PUBLIC HEARING TO CONSIDER ADMINISTRATIVE CIVIL LIABILITY COMPLAINT NO. R3-2012-0030

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

Corrected Transcript
October 29, 2012

TRANSCRIPT OF HEARING BEFORE THE REGIONAL WATER QUALITY CONTROL BOARD, CENTRAL COAST REGION,

SEPTEMBER 7, 2012

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REGIONAL WATER QUALITY CONTROL BOARD MEMBERS:

Michael Thomas
Russell Jeffries
Jeffrey Young
Kenneth Harris
Jessica Jahr
Jean Pierre Wolff
Michael Jordan
Michael Johnson

ALSO PRESENT:

Matthew Buffleben
Harvey Packard
Leo Sarmiento

I N D E X

SAN LUIS OBISPO, CALIFORNIA, SEPTEMBER 7, 2012

8:30 A.M.

- - -

MR. YOUNG: Good morning, everyone. I'm Jeff Young chair of the Central Coast Regional Water Quality Control Board. Today is September 7th. Welcome everyone to San Luis Obispo. We're going to begin this meeting as a normal board meeting, then we'll day go into the agenda item which is an ACL hearing.

So to start off with the meeting we need to did roll call. Mr. Harris.

MR. HARRIS: Mr. Young?

MR. YOUNG: Present.

MR. HARRIS: Mr. Jeffries?

MR. JEFFRIES: Here.

MR. HARRIS: Mr. Johnston?

MR. JOHNSTON: Here.

MR. HARRIS: Mr. Jordan?

MR. JORDON: Here.

MR. HARRIS: Dr. Wolff?

MR. WOLFF: Here.

MR. HARRIS: Monica Hunter? Absent. Bruce Delgado? Absent.

MR. YOUNG: Okay. Thank you,

Mr. Harris. Agenda item 2 is introduction from staff recognition. Mr. Harris, do you have any issues?

MR. HARRIS: No, not at this point.

MR. YOUNG: Okay. And in terms of -- oh, all right. So we will move on to agenda item 3, which is the enforcement item for today, South San Luis Obispo County Sanitation District administrative civil liability.

Mr. Harris, can you introduce this item, please?

MR. HARRIS: Certainly. The board's consideration today is administrative civil liability a R3-2012-0030 against the San Luis Obispo County Sanitation District. The complaint alleges that the South San Luis Obispo County Sanitation District discharger caused untreated wastewater discharge surface waters in the United States on December 19 and 20, 2010. The alleged discharge is in violation of sections of the California Water Code and Federal Water Pollution Control Act and Water Act. Sanitation sewer leaching surface waters was unauthorized caused by discharge failure to maintain and operate a sanitary sewer collection system as required by

the use permit adopted the Regional Water Quality Control Board Central Coast Regional. And sanitary sewer collection system adopted by the State Water Resources Control Board, State Water Board.

This draft order recommends $1,408.007.50 in administrative civil liability discharger which arose from the record civil liability complaint prepared by the Central Coast and State Water Resources for office of enforcement staff's prosecution team.

Assisting the board today advising board is myself executive officer, Mr. John Robertson to my right, Mr. Brian Lodge to my right, and Ms. Jessica Jahr counsel from the State Water Board.

MR. YOUNG: Okay. Thank you. This is the time and place for a hearing of the Central Coast Regional Water Control Board for adoption of administrative civil liability order against South San Luis Obispo County Sanitation District.

This hearing will be conducted in accordance with the hearing procedures that were provided to the parties. Designated parties are as follows. Regional board prosecution team and

South San Luis Obispo County Sanitation District. The designated parties and their witnesses are subject to cross-examination. The prosecution staff will be allowed 180 minutes for their presentation, including opening statements, direct testimony, cross-examination and rebuttal.

South San Luis Obispo County Sanitation District will be allowed 180 minutes for their presentation, including opening statement, direct testimony, cross-examination and rebuttal. Each designated party will be allowed five minutes for a closing statement.

All other persons are considered interested persons and will be allowed three minutes. And for those individuals please fill out the speaker card which you'll find the white cards in the back of the room. Fill them out completely and hand them up here to Mr. Robertson in the red shirt at the end of the table. The chair may provide additional time at his discretion. A timer will be used.

Board members, the advisory team and staff counsel may ask questions to clarify testimony of a witness at any time. And let me suggest to my colleague that because we have a

court reporter here it's important that only one person speak at a time, otherwise it becomes a very, very difficult task for her to separate the testimony out and keep it straight and clear and understandable.

MR. THOMAS: At what point do we introduce the parties to give their three-minute testimonies?

MR. YOUNG: Great question. And I'm going to get to that probably at Page 3 of the statement that I've got it in front of me.

MR. THOMAS: Thanks.

MR. YOUNG: For purposes of this hearing, the functions of staff and counsel are separated. Prosecution staff who are proposing this action have had no communication with the board members or the board's advisors, other than for noncontroversial procedural matters.

The board's counsel has not advised the prosecution team in this matter for this hearing. The prosecution team consists of Michael Thomas, assistant executive officer, Harvey Packard, Matthew Buffleben, Leo Sarmiento, Jim Fischer, Todd Stanley. Is Todd Stanley here? Okay. Shelia Soderberg and Katie DiSimone. They are

advised by Julie Macedo, counsel from the State Water Resources Control Board's Office of Enforcement.

For this hearing the board's advisory team consists of Jessica Jahr, counsel from the State Water Resources Control Board Office of Chief Counsel and Ken Harris interim acting executive officer to my left, John Robertson, Brian Lodge introduced earlier.

Each person who testifies at this hearing shall begin by stating his or her name and address unless the address has already been given. All persons who may testify at this hearing please stand now, even if you don't plan to testify but are involved in this matter. Raise your right hand and take the following oath. Do you solemnly swear that the testimony which you will give in this matter is the truth? Has anybody said anything else? Okay. Thank you.

The order of presentation in the hearing will be as follows: Opening statements by prosecution staff South San Luis Obispo County Sanitation District.

Two, direct testimony of Mr. Thoma, followed by cross-examination by prosecution staff

Mr. Thoma.

Three, Central Coast Water Board prosecution staff case in chief with cross-examination by South San Luis Obispo County Sanitation District.

Four, South San Luis Obispo County Sanitation District case in chief with cross-examination by prosecution staff.

Five, representatives of agencies, they will be allowed three minutes each.

And to answer your question, sir. Six, other interested persons, three minutes each.

Then we will have closing statements by first the South San Luis Obispo County, five minutes, and followed by prosecution staff, five minutes.

Cross-examination of each witness will occur after that witness' direct testimony has concluded. The party offering the witness then may then offer redirect testimony.

At the close of the hearing the board members and advisory team will adjourn to closed session to deliberate on the evidence as authorized by Government Code Section 11126.

After the conclusion of the

deliberations the board will resume open session and provide the ruling.

Please state your name, address, affiliation of whether you have taken the oath before you testify. We will begin with testimony by staff. We've already rearranged this somewhat. Okay. At this time evidence should be introduced on the following issues. Whether the regional board should issue, reject or modify the proposed ACL order. I will now begin the hearing.

So let's start with our opening statements.

MR. JEFFRIES: Before you do that I think that if anybody has speaker cards, they're over in that alcove on the left-hand side or the right-hand side, they should be brought over to Mr. Robertson. Because I saw some people wandering around that didn't know what to do with the speaker cards.

MR. YOUNG: These cards should go up here. And then than perhaps what counsel can do is introduce yourselves because I don't think that the board has met all of you.

MS. MACEDO: Sure. I'm Julie Macedo, I'm senior staff counsel with the office of

enforcement.

MR. YOUNG: Okay. And to your left is?

MS. MACEDO: To my left is Dr. Buffleben, he is the supervising engineer for the state office, special investigations unit.

MR. YOUNG: Okay.

MS. THORME: Melissa Thorme from Downey Brand representing South San Luis Obispo County Sanitation District. And this is Olivia Wright one of my associates. She will be helping me present today. And then our paralegal Sandra Collier.

MR. YOUNG: Great. And welcome everybody.

MS. THORME: Thank you.

MR. YOUNG: All right. Let's begin our hearing. Let's have our opening statement by the prosecution team.

MS. MACEDO: Great. Good morning chair members of the board. As I just said, my name is Julie Macedo and I'm senior staff counsel with the office of enforcement. It's my pleasure to present today what's going to be an all-day event and clearly a packed house.

I'm actually the region's liaison

attorney and it's my first enforcement matter before the board. Other staff joining me include Gerry Horner, chief economist; Jim Fischer, water resource control engineer; Matthew Buffleben, senior water resource control engineer, and Katie DiSimone, water resource control engineer from region three. Leo Sarmiento, Harvey Packard and Michael Thomas have also been instrumental in bringing this case to hearing, although they will not be testifying today.

This enforcement matter concerns a sanitary sewer overflow and while we're concerned -- while we've covered substantial information in the written materials, we'll cover the high points in today's evidentiary hearing.

We know that we're asking you to adopt an order with a significant penalty during a tough economic time, and we don't take that lightly. We would not be asking you to do that if you did not have good reason and we didn't think that penalty is warranted or necessary.

We also know that many on dischargers with similar delayed maintenance issues to the ones that the district faced in December of 2010 are watching this hearing and we hope that the

board sends them a message that it is better to deal with such issues as they arise, then hope that problems don't pile up and lead to a spill that has far reaching public health consequences and ultimately could cost more than addressing the problems in the first place. Such a result would be both fiscally responsible and protective of water quality. With that said, let's begin.

There are two main issues to decide in this hearing. The appropriate penalty under the 2010 enforcement policy and the volume discharge during the overflow events that occurred on December 19th and 20th of 2010.

On December 19th and 20th there was an illegal sewer overflow and we're arguing over how to assess the penalty. While the district hasn't had a similar spill of this type before, this was a spill that affected more homes than any other spill since the state started collecting information in its database in 2007. As I said, this is a matter of great importance around the state.

No defense applies to this spill event. No defense under the Clean Water Act and no defense in the district's permit. Both the Clean

Water Act and the district's permit prohibit discharges of untreated or partially treated wastewaters into waters of the United States.

District counsel has argued and will likely argue today that the district should pay no penalty for this overflow. Its argument is flawed for a number of reasons, not least of which that it completely misstates the definition of the upset and bypass defenses which do not apply to this discharge violations.

Furthermore, the district will argue for low or inappropriate factors to be assigned to various steps in the enforcement policy penalty methodology which the prosecution team feels are inappropriate due to the gravity of the spill, the harm incurred by the public, and the failure of the district to recognize its contribution to the spill by years of delayed maintenance.

The prosecution team's recommended penalty is approximately $1.4 million, after an analysis that 1.1 million gallons of raw sewage and storm water was discharged and an analysis of the factors under the 2010 enforcement policy.

The prosecution team's recommended penalty is fair based on other sanitary sewer

overflow cases decided under the policy around the state. Conservative based on the circumstances and volume of the spill, and appropriate because it is needed to send a message to this particular discharger.

The recommended penalty is also fair based on the total volume of sewage and storm water we've calculated was spilled over the two-day event. The penalty amount is in line with other ACLCs for SSOs.

While the district claims the overflow was beyond its control, the facts and testimony you will hear today will indicate otherwise. The penalty should bear that out.

As the board and the public will see, the prosecution team's recommended penalty could have been higher, but the prosecution team made several conservative selections in the district's favor; however, we feel that the penalty we are ultimately recommending is appropriate, fair and necessary.

A common theme you'll hear today from several of the witnesses is that the cause of the spill could not be boiled down to a single cause. There were several overdue preventative

maintenance issues and improper operating procedures that led to the overflow and ultimately the size of the spill.

These issues included a pump discharge valve being closed when it should have been opened, emergency pump problems, a leaky influent gate that may not have been addressed since the plant's construction in the early 1960s, ponding issues that allowed for water intrusion into electrical pool boxes, and faulty electrical issues.

Finally, this matter had a significant component. One of the main factors in the penalty calculator is the harm caused by the spill, and from the size of the audience and the amount of public comments the board has received this spill has caused a lot of harm.

Now, the board can't directly compensate the Oceano residents for any damage caused by the sewage backup into homes, but up to 50 percent of the penalty amount can stay right here in region three and be spent on a supplemental environmental project. The prosecution team fully supports a use of the penalty in this way.

I think that the board has an opportunity to send a message to the district total hopefully on behalf of the residents of Oceano and to other dischargers who failed to address preventative maintenance issues until discharges such as this happen. Thank you.

MR. YOUNG: Okay. And the district's opening statements.

MS. THORME: Good morning, board members, Mr. Chairman, advisory team. As I said, my name is Melissa Thorme and I'm here representing the South San Luis Obispo County Sanitation District. This is such a big chunk of things to say, I'm just going to call them the district from now on. Just so everybody knows when I use that term that's what I mean.

So I'd first like to say that the district greatly appreciates the additional time that was given to allow us to tell our entire story. And the story is basically a district that hasn't had a sewer spill in 25 years until this flood event occurred. And we hope today that your job will be taking a critical view of this case. You are the judge and jury in this case and so I want you to listen to both sides and not just take

the prosecution team's side on this, just to listen with a critical ear.

As I was sitting trying to think of a theme for our opening statement I couldn't really decide between two different things. So I'm going to tell you both of my themes that I had for today.

So on the one hand this case feels a little to me like a poker game. And the poker game is where the prosecution team has all the cards, all the face cards and all the aces, and we have to have our cards laying up on the table. And why I say that is because the district has been at a disadvantage from the beginning.

The state has all the investigative power. They can send letters and say tell us this and tell us that. In fact, they sent letters saying please tell us that the advantages and disadvantages of each of the spill methodologies that you put forth. And the district has to answer all those questions or they can be under penalty by the state for not doing so.

On the other hand, when we asked for documents from the prosecution team they were being kept from us. We asked under Public Records

Act request, they were hiding documents under an investigative privilege, which is supposed to be maintained only for criminal cases. So we said okay, if you're going to have this be a criminal case then under the law you have to give us all the exculpatory evidence, things that would know maybe the district wasn't at fault. And they denied us under then as well. So we are at a little bit of a disadvantage in this case.

So the other theme that I have is that on the other hand it seems to me a little bit like playing archery with a moving target. And I'll give you one example of that. One is on its private sewer lateral in-home spills. And under the sanitary sewer overflow permit it is not required that a district report in-home spills. And that administrative civil liability complaint in this matter alleged that these were category two spills and were not properly certified, and that was in paragraph 24 of the complaint.

So when the district showed the prosecution team in our brief that only category one spills have to be certified within a certain time frame then the target changed. And now in the final brief the prosecution team is arguing

that these are category one spills and need to be certified. And now they are the most important part of the prosecution team's case. And they've been out interviewing people, local residents, having meetings at local cantinas and trying to get people to come and testify, and at the same time they're keeping all that evidence of those interviews from the district.

So our theme for today is asking the board members to keep in mind this uneven playing field and to keep in mind the actual facts of this case as you consider and make a decision today. Thank you.

MR. YOUNG: Okay. Thank you. Kind of a point of clarification, aren't we also determining first liability before we get into any kind of a penalty calculation? Your presentation suggested it's simply a matter of us determining how much. Don't we first have to look --

MS. MACEDO: I think everyone understands that there was a spill --

MR. YOUNG: Correct.

MS. MACEDO: -- on December 19th and 20th.

MR. YOUNG: Right.

MS. MACEDO: To the extent that the district isn't denying that there is a spill you can reach the foundational question whether the district was responsible for the spill or if there's a defense and then what amount of penalty should apply. We don't think there's a full defense, but the spill did occur. So you're not answering the question of whether the spill occurred.

MR. YOUNG: Okay. I was curious whether it was a preliminary question to be answered first.

MS. MACEDO: We're past the point of whether the spill occurred. Okay.

MR. YOUNG: Okay. All right. Let's begin then with Mr. Thoma, correct? And so we will now begin. Who has our clock, who is our clock keeper? Okay.

MR. THOMA: Good morning, board members. My name is Bill Thoma, as was stated. I live at 3562 Empleo Street, San Luis Obispo, California. I did take the oath and my declaration is true and accurate as presented, and so I would like to just -- the major conclusion to my report was that -- that I was looking at the

electrical issues related to what occurred on the date of December 19th.

And my conclusion is that the cause of the failure of the electrical system on that date was a function of seals lacking -- water seals lacking in a number of conduits that entered into the influent building. And that is the cause of this electrical issue. It had nothing to do with maintenance or ongoing maintenance or operations or replacement or deferred maintenance.

I welcome any questions you might have about my report.

MR. JEFFRIES: The sealed that --

MR. YOUNG: I think what we should do is let them go ahead and give their cross-examination and then when they're done we can do follow-up.

MS. MACEDO: Mr. Thoma is a district witness so direct would go first?

MR. YOUNG: Correct.

MS. THORME: We're not going to have any direct examination.

MR. YOUNG: Okay. All right. Then the prosecution, do you have any cross-examination?

MS. MACEDO: Okay.

CROSS-EXAMINATION

(Bill Thoma)

BY MS. MACEDO:

Q. Okay. Do you have your declaration in front of you, Mr. Thoma?

A. Yes, I do.

Q. When were you contacted to provide a declaration in this matter?

A. Approximately two months ago, a month and a half ago, something like that.

Q. What materials were you given to review?

A. I reviewed documents that were provided to me in terms of the State Water Quality Control Board's complaint. I reviewed -- I made a visit to the site. I conducted an interview with the operators that were on duty at the site. I have reviewed -- I have knowledge of some of the work that was done at that plant, as our firm has done some design work at that plant. And that's about it.

MS. JAHR: I don't want to interrupt you, if you're referencing an exhibit can you just say that what that is for all board members if we

want to look at it?

MS. MACEDO: Absolutely. Yes. If I refer to something specific.

MS. JAHR: You were referencing the declaration, right?

MS. MACEDO: Oh, I'm sorry. Yeah I was referring to the declaration which is Exhibit 25 submitted with the district's materials. I apologize.

MS. JAHR: Thank you.

BY MS. MACEDO:

Q. Were you provided with all of the briefs in this action? You said you reviewed the complaint. Did you review the prosecution team's opening or rebuttal briefs?

A. I do not recall.

Q. You do not recall --

A. I'm not sure that I can identify exactly what you're talking about.

Q. Okay. The prosecution team's submitted an evidentiary brief on July 27th.

A. I don't recall the date of the document that I reviewed. I'm sorry, I think I may have but I don't recall if that's the exact exhibit. If you want to show it to me I might recall.

Q. Okay. Let's go about it a different way. You said you were contacted a couple months ago to prepare your declaration?

A. Yes.

Q. Okay. You prepared that declaration in assistance with attorneys at Downey Brand?

A. They reviewed it before it was submitted; however, I developed this brief on my own based on my own investigation and my own interviews and conducted my own investigation.

Q. When did you provide the first draft to Downey Brand?

A. I can't tell you the date. It was probably about a week before the final was completed.

Q. Okay. Their submission was due in August, so approximately August?

A. Yes.

Q. Okay. Have you reviewed any documents since then?

A. No, I haven't.

Q. Okay. So you have not reviewed the prosecution team's rebuttal brief?

A. I don't believe so.

Q. Okay. And in your declaration you

describe yourself as an expert on electrical issues, correct?

A. Correct.

Q. Okay. Would you describe yourself as an expert on wastewater treatment plants?

A. I would say I have experience in wastewater treatment plants. We've done a number of projects at wastewater treatment plants. I would expect -- I would say yes.

Q. Okay. Would you describe yourself as an expert on standard operating procedures related to valves?

A. No.

Q. Okay. Would you describe yourself as an expert on grading or ponding issues?

A. No.

Q. Would you describe yourself as an expert on leaky influent gates?

A. No.

Q. Have you ever been an expert before?

A. Yes.

Q. When was that?

A. Twice. About ten years ago and once about 25 years ago.

Q. I want to show you one item, and I'll

pop it up for board members. This is Exhibit 2 submitted with the prosecution team's opening brief, and I will hand the witness a copy. Does counsel need a copy or do you have it handy?

MS. THORME: We don't need it.

BY MS. MACEDO:

Q. So if I'm understanding your declaration correctly, you're an expert in electrical matters, correct?

A. Yes.

Q. Okay. If you could turn to the final page of the exhibit, Page 3, and I'll scroll down to Page 3 on the screen. I will represent to you that this is an excerpt from a budget from the district's 2010 to 2011 budget, taking about a proposed electrical system upgrade. Take as much time as you need to read it.

A. Okay. I've read it.

Q. Have you seen this document?

A. Yes, I have.

Q. Okay. Had you considered this document prior to submitting your declaration?

A. Yes, I have.

Q. Okay. In your expert opinion is it best standard of care to allow wiring that is

deteriorating due to groundwater intrusion to continue to not be upgraded?

A. Wiring that is deteriorating, correct, would not be adequate to remain in service; however, I have found that not all the wiring in the facility was deteriorating.

Q. That wasn't my question. You understand my question. So separate and apart from the cause of the spill, as an expert electrician, the reason you're here today, deteriorating groundwater -- or deteriorating wiring from groundwater intrusion is not the best standard of care?

A. Deteriorating wire is not -- that has not been replaced is not a good standard of care.

Q. Thank you.

A. If identified as deteriorating. Not all the wiring in that facility was deteriorating.

Q. You read this document that there had been problems identified with deteriorating groundwater, correct?

A. Right.

MS. MACEDO: Thank you. Nothing

further for this witness.

MR. YOUNG: Okay. Any board questions? Mr. Jeffries.

MR. JEFFRIES: Good morning, sir.

THE WITNESS: Good morning.

MR. JEFFRIES: Nice to have you have here.

THE WITNESS: Thank you.

MR. JEFFRIES: I have probably three questions for you. One is the conduits that you referred to was the seals that were faulty, were they below grade?

MR. THOMA: The conduits were below grade, yes.

MR. JEFFRIES: Is there a periodic maintenance procedure to examine those particular conduits that are below grade for water intrusion?

MR. THOMA: A wire in conduit below grade is expected to be in water. By definition it's considered a wet location, so the answer is the -- so it is a wet location. The seals are not normally in any experience that I've had been a function of any inspection proceeding.

MR. JEFFRIES: So you're saying that once the seal's placed then that should be

serviceable for the life of that facility?

MR. THOMA: Yes.

MR. JEFFRIES: And is this location, is it normally an area that is wet?

MR. THOMA: Yes, it is.

MR. JEFFRIES: Is the wiring, is it a plastic coating or a cloth coating?

MR. THOMA: The wiring that was installed?

MR. JEFFRIES: Yes. Is it a submersible type of wiring?

MR. THOMA: Yes, it's THW wire which is the wet -- the 'W' means wet.

MR. JEFFRIES: I understand. All right. Thank you, sir.

MR. YOUNG: I have a few questions for you. I noticed in my reading of the brief mentions of plumbing code, but I was interested in whether the electric code applies to this facility.

MR. THOMA: Of course, yes.

MR. YOUNG: Okay.

MR. THOMA: California Electric Code, yes.

MR. YOUNG: Okay. And in your review

of the information that was provided to you did you find any electrical code violations?

MR. THOMA: Of the documents or of the facility?

MR. YOUNG: Of the facility, you know, anything that you thought -- you mentioned the seals. I'm wondering if you picked up on anything else that may have been involved in causing the sequence of events that caused this spill?

MR. THOMA: There was nothing that I saw that was a code violation that resulted in any of the outage condition that occurred. What I would say is that the seals were a violation themselves for having not been placed in the first place during construction.

MR. YOUNG: Okay.

MR. THOMA: That should have taken place probably back in 1986, '87.

MR. YOUNG: Thank you. Mr. Jordan and then Mr. Johnston.

MR. JORDON: Good morning, Mr. Thoma. The description you're giving of what you inspected is wiring and conduit. The picture up on -- that was up there a moment ago is not wiring and conduit, it looks like it's loose wiring in a

vault. Now, did you observe any wiring that more closely resembles what was up there on the board?

MR. THOMA: I'm sorry, I'm not sure I understand your question, please.

MR. JORDON: Okay. You described conduit and wiring, that's wiring that's in a wet location and sealed, and this is supposed to be there.

MR. THOMA: Correct.

MR. JORDON: When I look at that picture it's not in the conduit, it doesn't look like it's supposed to be in a wet location undergrade. So my question was did you observe any wiring in your review that resembled that picture?

MR. THOMA: I have reviewed that box. And to clarify, is that box is below grade and it is anticipated that the water would be present occasionally incidentally in that box. So the seals are between that box and the inside of the building where the damage and the incident occurred.

So this box is outside on grade exposed to the weather. When that -- and when you pull wires from -- through a conduit you -- when you

get from one building to another there's too many 90 degree elbows to go through. So you have to place boxes on the site for pulling. So that's a pull box where they pull wires to, and then you go into the building. Where it goes into the building from the exterior box is where the seals were to have been placed.

MR. JORDON: But still my question was did you observe any situation similar to that where there was bare wiring that was decomposing due to submerging water?

MR. THOMA: No, I did not.

MR. JORDON: Thank you.

MR. YOUNG: Mr. Johnston.

MR. JOHNSTON: Mr. Thoma, I've just been reviewing your declaration, and tell me if I'm correct, it appears that your analysis of what happened then is that there was a shunt trip switch in the box we've been talking about, which is below grade, expected to get water on occasion, and that the conduit going into the box containing the shunt trip switch was lacking seals which had been specified in the original 1986 construction which the original electrical contractor hadn't put in?

MR. THOMA: Correct.

MR. JOHNSTON: Because of the lack of the seals that water came into that box and that that tripped and therefore tripped the breaker controlling all four influent pumps; is that correct?

MR. THOMA: It tripped one circuit breaker, that impact then tripped all four pumps. There's an exhibit on the board where I might just point out real quickly, right there there's the original construction documents for 1986. This is exhibit -- I believe it's D -- I mean A in your -- in my declaration. And those words right there (indicating) I believe state all conduit -- seal all conduits typical. And the little dots there indicate the seal locations.

The box was right outside here. The seals were between it and the inside building. The water intruded from the box outside in through those conduits without the seals and into the building. That's the location of the shunt trip switch.

MR. JOHNSTON: Okay. So the shunt trip switch is in the building containing the influent pump; is that correct?

MR. THOMA: Correct. It's at the exterior mid-level landing in the influent pump area. And as I understood it from the plans was an emergency shut off for that confined space.

MR. JOHNSTON: And what I'm seeing on the diagram is that where the conduit entered the building there should have been a seal on each side of the wall, correct?

MR. THOMA: I don't know that it was on either side or if it was on just the one side. I believe it would -- I believe it would have been indicated to be just on one side.

MR. JOHNSTON: Now, would there also have been seals on the conduit in the box, in that box that was -- that got flooded?

MR. THOMA: Not necessarily, and most times not in the box.

MR. JOHNSTON: And when I say the "box," I'm not referring to the box that contains the shunt trip switch, I'm referring to the pull box that was flooded.

MR. THOMA: The vault?

MR. JOHNSTON: The vault, yes.

MR. THOMA: No, they would normally not be in the vault.

MR. JOHNSTON: Okay. So you would not normally have seals in a vault. What I'm wondering about is you assert in your declaration that had the work that was considered for budgeting in I think it was 2004, 2005 been done, that even had they pulled new wire through there that they would not have known that there were no seals, or they would not have known that seals were required, to put it more correctly. They would have known there were no seals because they were able to pull the wire cable through?

MR. THOMA: Correct.

MR. JOHNSTON: But they would not have known that seals were required?

MR. THOMA: Correct.

MR. JOHNSTON: And that's what I'm trying to understand. It seems to me if -- or at least that's what I'm trying to get my head around. If you've got a contractor doing that budgeted work or that work that was considered for budgeting in 2004, 2005, they're going to pull wire presumably from that vault to this shunt trip switch box in the pump room, and would they be referring to this power plant that we're looking at here?

MR. THOMA: It's possible that they could be. It's possible -- it's more likely that they would not, but that's a hypothetical question. I'm not sure that they would or would not.

MR. JOHNSTON: Well, how would they know where -- I mean, to pull wire you need to know where both ends of it are?

MR. THOMA: Well, replacing the wire is a matter of pulling the wire out from one end, pulling the rope in, pulling the new wire in re-terminating.

MR. JOHNSTON: Right. So you have to know where both ends are?

MR. THOMA: Yes, that's correct.

MR. JOHNSTON: And you --

MR. THOMA: But you don't know what the route of that conduit takes to get from point A to point B. You see the end of it on this end, you see the end of it at this side, and there's no way to know if there's a hydraulic issue in that conduit or not.

MR. JOHNSTON: I understand, but what I guess what I'm asking you is, if I'm the electrician going into the vault and I'm told to

replace this wire I have to know where both ends of the wire are. I have to look at some sort of plans, right, to know where the wire's going, to know where I'm pulling to, right?

MR. THOMA: In pull boxes not necessarily, no. I mean you're pulling wire from one location, you're identifying it by pulling on it and identifying it at the other location. You don't necessarily need to know where it's going. You're just simply replacing that wire for wire.

MR. JOHNSTON: Okay. So then if you -- you're an electrical contractor, right?

MR. THOMA: Yes.

MR. JOHNSTON: So if you were -- if you were responsible if that budgeted -- or that job that was considered in the budget, replacing that wire with waterproof wire, would you have been working from plans to do it or would you have simply gone and pulled wire to see what wiggled on the other end?

MR. THOMA: I would -- that's a hypothetical question. I don't know what I would have done unless I had a set of plans and specifications to answer that question from. Again, I don't -- I'm not trying to be difficult.

I just -- I don't know what -- how the plans and specifications called for that to be completed. I did not see the plans and specifications.

MR. JOHNSTON: Thank you, sir.

MR. YOUNG: Okay. Any other board? Dr. Wolff.

MR. WOLFF: Mr. Thoma, when you talked about sealing the conduits, isn't the general industry practice to seal to prevent intrusion of water in conduits?

MR. THOMA: I'm sorry?

MR. WOLFF: Isn't the seal location generally placed at a point that would prevent water intrusion into the conduits?

MR. THOMA: Yes.

MR. WOLFF: Therefore, shouldn't the seal be located in the J-box rather than -- the junction box rather than in the lower elevation of a facility?

MR. THOMA: There's no code that talks about the location of a seal, it strictly talks about that you should seal to prevent moisture intrusion. I think that you could argue either direction, it's not necessarily going to be the location of the seal in the box.

MR. WOLFF: If the National Electric Code requires sealing wet locations, wouldn't that indicate that the seal should be at a point that prevents water intrusion into the conduit?

MR. THOMA: No, I would disagree with that.

MR. WOLFF: So you could therefore have moisture and water intrusion that would remain in the conduit?

MR. THOMA: You want to prevent water from running into a conduit, but there's always going to be water in a conduit just by virtue of condensation. Nearly every wire you pull out of the underground conduit is wet, when it comes out it's wet because of the condensation in the conduit itself. And sometimes it's immersed in water for its entire life.

MR. WOLFF: In the circumstance that we have here there had been a history of water ponding into the junction box based on some evidence that I had read. Therefore, wouldn't the consideration of putting the seal in the box be a better location than a seal in the basement?

MR. THOMA: Would it be a better location? It possibly could be, that's conjecture

on our part. We weren't, again, asked to design the facility, nor was the operator the designer of the facility as I understand it. So I can answer that question, would it be better, possibly. There were drains in the boxes that drained to other locations. I can't argue that it could have been a better location. It's not necessarily the only location, however.

MR. WOLFF: So when you stated earlier with your experience that you do provide electrical services in various facilities, so therefore you do have experience with wet locations?

MR. THOMA: Correct.

MR. WOLFF: And so on your other projects do you typically put the seal upstream as I'll call it versus downstream from where water could flow?

MR. THOMA: My typical approach would be to have an air gap and actually rise the conduits above the water level so it doesn't actually enter into the wet location, and then perhaps put a seal on one side or the other to prevent just incidental moisture from entering. That was actually the fix that was provided for

here was to reroute those conduits up over the wall and back down so there was an air gap so the water couldn't make continuous entry into the building.

MR. WOLFF: Thank you. My other question is as part of the evaluation, investigation and corrective actions that you took you performed a protective device coordination study?

MR. THOMA: Yes, we did.

MR. WOLFF: And is a protective device coordination study required in the National Electrical Code?

MR. THOMA: Is it required? For certain facilities, yes. I believe healthcare is required. I'm not certain whether wastewater treatment plants is one. I can't answer that question, but it's not required by code.

MR. WOLFF: So the National Electrical Code does not require protected device coordination study in the electrical systems that you have applications which are nonresidential, is this the case here?

MR. THOMA: It's not required for all applications, that's correct.

MR. WOLFF: Okay. Outside of residential applications?

MR. THOMA: Outside of residential applications, commercial applications, industrial applications, it's not a requirement; it is often recommended.

MR. WOLFF: What's the -- I couldn't see on the single line diagram the capacity of the main breaker. I assume it's a 480 volt three phase system?

MR. THOMA: It was a 480 volt three phase system. If you want to go to exhibit -- I believe it's B. Exhibit B. That's the breaker that tripped. That's a 400 amp breaker. It flows -- that I believe is the 150 amp breaker and a motor control center No. 1 that feeds on to a main breaker for the motor control center that feeds the influent pumps. That is the breaker that was tripped on the date of the December 19th event.

MR. WOLFF: Right. So the main breaker is a 12 combo amp breaker?

MR. THOMA: This one right here, yes.

MR. WOLFF: All right. And this is a 480 volt system, correct?

MR. THOMA: Yes, sir.

MR. WOLFF: Is there a code requirement on the 480 system, a thousand amp breaker or larger to have some type of additional protection?

MR. THOMA: It's required to have ground vault protective device protection. It also requires testing to be done on it after it's installed, correct.

MR. WOLFF: All right. And so when you have the systems with the ground vault protection and also additional protection, which I would assume is like over-current, et cetera, is there some type of a coordination that is required to prevent tripping?

MR. THOMA: You would normally do everything you could to prevent -- to provide selective coordination, correct, so that the downstream breakers would trip before the main, correct. And that study -- we don't know whether that study was done, quite possibly it was. Do know, but the designer and the installer of this facility may have done that.

MR. WOLFF: You performed this study eventually, didn't you, as part of the corrective action?

MR. THOMA: We looked at the operators because of the fact that the 400 amp breaker tripped ahead of one of the downstream breakers. We did look at is there something that could be done to better coordinate the breakers downstream with the upstream breaker. And that was the impetus for doing the coordination study.

We did identify that because of the molded case circuit breakers, and I know, sir, that you're familiar with this equipment. The molded case circuit breakers in this range in our instantaneous region are very much overlapping in a lot of vault conditions. So the higher vault conditions pretty much any one of those four breakers could have tripped.

So it's impossible to completely selectively coordinate all four breakers so that the downstream breaker trips ahead of the upstream breaker. So it wasn't -- the impetus for doing the study was to see if we couldn't improve upon any coordination settings to more properly or more effectively operate that system. And it turns out that there's very little that could be done based on the type of equipment that's there.

MR. WOLFF: And when you did this

coordination study to verify the setting of the breaker, as you pointed out, you didn't have, you know, different settings that could inadvertently overlap, did this include the testing of the breakers beyond just performing the theoretical calculation?

MR. THOMA: There was no testing done, no, sir. There has been no testing done. I'm not saying that there wasn't going to be or the district wasn't prepared to do that, but that hasn't been done as of yet.

MR. WOLFF: Is it an industry standard practice or are there any ANSI standards that recommends preventative maintenance testing?

MR. THOMA: Yes, there are. I can't cite them for you, sir, but yes.

MR. WOLFF: And those standards would fall under NFEA standards, just like National Electric Code?

MR. THOMA: I can't verify that, sir.

MR. WOLFF: You performed preventive maintenance on facilities?

MR. THOMA: We do perform preventive maintenance. We normally hire an outside firm such as Electro-Tech or Eaton Cutler-Hammer to do

those tests.

MR. WOLFF: And then those companies would perform the electrical preventive maintenance testing and they would be using the applicable standards?

MR. THOMA: Yes. Yes, I believe so.

MR. WOLFF: There was problems with the controls also based on some of the documents that I read. Did you have a chance to review or troubleshoot some of these control problems that were discovered during, you know, the event?

MR. THOMA: Could you clarify which control issues? I'm not understanding what --

MR. WOLFF: That's the part where I'm confused myself because it was referenced to controls problem in the MCC and I wasn't too sure if they were talking about the -- you know, if it was VFD, verifiable frequency drive problems or other problems.

MR. THOMA: Like I say, I did not look at any control issues or incidents, and I don't believe they were in any way a factor in the failure of that system.

MR. WOLFF: When you were hired to perform the study and you made in fact

recommendation for addition of an arc flash study, was that performed?

MR. THOMA: Arc flash study has yet to be performed. It was an option on our proposal, has not been performed by our firm.

MR. WOLFF: When you reviewed the single line in the documents, have you had a chance to review the electrical preventative maintenance manual from this facility?

MR. THOMA: No, I have not.

MR. WOLFF: Were you asked to provide that service?

MR. THOMA: No, I was not.

MR. WOLFF: And so when you looked at the electrical equipment was there any type of labels or indication of, you know, tested by and dates?

MR. THOMA: I believe there are test stickers on the main service equipment near and at the 1200 amp main on the main service equipment, MSE.

MR. WOLFF: You don't recall the date of the test?

MR. THOMA: I do not recall the date of the test, I'm sorry.

MR. WOLFF: Okay. The standby generator, have you -- part of your services, did they include also a review of the emergency generator system?

MR. THOMA: Not in particular. It is a part of and it's shown on a single line diagram, but I was not asked to review it. It was looked at as part of the coordination study when the single line diagram was furnished to Eaton Culter-Hammer for the coordination study.

MR. WOLFF: That emergency standby generator has a transit switch?

MR. THOMA: Yes, it does -- I'm sorry. The generator is the generator, the transfer switch is the transfer switch and it's located at the main switch gear. It's in the lineup of the switchboard. So it's the PG&E underground pole section, a meter, a CT section, the main circuit breakers, a transfer switch and distribution.

MR. WOLFF: Okay. So part of that -- you know, critical part of the system, did you have also any review or input on the maintenance that was performed and the condition of this critical piece of equipment?

MR. THOMA: No, I was not, and as I

understand it, it operated as it was supposed to have on the date of the event.

MR. WOLFF: Well, wasn't there problems with the emergency generator? In some of the documents that I read there were problems with the generator being able to perform correctly, and please, you know, correct me if I'm mistaken because there was quite a bit of material to read and --

MR. THOMA: It was my understanding that the generator -- there was an alarm at the generator location as there was water ponding in that area. And again, I don't know the details of the water or what the alarm was. That was -- my understanding that was the first place that the operators responded to as an alarm came in, that there was an issue there. When they got there they started the generator and it operated correctly, then they moved into the electrical equipment room where the next alarm was giving them some kind of an alarm. I do not recall what the alarm was that caused them to go in there, but the transfer switch in the main electrical building which is a different building. The breaker that tripped is downstream of the transfer

switch, so when it tripped the generator could run all day long, it's not going to back up those pumps.

MR. WOLFF: Yeah, because wasn't there a problem with the pumps that they were not running at full rpm, instead of running at 1800 rpm one of the emergency pumps, to be specific, was only running at 1500 rpm?

MR. THOMA: I have no knowledge of that. Are you talking about an electric pump?

MS. MACEDO: I don't want to interrupt, but I believe Chairperson Wolff is talking about the emergency backup diesel pump and sort of the intermittent problems it had on the day of the spill, and you're referring to the generator. So I don't want you to be talking about two different things and maybe both be right and sort of be miscommunicating with each other. So I apologize.

MR. THOMA: That's what I was wondering, maybe that was the diesel pump that was running at lower rpm's, not the pumps -- the influent pumps were off at the time so they weren't running.

MR. WOLFF: Okay. All right. Well, thank you for answering my questions.

MR. YOUNG: One last question for you. This junction box that had the wires in it, is it your testimony that that box was properly designed and built and maintained to allow water to get into it from ponding and that that would be okay, that would not be an issue except for the lack of seals?

MR. THOMA: I would say -- I wouldn't say that exactly, no. I wouldn't design a box to be ponded on top of. We would never intentionally design a box to be at the lowest level. My understanding is that in the year prior or maybe two years prior that that had been identified and that the box lid had actually been raised about two or three inches so it wasn't -- it was out of the ponding area, but the date of the event there was water flowing -- surface water flowing 6 to 12 inches above the box. So even that that maintenance lid raising didn't adequately prevent water from getting into the box.

Incidental water from rain and condensation and fog that was expected to be in the box outside. And that's why they're not sealed, you're just going to have -- so you do preventative measures, the bottom has to have a

drain in the bottom to seep out. And then if you have a concern about it getting into the building you should provide some type of a seal or air gap.

MR. YOUNG: Okay. So if then you knew you had a box that was subject to flooding at times or inundation from water beyond incidental moisture from either air or soil, would you take other precautions? What would be the standard of care in a situation like that?

MR. THOMA: Well, the standard of care was that you probably would not want it to become a drain, correct. And I believe prior to the event the district had taken those precautions, and I'm not sure of the date of that, but they had identified that problem and the box lid had been raised. I can't tell you exactly how many inches above the ponded area, but that area had depressed slightly. You'd have to talk to the civil engineering experts about that, but my understanding is they identified that, and the box that was raised so that water wouldn't just run into that box, and that was, I believe, prior to the event.

MR. YOUNG: Do you know when?

MR. THOMA: I understood it was a couple of years prior to December 19th of 2010.

MR. YOUNG: Where did you get that information from?

MR. THOMA: In interviewing the Wallace engineers as well as some testimony that I heard from -- I believe it was Mr. Appleton that that box had been raised.

MR. YOUNG: Okay. All right. Dr. Wolff.

MR. WOLFF: I have one more question. In testimony that were made, and I believe it was Mr. Appleton, he referred to the degradation of the wiring having caused a short at times, and earlier in some of the questions made there was a discussion about the replacement of the wiring. And so in your investigation did you have an opportunity to review some of the history of the wiring problems and perhaps the troubleshooting log?

MR. THOMA: I did not review the troubleshooting logs. I have a bit of an understanding, the plant was, as I understand it, built in 1966 or thereabouts, so the original wiring, some of it was probably the old RH wire,

cloth cover, older wire, which is now bordering on 50 years old. I can't say nor could any of the district folks tell us for sure that that was the subject of all of the issues that they had with wiring, but the wiring that was installed in 1986 was all THW or XHHW, which were all wet locations properly rated.

And I believe that the district over, you know, the course of time, I think it's Exhibit 51 kind of shows over time where they had been replacing portions of the wire as projects came along. You'll see this table kind of talks about -- and it's difficult to see, but I believe they show the wire sizes -- I mean, the wire types and the dates that things were replaced.

This was when the wire was installed, what the insulation types were. And the ones that -- I think the GHHN, which is not a wet location rated wire, you can see that they were replacing many of those conductors, you know, in -- back as early as 2006, 2009, and some of it was since the event has occurred.

I'll also point out too you can't shut the entire plant down and replace all of the wire, so the district's process was to try to do it

incrementally as projects came along as well as to do it when off-peak times of the year when the systems could be down if we didn't have redundant systems to take care of a pump, that if we had to take a critical pump out of service we couldn't do that during peak time or you had to do that during scheduled maintenance. So the fact that you couldn't just do it all at one time this was, you know, a process that they were going through and demonstrates that they were making progress on that older wire.

MR. WOLFF: On the budget which was around I think 2009, 2010 there was a budget to upgrade the electrical system, and I believe part of the upgrade was also the electrical wiring so was there still some wiring that required upgrades?

MR. THOMA: I would -- as of what period of time, sir?

MR. WOLFF: Around 2009.

MR. THOMA: I think according to this there were probably still some occasions where the older wiring still existed, correct.

MR. WOLFF: All right. Thank you.

MR. YOUNG: Okay.

MS. THORME: Can I do a couple of redirect?

MR. YOUNG: Sure. Go ahead.

REDIRECT EXAMINATION

BY MS. THORME:

Q. Mr. Thoma, so that Exhibit A that you had up there, those were the design schematics from 1986; is that correct?

A. That's correct.

Q. Okay. So you testified that they designed this to include seals, was that what I heard?

A. That's what the construction documents show, correct.

Q. Okay. So the thought would have been that when they constructed that plant in 1986 that somebody would have actually installed those seals, right?

A. Correct, and would have been inspected.

Q. So then someone besides the district, the county or some other entity is supposed to come and inspect?

A. Normally there will be either a county

inspector or a deputy inspector.

Q. Okay. Would it be easy to tell right away that these weren't there?

A. I would say so.

Q. I mean, just looking at --

A. Yes.

Q. You could walk by and look and see that they weren't there? I mean, you would notice that on a normal day?

A. You mean after the construction's complete.

Q. Yes, after it's complete.

A. Not necessarily.

Q. Okay. And as far as you're aware were there any problems with the fact that there were no seals since 1986 until this event occurred?

A. It's my understanding that there were no problems prior to this event.

Q. And were the construction design from 1996, was all that wire supposed to be the waterproof wire for the newer construction?

A. From 1986?

Q. Yes.

A. Yes.

Q. Okay. So most of the rewiring was for

the 1960 to 1986 construction?

A. I can't speak to what the intent was, but that would be my intent if I was doing that because the other wire was only 17 years old and it was all properly rated.

Q. Okay. And then you had talked about how these boxes are designed that they can have water in them and that they drain; is that correct?

A. Normally it would drain through a hole in the bottom or if there's a physical drain that goes between boxes and maybe a sump pump. I can't speak to that specifically. I do know that there was in the original construction documents identified a conduit between boxes and it was No. 999 on the conduit schedule. There was a two and a half inch conduit that was near the bottom of the box to allow for the water to drain out.

Q. And then I think that you had mentioned things that had happened since the spill, that the conduits have now been rerouted over the walls?

A. Correct.

Q. And has the shunt trip switch that was the problem now been separated so that it only controls two pumps at a time instead of all

four?

A. I do not know that that work has been completed. I understood that that work might be taking place so that they would isolate those shunt trip switches so to minimize the exposure. I don't know that the work has actually taken place personally. It was anticipated to be done, it was a suggestion that we made.

Q. And then I think that you had talked about the boxes being raised?

A. Right.

Q. Would this be that kind of work that they're now above grade?

A. Right. See the ramp out here to the lid of the box, this is where an extension ring was placed on the top of the box to raise it, looks like about four inches. And then a concrete ramp, you know, to prevent a trip hazard and then the lid goes inside of that box. So it was raised to prevent ponding water getting in there that would just run right in. Incidental water could get in, but during the event of the 19th the water was 12 inches above that at the surrounding territory. There's a four inch box extension didn't provide the --

MS. JAHR: Correction.

MS. THORME: That's Exhibit 71.

MS. JAHR: I wanted to show you the front page. I wanted to show the picture first. This is Exhibit 71 and the date on that is --

MS. THORME: 2007. I think Mr. Young had asked a time frame. So thank you very much, Mr. Thoma.

MR. YOUNG: Any re-cross?

MS. MACEDO: No.

MR. YOUNG: Okay. Thank you very much, Mr. Thoma. All right. Now we will go back to the prosecution team's case in chief.

DIRECT EXAMINATION

(Gerald Horner)

BY MS. MACEDO:

Q. Sure. We're going to go slightly out of order and call Mr. Horner. We had a ruling yesterday that Mr. Horner was allowed to testify to make sure some exhibits got into the record. So he drove from Sacramento yesterday, which we appreciate. Good morning, Mr. Horner.

A. Good morning. My name is Gerald Horner. I'm the chief economist for the State

Water Resources Control Board. My address is 1319 H Street, Sacramento, California 95814.

Q. And how long have you worked with the Water Board?

A. I've worked with the Water Board for over 11 years.

Q. What is your title with the Water Board?

A. I am the senior economist for the Water Board.

Q. And I know you helped me and the rest of the prosecution team in a number of ways, and we're going to cover a couple of topics. Let's start with the foundation of a number of exhibits.

You assisted the prosecution team with Exhibits 18, 109 and 113. Those are exhibits that concern the economic benefits that we believe was received by the district in this matter. Do you recall those exhibits?

A. Yes, I do.

Q. Okay. And are they true and correct copies of what they purport to be?

A. Yes, they are.

Q. Okay. Ms. Thorme may have questions about the economic benefit and how it was derived,

but I'm going to proceed directly to ability to pay if you don't mind.

A. That's fine.

Q. Have you ordinarily conducted an ability to pay analysis?

A. Yes. In every case we usually require a method analysis benefit of noncompliance and also an ability to pay analysis.

The ability to pay analysis is usually done by first requesting the comprehensive annual financial report from the district that gives us a set of financials, according to a prescription that has been agreed to by the accountants that do this type of work. That has been -- was requested and we did not receive the comprehensive annual financial report from the district, so therefore we did not conduct a formal ability to pay on the initial June 27th submission in chief.

Q. Okay. But we did at the time that the district submitted its materials receive audited financial statements; isn't that correct?

A. Yes, we did.

Q. So we were able to do an ability to pay analysis at that time?

A. Yes, we did.

Q. What did it reveal?

A. The ability to pay of the district is adequate to cover the proposed ACL without any kind of impact on the ratepayers.

Q. And how did you come to that conclusion?

A. The conclusion was derived from the financial reports that were submitted for fiscal years ending in June 30th, 2010, fiscal years ending June 30th, 2009, and the fiscal report for the fiscal year June 30th, 2008.

In those reports there is a substantial amount of unencumbered cash and cash equivalents held by the district that is free to be used with contingency expenses for the district.

Q. When you say "substantial amount," what amount are we talking about?

A. For the years 19- -- fiscal year ending 2010 it is $5,125,000. For the year ending in 2009 it's $5.8 million, and for the fiscal years ending of 2008 it was $6.9 million. This is substantially more than what is typically retained in this type of an account.

Q. Okay. So I want to make sure, I'm not an economist, I want to make sure I understand you

correctly.

The most recent financial documents submitted to us that ends with fiscal year 2010 indicates a $5 million surplus?

A. Surplus.

Q. Okay.

A. Yes.

Q. So that is not indicating that there is bills to be paid, that's not reflected on a budget an outstanding income and assets, that's a $5 million surplus?

A. That is correct.

Q. Okay. Is that money unencumbered?

A. That is correct.

Q. Is that money liquid?

A. It is. Some of it is held, but it's not -- in a perusal of the account, it is not held nothing more than 90 days, so it's liquid in 90 days.

Q. Okay. Now, in one of the documents we talked a little bit about wastewater treatment rates and, you know, so it's your conclusion that based on this $5 million surplus that the district can pay the full penalty recommended by the prosecution team without passing it on to the

ratepayers, but based on the wastewater treatment rate what was your analysis of the rates, are they fair based on a consideration of other wastewater rates around the area?

A. The rates that are currently being paid by the district is about $16 a month for a residence. $16 a month is a lot less than what the average rates that are paid in the State of California. The average rates are about $26 a month.

MS. MACEDO: All right. Subject to redirect I don't have any further questions of this witness.

MR. YOUNG: Go ahead.

CROSS-EXAMINATION

BY MS. THORME:

Q. Exhibit 18, please. So Mr. Horner, this is Exhibit 18 which was the BEN results that were provided to us in the prosecution team's evidence. Have you seen this document before?

A. I have.

Q. Did you prepare this document?

A. I did.

Q. Okay. And what input did you use for

this document?

A. When we started this I normally go through with the technical people that are assigned to this project, if there is any indication of any kind of either practice or any kind of a program that should have been purchased that could have prevented the spill and also whether it was out of compliance.

We found -- I found in the fiscal year budget of 2004, 2005 a proposal for an electrical system upgrade. And my decision was to use or to indicate that this upgrade would have significant effect on prevention of the spill. And let me -- I base this on the following description that was prepared by the district.

The original electrical system was installed in 1964 and 1966 as part of the construction of the plant. Additional electrical equipment and wiring was installed in 1986. The wiring that connects the various motors with the motor control center located in the power generation plant has deteriorated over the years due to being submerged by groundwater. The existing wiring is not designed for this type of service, and as a result there has been several

instances where the wiring has failed and either caused an electrical fire or loss of power.

This project will replace all of the wiring to the various motors and lighting in the plant with waterproof wiring that is rated for this type of service. In order to keep the plant operating during this process the wiring will be replaced in a sequenced fashion with one set of wires replaced at a time. In addition, as-built drawings will be created.

And it was my judgment at that time had that project been undertaken in 2004 or after 2005 it would have had a significant effect not only in upgrading the electrical system but to uncover other problems that were in existence in this vault.

Q. So Dr. Horner, were you given the district's evidence when we submitted it to review?

A. Yes.

Q. Did you review Mr. Tomas' declaration?

A. No, I did not.

Q. Did you hear Mr. Tomas' testimony today?

A. I did.

Q. Does that change your mind at all as to --

A. No.

Q. -- whether that wire -- can I finish my question, please?

A. No.

Q. Can I finish the question, then you answer it.

So does that not change your mind that this initial 2004 budget item would not have made a difference?

A. No.

Q. Were you aware of the rewiring projects in Exhibit 51 that we had up on the board?

A. Yes, I am.

Q. And that doesn't change your mind either?

A. This was done in June -- I did this -- performed this in June.

Q. I understand.

A. Okay. All right. Prior to the submission of that evidence.

Q. I understand.

A. Okay.

Q. But if your mind has been changed and the BEN model needs to be rerun, that's what the question I'm asking you, has there been any change in your thought process that would modify the BEN model?

A. Yes, there is.

Q. Okay.

A. If I had to do it over again, I certainly would look at a number of factors that led or possibly led to this occurrence. I think the pump discharge valve I think needed to be -- could be a cause. The emergency pump, the leaky influent gate, headworks had problems and then, again, there was probably other electrical issues that will be discussed -- or were discussed this morning.

I would do a more detailed investigation on those issues and determine what the compliance costs were at the time that that should have been done to determine the spill.

Q. So my understanding you would make the number bigger and not smaller?

A. I think this right here is a very, very conservative estimate of the benefit of noncompliance.

Q. Okay. Where did the $5,000 estimate come for the one-time nondepreciable expenditure come from?

A. Well, that will be discussed later, but it was for some minor -- very, very minor expenses that were not done at the time of the spill.

Q. You don't know what those things were?

A. Well, I can't really remember right now what they were.

Q. Okay. What is the basis for your allegation that the costs were tax deductible?

A. No, the tax status is a municipality. If you can -- right down there on the fifth line there it says, "Tax rates in municipality which pays no taxes." So it's not depreciable.

Q. Where did you come up with the discount rate?

A. The discount rate in the BEN model is determined by the type of entity that you are, and from municipalities the average bond rate is used as the discount rate.

Q. What is that percentage?

A. For this particular case it is 4.5 percent.

Q. Okay. And do you know what the prime rate interest rate is right now?

A. Prime interest for commercial lending?

Q. Yes.

A. Is about 7 and a half percent, 9 percent.

Q. Okay. All right. And where did you come up with the useful life estimate of 15 years?

A. 15 years is pretty typical on this type of an installation.

Q. What is the rate for SRF loan funding, state revolving fund loans?

A. Right now it's about 2.5.

Q. And how did you select the probable payment date of 9/1/12?

A. That was in June, and counsel said that that was a probable date of settlement.

Q. Okay. All right. Can we pull up Exhibit 39, the last page, please. So this is the shunt trip receipt for payment. So to make the change to install the seal in the middle of the page is cut in EYS on shunt trip controls, the actual cost to fix that was approximately $500. Was that in your analysis?

A. No.

Q. Okay. And can we go to Exhibit 98, please, which is the declaration of Aaron Yonker, it's Exhibit B on the financial information. Okay. So these funds here that are in the middle, were these the numbers that you used for determining there was a $5 million surplus?

A. I don't recognize that at all.

Q. So what numbers were you looking at to determine there was a $5 million surplus?

A. Okay. This report is entitled the independent auditor's report and financial statements for the years ending -- or for the year ending June 30th, 2010 for the South San Luis Obispo County Sanitation District.

Q. Do you know whether that was evidence in this case as part of an exhibit?

A. It was submitted I think by the discharger.

Q. That wasn't my question. My question is did the board members have that evidence?

A. I don't know.

Q. I don't believe that they do.

A. Oh, okay.

Q. So was there any evidence in the

exhibits that were presented to the regional board that would show what you're claiming to be a $5 million surplus?

A. If you say no, no, there isn't.

Q. So if you look at this information, which was presented in evidence to the board members, this is the -- as of July 1st, 2012 these are the balances. So there's operating fund balance, which is negative, an expansion fund which are sewer connection fees that cannot be touched under the government code, replacement fund to total $3.7 million, where do you find a $5 million surplus in there?

A. The ability to pay analysis is based on a US EPA model, it's a computer model for determining the financial status of a district. And it uses the standard financial statements called the balance sheet, the income report and a cash flow statement. The basis -- the first basis for ability to pay is cash and cash flows which comes from the financial report.

Now, the last report that was submitted by the district was the fiscal year ending June 30th, 2010. If there were adequate reports that were prepared after that date we did not see

them. If that is a 2012 document it is immaterial, because, one, I would probably guess that is probably a budget; is that correct?

Q. I am not testifying today.

A. Well, can I see the title page for that?

Q. This is attached to Mr. Yonker's declaration. This was evidence that was provided with the district's -- our case in chief, essentially. So you weren't given this to review?

A. I have seen this. Okay. And this is not germane to ability to pay.

Q. So cash on hand and ability to get the money is not relevant to whether someone can pay?

A. Well, your cash on hand comes from your financial statements, from your balance sheet. That is not a balance sheet.

Q. But doesn't it directly reflect to how much money you have in the bank?

A. That does not show a complete picture.

Q. Okay. So at the bottom, the table that runs over into two pages, she can put both of them

up so we can see both, so this is as of the revenues and expenditures for the coming year, which would be this fiscal year that we would actually -- the district would have to pay the penalty, so revenues minus expenditures. And then we see on there if this liability, which has now been raised, had to be paid it would leave a negative amount for the district to run the treatment plant. How does that not reflect ability to pay?

A. Because your expenditures listed as fiscal year 2010-13 expenditures probably include -- there's no detail on this number, but I am guessing that that has a substantial amount of depreciation. Depreciation is a non-cash cost.

Q. But what about major budget items that have been scheduled that need to be done and if they're not done then we'll back in another hearing?

A. Okay. You asked me about that number.

Q. Right.

A. And I'm saying that that number -- I have looked at your audited financial statements and your revenues exceed your expenditures in

every given year. You do not have an income problem in the district.

Q. But the last ones that you looked at you're relying on 2010 and we're two years later than that now.

A. That's right.

Q. Because the audited forms for 2011 aren't due yet or haven't been done yet.

A. For 2011 --

Q. Or you don't have them.

MS. MACEDO: They were provided.

THE WITNESS: The last I saw was 2010.

BY MS. THORME:

Q. Okay. Where is your evidence that there is depreciation contained in those balances?

A. Well, I can show you -- for these?

Q. Yes.

A. Yes, I can if you want to see it.

Q. Well, if it's a document that's not in evidence we have to put it into evidence. This is two years old.

MS. MACEDO: That's the latest you provided; so --

MR. YOUNG: If he's referring to this document, is this in evidence?

MS. MACEDO: It's not.

MR. YOUNG: Why don't we mark it.

MS. THORME: Yeah, we should mark it.

MR. YOUNG: Do you have a problem?

MS. MACEDO: I don't have any objection to it being marked as evidence as long as the district doesn't.

MR. YOUNG: Is this a district document?

MS. THORME: I believe so, yes.

MS. MACEDO: It is.

MR. YOUNG: Okay. So let's mark it.

MS. MACEDO: Okay. It will be Exhibit 114?

MS. THORME: Yes.

MS. MACEDO: It's the whole 2010 fiscal audited response?

MR. HORNER: It is the independent auditor's report and financial statement for the South San Luis Obispo County Sanitation District for the year ending June 30th, 2010.

/////

BY MS. THORME:

Q. And so are any of the funds that you are looking at in fund balance 19 -- actually, can you go back to the earlier table? So which fund balance were you looking at that had additional cash in it?

A. Okay. This document is not the document that is used to determine ability to pay. The ability to pay is determined by the financial statements of the district which you have said are not completed yet for 2011, and they're also not completed for 2012.

Q. Right. Well, the fiscal year just ended fairly recently for 2012.

A. That's right.

Q. But my question goes to which fund balance -- the district has dedicated funds that are for certain things and certain of those funds cannot be touched under law.

A. I did not look at any of those.

Q. Okay. So if --

A. I did not consider them.

Q. So if that money, the $5 million that you were looking at was in a restricted fund that couldn't be used for this purpose how does that affect your ability to pay analysis?

A. Okay. For the fiscal year ending June 30th, 2010, the current assets, cash and cash equivalence $5,190,955, that's where I got that.

Q. Okay. But what I'm saying is you have to look at each of those funds to see where the money is because under the government code certain funds that come from sewer connection fees have to be deposited in a separate fund and can only be used for the purposes that those charges were collected. So they are restricted under law and cannot be used to pay a penalty which is not the purpose that they were collected for. So my point is if you're looking at money that's in a restricted fund it cannot be used for ability to pay. And you didn't -- you didn't consider that when you're looking at the $5 million surplus.

A. I did.

Q. How did you?

A. Those funds are not included in the cash and cash equivalence. Those funds are separate. Those funds are kept clear by law. There is a clear statement about proprietary funds and those that are restricted by law not to be touched, but it's very clear when your financial statement that your cash and cash equivalence,

accounts receivable, interest receivable and prepaid expenses are substantial. None of those are restricted by any -- any rules or any laws. Those are liquid, those are kept in interest bearing accounts of no more than 90 days.

Q. Okay. But this --

MR. YOUNG: Excuse me, can I just ask him a question because it's --

MS. THORME: Yes. Certainly.

MR. YOUNG: Mr. Horner, where then would the funds that you're referring to that are designated and separate, where do they appear in that analysis or on this table?

MR. HORNER: They are in separate -- in separate accounts that are identified in proprietary accounts, but they're not in the financial statements. These are the statements by law that must be accounted for in those categories. They are not proprietary funds. We don't look at proprietary funds. So we don't -- we are aware of them, but I don't -- I have no interest in proprietary funds.

MR. YOUNG: So this is a balance sheet, correct?

MR. HORNER: This is a balance sheet,

yes.

MR. YOUNG: So it's not identifying or recognizing all of the district's assets, is that what you're saying?

MR. HORNER: Yes.

MR. YOUNG: It is other assets that are not on this balance sheet?

MR. HORNER: Yes. Those proprietary funds, yes, that they're nontouchable.

MR. YOUNG: Okay. Go ahead.

BY MS. THORME:

Q. Well, I just want to say we're at a little bit of a disadvantage because this wasn't put in as evidence that we were preparing for today. So I haven't had a chance to look at this or know where it came from or anything. So I just want to get that on the record that we're working at a little bit of a disadvantage. We'll try to have district people testify to this later in the day, but this -- just for the point, this is 2010, we're now two years later and as everyone knows your financial situation can change very quickly. And so if there was a need to go out to raise rates in order to pay this penalty are you aware of the restrictions on a district that you cannot

just raise rates, that you actually have to go out to a vote under Proposition 218 and Prop 26 before you can raise rates?

A. Yes, I am.

Q. Is it a sure thing that you're going to be able to raise rates?

A. No, it's not. However, with this amount of cash sitting on the books, there is no way you should have to go to raise rates.

Q. But that was sitting on the books two years ago?

A. Right.

Q. Now, if we can move to your Exhibit 109 which was the document that you submitted with your rebuttal. All right. In this document you said that there were illegal competitive advantages that you were looking at. Can you explain to me how a municipality can have an illegal competitive advantage?

A. This response was prepared to the objection that was raised concerning the BEN model. And the fact that the BEN model was controversial --

Q. Okay. But wasn't the BEN model --

A. Excuse me. Can I finish?

Q. Oh, I'm sorry.

A. The BEN model is controversial, there's no question about it. Because it is used nationally against major corporations. They have prepared a number of arguments to challenge the way that we discount, the way that we compound our interest and this illegal competitive advantage, which does not pertain to this case.

Q. Right. So municipalities are a little bit different than when you're using this model for a corporation that actually makes money?

A. That's correct.

Q. Okay. You also talked on the second page of your document that there were five alternative inflation rates that have been built into the model and that default discount rates can be overridden by the user. How are we to know from the black box whether you're overriding, whether you're using a standard, how is someone to know just from the output what was the input?

A. First, this is not a black box. The BEN model is nothing more than an Excel spreadsheet. The Excel spreadsheet is distributed with every download for the BEN model, it's a standard, stand-alone calculated. The input for

the BEN model is printed out. Now, I think -- I'm not sure if we had an exhibit or a slide, but I can certainly show it to you.

MS. MACEDO: I can get it.

MR. HORNER: In here is a description of the inflaters that are used for a particular expenditure or capital cost that should have been used for compliance. And I can certainly go through those with you if you'd like. I can describe them. It's listed --

MR. YOUNG: Before we do that -- how are you doing?

(Discussion off the record.)

MS. MACEDO: He's talking about 18.

MS. THORME: Okay.

MS. MACEDO: If that helps.

MS. THORME: Which we had up before.

MS. MACEDO: Yes. You have it. There you go. Is that what you want, Gerry? The first page?

MR. HORNER: That one right there. And that's the standard input sheet that's printed out and indicates what all the assumptions that were used in the analysis.

BY MS. THORME:

Q. Okay. So also if we can go back to Exhibit 109 to the second page. At the bottom you were saying that the 2012, 2013 adopted budget cannot be used to determine fund balance for the district. What's your basis for that statement?

A. Budgets have no rule.

Q. But that's how the district functions, they work off of a budget and --

A. It's a planning document.

Q. But it's also based on reality of what the money is in the bank at the beginning of the budget and how they're going to spend it.

A. Could be. There's no checks and balances on budgets, never has been, never will be.

Q. Right. But that's the way a public entity functions. They don't function two years ago on the audited documents, they're functioning day to day on what's in the bank.

A. And I have to do my analysis based on what was and what is currently.

Q. Okay.

A. Not on what will be.

Q. You also said that many dischargers are required by California law to prepare a

comprehensive annual financial report and you cited sections of the government code. Do you know whether those sections apply to the district?

MS. MACEDO: I'll object that it calls for a legal conclusion.

MS. THORME: You can answer.

MS. MACEDO: You can say I don't know.

MR. HORNER: I'm confused.

MR. YOUNG: Then don't say anything until we --

MS. THORME: Well, he was putting these legal arguments into his document, so he obviously had a thought that this applied.

MR. YOUNG: I think you asked him whether certain government code sections apply.

MS. THORME: That's what I asked is whether those apply to the district.

MR. YOUNG: I think it's fair to ask him the question. Go ahead.

MR. HORNER: Well, it was my opinion that every district should be using a comprehensive annual financial report.

BY MS. THORME:

Q. That's different than whether these code sections apply to the district.

A. The code sections are strongly suggested. Okay. They're not mandatory.

Q. And do you know whether those only apply to county governments?

A. They apply across the board. Any public agency should be using a comprehensive annual financial report format.

Q. That wasn't my question. My question was does this code section specifically apply to county sanitation districts?

A. I don't know.

Q. Okay. And you said that there shouldn't be any impact to ratepayers and that was based on your analysis that there's $5 million in surplus; is that correct?

A. That's correct.

Q. But if rates had to be raised to pay this penalty there would be an impact to the ratepayers; is that correct?

A. Could you ask that question again?

Q. If the district had to raise its rates in order to pay this penalty, would that be an impact to the ratepayers?

A. If the rates were increased it would be a direct impact to the ratepayers, yes.

Q. And when you were considering the rates of the district the only thing that was provided by the prosecution team in evidence was Exhibit 113 which were rates from 2006 to 2008, were those the rates that you considered?

A. No.

Q. So you were considering other rates that were not in evidence in this case?

A. No, the rates were effective in 2010.

Q. Okay. But the prosecution team did not put those into evidence?

A. I don't --

Q. To be clear, which ones?

A. I don't know. But it's directed -- it came from the district and it's your rate schedule that currently exists in the district.

MS. THORME: Okay. All right. No further questions.

MS. MACEDO: Do you want to take board questions?

MR. YOUNG: Do we have board questions? We do. All right. Let's take a break first.

(Recess taken.)

MR. YOUNG: Just a couple of housekeeping matters to take care of, then we'll break for lunch. I received a request for one or two of the public comment speakers that have a time crunch that would like to speak earlier in the day, and I'm going to grant that. Here's the trade-off: If you were to speak at the end of the day you get three minutes, if I take you out of order now you'll have two minutes. That's just a trade-off I'm going to do. So can I see a show of hands so I get an idea of how much time I'm going to need for those that want to give up their minute and speak, I'll take you before we break for lunch. I see one, two, three. So those three we'll take before we break for lunch, just those three at this point.

And then we just wanted to let counsel know, Melissa and Julie, what we're going to do, I just want to make sure you're aware, we admitted a number of documents as hearsay documents. We're going to rely on you, both of you, if there is a document that you want admitted under a hearsay exception we're going to need to lay the foundation and make sure we're aware of it which you're going to offer for the truth of the matter

asserted. Okay?

MS. THORME: Yes. I just have one clarifying question because Board Member Wolff was referring earlier to Mr. Appleton's testimony, which was one of the documents that was excluded as evidence.

MR. YOUNG: Okay.

MS. JAHR: Right. We will -- the board members will not be relying on any exhibit unless it is used for those purposes.

MS. THORME: Thank you.

MR. YOUNG: Okay. All right. So we will continue with Mr. Horner. And let me ask you something. Were you waiving your redirect?

MS. MACEDO: No, I'm happy to do it now or I'm happy to do it after board member questions.

MR. YOUNG: Okay. Why don't you do it now.

REDIRECT EXAMINATION

BY MS. MACEDO:

Q. Sure. So to the extent we should just clear the record, we've placed in front of everyone a document that was submitted by the

district that has been Bates stamped SLO 02503 through SLO 02537. And Mr. Horner, do you have these documents in front of you?

A. Yes, I do.

Q. For the record I believe they are the independent auditor's report and financial statements for the years ending 2009, 2008, and then if you turn to Page 02520 that is the financial statement for the year ending June 30th, 2010.

A. That's correct.

Q. Okay. And this is where you had interacted with Ms. Thorme about the $5 million surplus, correct?

A. That's correct.

Q. And you were assisting me with the preparation of our rebuttal materials, you prepared a couple of documents that we submitted, our rebuttal materials including documents 108 and 113. These documents were submitted and you have the opportunity to review them. They have not -- the district has not prepared -- or excuse me, the district has not submitted any more recent financial statements?

A. That's correct.

Q. And Ms. Thorme showed you Mr. Yonker's declaration and some excerpts from that about a proposed budget and where their money is and how they have an inability to pay. Do you recall that?

A. Yes.

Q. And you testified briefly about the difference between a budget and an audited financial statement?

A. That's correct.

Q. And it is your opinion that the board would not be able to make a finding of an inability to pay on a budget?

A. That's correct.

Q. Based on an audited financial statement from the year 2010, and now we're in the year 2012, would it surprise you to learn that a $5 million surplus has now been either spent or allocated in such a way that it cannot be used to pay a $1.4 administrative civil ability penalty?

A. Yes, it would. And that conclusion is based on the fact that the current income, current expenses as reported in the last fiscal year's document is very adequate to meet. There should be no negative balances. If a catastrophe, if

something happened that was unforeseen, you could see a substantial decline in that balance, but I'm not aware that that in fact has happened.

Q. Okay. I wanted to direct your attention --

MR. YOUNG: Hang on. Is there an objection?

MS. JAHR: No, I just wanted to clarify. You said last year's financial record. Are you referring to the 2010 financial year? When you had just stated you said the conclusion was based on the income and expenses from the last year's fiscal statement.

MR. HORNER: Yes, 2010.

MS. JAHR: Okay.

MR. HORNER: That's fiscal year 2010.

BY MS. MACEDO:

Q. Then we had a brief discussion about the current wastewater rates for the citizens of Oceano, and this was actually submitted with the prosecution team's rebuttal documents and Exhibit 113, and I would like to point out that these documents and rates are not four years old. You've assisted me with printing this document, this is Page 6 of 18 for Exhibit 113. And can you

describe what this reflects?

A. This is the rate structure that's currently being used by the district, and this was proposed to the board by ordinance No. 2006-01. And it includes the rates that were submitted for approval up to May 1, 2010.

Q. So the rates are more current than four years old, they're as current as May 1, 2010?

A. These -- yes. These were adopted by the board and are currently operational.

Q. For my final question or series of questions, you've testified in several ACL cases around the state, correct?

A. That's correct.

Q. Are you familiar with how the inability to pay defense works for dischargers?

A. Yes.

Q. So once the prosecution team conducts the review of documents how does the burden of proof then shift?

A. It is on the discharger of the defense to show that they have inability to pay.

Q. And is it your opinion in this case that they have -- the district has demonstrated an inability to pay?

A. Yes, as of end of fiscal year 2009, 2010.

Q. Does the district have the ability to pay the recommended penalty?

A. Yes, that's right.

MS. MACEDO: No further questions.

MS. THORME: Mr. Young, if I could, we just got copies of these documents and I didn't have them with me because they weren't in evidence. If I could have a little leeway to ask a couple questions.

MR. YOUNG: Sure. You're referring to this?

BY MS. THORME:

Q. Exhibit 114. So if you could put up -- we don't have this electronically either, so I would ask if we could put up the page that you were testifying from, which I believe is Page 3 of that document. You had it pop up when he was originally testifying.

So Dr. Horner, was this the document that you talked to me about earlier that you were using to demonstrate a $5 million surplus?

A. Yes, I was.

Q. Okay. So did the amount of money in

this financial report go down from 2009 to 2010?

A. Yes, it did.

Q. Okay. And so the money that you're looking at at the very bottom where it says unrestricted 5,180,985, is that the number that you're using for the $5 million?

No, the number that is used is the amount of the current assets, which in 2010, I'm just going to say fiscal year '09-'10 is $5,640,248. You have to subtract from that the current liabilities, which is in this case, again, for the year 2010, $515,160. And that gives you what is called the net current assets, which in this case is $5,125,079.

Q. Where do you see that number?

A. It's not on here.

Q. Okay. Where did it come from?

A. Okay. It came from the total current assets. If I could go over there I could --

Q. Yeah, you can go and point to it.

A. Maybe the screen can be enlarged. Here we go. Okay. The total current assets -- I can't quite read that, $5,640,248. Net current assets is this number right here minus the total current liabilities, which is $515,169. That is what's

called your total net current assets.

Q. Is that not the same as essentially down at the bottom where it says net assets and some of it's invested and some of it is quote/unquote unrestricted?

A. No.

Q. So how is it different?

A. Well, what number are you referring to?

Q. Down at the bottom there's a $13 million figure for invested in capital assets and then unrestricted $5.1 million which is essentially in the same range of the number that you're speaking to me about.

A. Your net assets includes a lot of invested capital and net related debt. It's called other things, but that's not what we're looking at in terms of ability to pay.

Q. Okay. So you're using the $5 million figure of cash and cash equivalence?

A. Yes.

Q. So if we can put up the last page of this exhibit. It says note 9 reserves and retained earnings.

MR. YOUNG: Next page after the one that's on the screen.

MS. JAHR: Bates stamped SLO-60537.

BY MS. THORME:

Q. So does that $5 million number that you're looking at include these reserve accounts?

A. No.

Q. Why not?

A. Because it doesn't.

Q. Well, where is that money accounted for on the earlier slide?

A. Okay. One of the problems that you have with nonstandardized financial reports is that there is a whole degree of latitude that the auditors have in preparing these reports. A comprehensive annual financial report dictates how all of these numbers will be prepared and reported. The typical -- no, the mandated -- the procedure in a comprehensive annual report specifies that the current net assets are unencumbered, unencumbered either with respect to restriction or with respect to law or ruling. And that page right there is not what I'm concerned about.

Q. Okay. And you had talked with Ms. Macedo about the rates, and those were

projected rates from an earlier time, projected to what they would be in a later time; is that correct?

A. No.

Q. The document that she had up on the screen it said future rates as of, and then each different year.

A. Okay. An ordinance No. 2006-01 was put before the board of directors, these were proposed rates that were approved.

Q. Right.

A. And now are currently in use.

Q. Okay. And what do those rates cover?

A. Those cover the rates to the connections for the district.

Q. Okay. So that covers the treatment plant and the trunk lines that are owned by the district; is that right?

A. It covers whatever the district covers to recover -- to charge service to recover to the expenses.

Q. Do the satellite collection agencies also charge rates for transport of sewage?

A. They do.

Q. And those are additive to the

district's rate; is that correct?

A. Only for those areas that pertain to the other -- their rate structure of their own. My understanding is that the South San Luis Obispo County Sanitation District furnishes services to two other districts. Is that correct?

Q. No, it's three.

A. Well, aren't they included -- they're one.

Q. No.

MS. MACEDO: She's not testifying.

BY MS. THORME:

Q. I can't testify, but it will come out later in the day.

A. Okay. The $16 is the recovery that it costs.

Q. Okay. But then there are satellite correction system agencies as well?

A. Yes.

Q. And do you know what those rates are?

A. I do. I've got them.

Q. Okay.

A. If you want to discuss those.

Q. For all three of the collection system agencies?

A. I do.

Q. Which collection system agencies do you have rates for?

A. Oceano CSD, City of Grover Beach. That's it. I have two.

Q. Do you have what those monthly rates are?

A. Yes, I do.

Q. Okay. And do you know whether the prosecution team put those into evidence?

A. No.

Q. Okay. Exhibit 113.

MS. MACEDO: Want me to pull it up?

BY MS. THORME:

Q. No, we can do it. We have that one. If you can blow that first table up a little bit for me, please.

So you said these were the current rates, but the last rate is -- these were adopted in 2006, is that what you testified?

A. Yes.

Q. So this says future rate as of May 1st, 2010. Is that the latest rate?

A. Yes.

Q. And do you know what the current rates

are?

A. Well, it says right there.

Q. Do you know whether they've been changed since May 1st, 2010?

A. No.

MS. THORME: No further questions.

MR. YOUNG: Any redirect?

MS. MACEDO: No.

MR. YOUNG: Okay. Then we'll have board questions. Let's start at the far end. Mr. Johnston, do you have any questions? We'll just go down the line, Mr. Jordon, Dr. Wolff, Mr. Harris.

MR. JOHNSTON: Dr. Horner, I'm still trying to sort out this, and I admit reading financial statements is far from my specialty. I'm looking at the final page of this auditor's report, I believe it was shown earlier, the 2010 auditor's report, and it's note 9 reserves and retained earnings. So is it your understanding -- I see a reserve for capital replacement and expansion. Is it your understanding that this is the fund created that's set aside, I guess created by connection fees and can't be touched?

MR. HORNER: That's the way this reads,

yes.

MR. JOHNSTON: Okay. And does that -- so I'm looking at the -- there's a bottom number there $5,180,985 of total unrestricted net assets, and it's not clear to me why they would -- maybe this is term of art, but why they would call it unrestricted if it in fact is restricted to only using for the specified purpose. Is that term unrestricted mean that they can use it for any purpose or is that -- do you have any sense?

MR. HORNER: Procedures that are established in the comprehensives annual financial report does not allow for any kind of what I'm going to call, probably incorrectly, double accounting. Okay.

The assets that are listed in your balance sheet which are current assets must be unrestricted. Those must exist as cash or cash equivalence or the accounts receivable, interest receivable pre-paid expenses. And they cannot appear in a proprietary restricted fund.

MR. JOHNSTON: So what you're testifying is that if this accounting form were in the preferred format that this would be quite clear?

MR. HORNER: Yes.

MR. JOHNSTON: Okay. But I'm trying to -- it's not.

MR. HORNER: It's not.

MR. JOHNSTON: So I'm trying to get at whether you're able to testify one way or another as to whether there is a portion of the -- what you're looking at, I believe the term you used was net unrestricted assets.

MR. HORNER: Net current assets.

MR. JOHNSTON: Net current assets.

MR. HORNER: Right.

MR. JOHNSTON: That is in fact a reserve that they cannot legally touch for capital replacement and expansion. And are you able to discern that from these documents?

MR. HORNER: This document -- the definition standard accounting definition for net current assets is that it is unrestricted. It is primarily set aside or set for use for immediate contingencies and it is not earmarked for any particular use. That is the standard accounting definition.

MR. JOHNSTON: Okay. So what -- and I don't want to put words in your mouth, but my

understanding then from what you're saying is that if standard accounting definitions apply that the restricted -- the connection fees restricted fund is not included in the net current assets?

MR. HORNER: That's correct.

MR. JOHNSTON: I think I understand.

MR. YOUNG: Okay. Mr. Jordon.

MR. JORDON: Thank you, Mr. Chair. Good morning, Dr. Horner. I'm actually sympathizing with both side's points. My experience is that the city government at least is that the use of the words encumbrances and restrictions is a term that's played with in different ways by cities and also even within departments within the city.

Could these numbers on this page also -- while I understand the point you're making, could they also just not be -- also be a pot that is being accumulated for long-term financial source on capital projects? Could they not have a 20-year list of capital projects and this is the method they're accumulating funds until they are ready to do that project or until they're ready to encumber or restrict those funds for that project? Isn't this where it would show

up?

MR. HORNER: What you're asking me for is, if I understand your question, is, is the question on managing financial accounts, how would you manage what you have and how you would indicate on paper what you're doing. Okay. And I'm reluctant to go there because that's certainly not my job.

MR. JORDON: But on the flip side you're asking me to presume an alternative scenario that you presented, right?

MR. HORNER: Absolutely.

MR. JORDON: Thank you.

MR. HORNER: Hypothetically, if an entity is planning what you said, a capital expansion, a project, what you should do is prepare the necessary funds to do that, to encumber your savings to be able to earmark that, to be able to use it when it is required. And that's -- I get back to this CAFR, comprehensive annual financial report, mandates that. That is set on the formula. By saying that you had a current asset you cannot have it encumbered. So their thinking about that is not evident to the person that's reading the financial statements.

MR. JORDON: So my experience is I think a little difference than that, and maybe we're just far apart on this word encumbered. Because if I have a 20 year schedule of unfunded capital improvements those out years are subject to city council or board of supervisor turnover as to what will be funded in the future or not, and I don't think they're necessarily -- at one point in time that they're restricted or encumbered. Those monies can move back out again. But they're certainly shown as -- my experience, they're shown somewhere on a balance sheet or a fund or a bucket as available funds being set aside for a future capital project. That's my experience, so I --

MR. HORNER: I understand.

MR. YOUNG: Is there a question?

MR. JORDON: That might not be proper in the way that you're describing it or the way you would apply to this particular situation. So going back to my question then, is it possible that the top line there of $2.9 million is being represented in that method?

MR. HORNER: Well, I don't --

MR. JORDON: You don't know if it's possible?

MR. HORNER: Well, it's possible, but I think that's only in the management of the district.

MR. JORDON: Okay. Thanks.

MR. YOUNG: Dr. Wolff.

MR. WOLFF: Thank you. In your testimony you addressed two issues, one is the ability to pay the fine, and then the second one, which the first part we covered, was the competitive benefit of not having performed the electrical repairs which were budgeted to initially $200,000. And in the capital improvement activities the electrical system upgrades were listed as 04-MB-116, and as I understand those originally were estimated about $200,000 to perform various electrical system upgrades. And earlier 01-MB-101 energy service project is a cogeneration installation, which if I recall was budgeted around $700,000.

The justification also in the evidence that were provided for the cogeneration was about $120,000 year energy saving by installing the system. That was one of primary economic element of the analysis.

So when reviewing competitive benefits

in allocating certain funds for certain activities versus other activities, when you reviewed the fiscal year of 2010 have you made any observation in terms of the ability of the district to commit some, you know, significant large capital equipment one way versus another, meaning $200,000 versus $700,000? And I'm not asking you, you know, the technical question associated with whether or not one would be more beneficial than the other, but the affordability of being able to spend $700,000 versus $200,000.

MR. HORNER: No, I didn't. I did not make that determination. My job is to determine if there is a compliance project that was not conducted or undertaken or practices that were not followed or procedures that needed to be upgraded and to determine what the economic gain from that by not doing -- either by avoiding it completely or delaying. And that's all my -- that's all I did.

MR. WOLFF: Thank you.

MR. YOUNG: Mr. Harris.

MR. HARRIS: No questions.

MR. YOUNG: Mr. Jeffries.

MR. JEFFRIES: Dr. Horner, I think

there's some confusion that I'm hearing from some of my colleagues of comparing the budget to a financial statement or an audited financial statement. In governmental accounting it's very difficult to track some of these items.

You talked -- and there's been a lot of discussion about restricted funds. There are restricted funds that are restricted by the vote of the board and there's restricted funds by government code.

Now, I know you said you didn't look at restricted funds by government code, but did you look at the budgets and their financial statements to look at restricted funds that were placed by a vote of a board? And those funds normally are for capital projects which could be changed by a vote of the board by simple vote. Did you look at those as restricted funds or nonrestricted funds?

MR. HORNER: I assumed those were restricted funds.

MR. JEFFRIES: You assumed those were restricted funds?

MR. HORNER: That is correct.

MR. JEFFRIES: So that would mean there would be more cash available if the board decided,

if they had an emergency, that they could by a vote and change that restriction to whatever they wanted to do with it at that particular time. Now, did you do any comparisons from their budgets to their audited financial statement year endings for each year, did you do comparisons?

MR. HORNER: No, I did not.

MR. JEFFRIES: You didn't. So you just took the audited financial statements?

MR. HORNER: That's right.

MR. JEFFRIES: And a lot of audited financial statements do not bring up all those particular restricted funds that are normally in budgets.

MR. HORNER: Yes, they do. The restricted funds are listed as a financial statement.

MR. JEFFRIES: Well, all restricted?

MR. HORNER: Yes.

MR. JEFFRIES: Okay. You took into account for all the restricted?

MR. HORNER: Yes, but not as a budgeted item. I didn't look at the budgets. I only looked at the reported funds that were in the proprietary.

MR. JEFFRIES: Okay. And did you separate those restricted funds? You did not is my understanding.

MR. HORNER: Yes.

MR. JEFFRIES: You did?

MR. HORNER: Yes.

MR. JEFFRIES: Oh, you did?

MR. HORNER: Yes. They are not included in the financial current assets.

MR. JEFFRIES: Just to explain my question a little bit further, and maybe I'm repeating myself. As I stated, there are government required restricted funds.

MR. HORNER: Yes.

MR. JEFFRIES: There are restricted funds that are placed on funds by the local board.

MR. HORNER: Yes.

MR. JEFFRIES: Okay. Did you separate those out again?

MR. HORNER: Yes.

MR. JEFFRIES: You did?

MR. HORNER: Yes.

MR. JEFFRIES: Okay. And that was included in their ability to pay?

MR. HORNER: Yes.

MR. JEFFRIES: All right. Now, there was an indication, I don't know, by somebody that said to raise rates you have to have a vote by the people, but you can also raise fees. Now, some people say well, fees are taxes, yeah, sure they are. Any time you have an increase from government it's a tax, I don't care what you call it, but you don't have -- to raise fees you don't have to have a vote of the people to raise fees.

MR. HORNER: You have to have -- my understanding is with the district is that you have to have a majority of the board of directors.

MR. JEFFRIES: That's right. They can raise the fees which is normal operating procedure.

MR. HORNER: Yes.

MR. JEFFRIES: Now, I understand --

MR. YOUNG: I think it's best that you pose your questions to him instead of kind of testifying as to what we may or may not know. Counsel hasn't objected and, you know, we're tending to do that and I think it's --

MR. JEFFRIES: Calling me an expert

witness or something?

MR. YOUNG: Well, you can ask the witness the information that you're looking for instead of loading it up with a lot of information; so --

MR. JEFFRIES: Well, I have a lot of experience.

MR. YOUNG: We all do.

MR. JEFFRIES: I understand.

MR. YOUNG: I think it's best if you ask the questions, if you can, and not load it up with so much stuff, you know what I mean?

MR. HORNER: I think there's something that has not been discussed here that is pertinent to your question. I use the US CPA model that determines the ability to pay of the municipalities. Okay. In the priority for ability to pay we use current assets as the priority for payment. The second priority involves their ability to finance. Third, they go into raising fees for dealing with their operating income. So that is the last priority, that ability to pay. We didn't even get to the financing part of it because the assets were sufficient to cover the proposed ACL.

MR. JEFFRIES: Let me ask you this then: Your analysis of the three years that you presented to us, in your opinion with the trend do they have the ability to pay the fine?

A. Yes, they do.

MR. JEFFRIES: Okay. Thank you very much.

MR. YOUNG: Okay. Last question for you, Dr. Horner. Can you tell us what exhibit number you were referring to early on when you were talking about the 2004, 2005 budget? I think it had some discussion about the proposal for electrical system upgrade.

MS. MACEDO: Number two.

MR. YOUNG: That's Exhibit No. 2. Okay. All right. Any other board questions? Okay. Thank you, Dr. Horner.

MS. MACEDO: Just a point of clarification. We take Dr. Horner out of order just like the district took Mr. Thoma out of order. So he was planning to depart and so we just wanted to make sure that was a acceptable.

MR. YOUNG: Is that okay? All right. That's fine. You can have your witness list any way you want. I don't know what order you were

proposing. So far as I know he was your first witness.

DIRECT EXAMINATION

(Jim Fischer)

BY MS. MACEDO:

Q. We're going to call our next witness, Jim Fischer.

A. Good morning, members of the board. My name is Jim Fischer and I'm a water resource control engineer, State Water Board Office of Enforcement. I'll be presenting the following information to you today, some of which you've already heard, hopefully to clarify some of the things we've talked about here as well.

First, an overview of the district's sewer system service area, including other service systems feeding into the district's sanitary sewer system wastewater treatment plant.

Second, information about the district's wastewater treatment plant facility, including its location and basic information about how it operates.

Third, the following areas we talked about before that cause or contributed to sewer

overflow.

And lastly, one more thing, the sequence of events on December 19th and 20th, ending with information about our investigation, including discussion about the violations.

This is a slide showing a map of the district's service area boundary right here in red. See the big boundary in red, that's our service area, basically a footprint of where all the wastewater's collected, transported and finally treated down here in Oceano at the plant.

The district's wastewater treatment plant is regulated under a national pollutant discharge elimination system or a NPDES permit, and also regulated under statewide sanitary sewer order or a statewide WDR for its sewer system, the trunk lines. You've heard of trunk lines before, the big giant sewers, they're shown here in black. These are all operated and maintained by the district.

Also note that other sewer systems Arroyo Grande, Grover Beach and Oceano, they're shown -- the cities are shown here but not necessarily the sewer systems. Those feed into the district's trunk line or the wastewater

treatment plant directly. Those systems are regulated separately and under our statewide sanitary sewer order.

This is an aerial view submitted to us from the district showing the wastewater treatment plant in relation to the Oceano Airport here to the left and the Oceano Dunes to the right.

Next slide, please. We have the area in red here to show you where the plant is in the aerial view. And there's also nearby homes to the left here showing Oceano along with the Oceano community service district sewer in blue and district's trunk line here in black.

I'd like to provide you with a snapshot, basically at the treatment plant here, how it works in summary. All the wastewater received in the area comes into this area here circled in red, the red arrows here we put on the slide. The process for secondary treatment through all these processes in the plant, disinfectant prior to being discharged into the Pacific Ocean and underwater outfall.

On the day of the spill the red circled area shows the location of the district's headworks where the electrical failure occurred,

that was one cause of the sewage overflow on December 19th and 20th.

Ms. Macedo earlier discussed some of the maintenance issues that led or contributed to the overflow that occurred on December 19th and 20th. I'd have to show you some of the photographs and orient you to where those items are located in the wastewater treatment plant.

This line shows the district's Exhibit 58, it's a diagram of the headworks room at the plant. Let me explain a little bit. It shows some of the -- several malfunctioning components we talked about earlier. The outer wall here at the top, this would be the overhead view, the bottom here the elevation view, and the top view you can see this wall around the headworks, that's referred to as the flood wall.

I'd also like to show you additional photographs that are components inside these headworks. And as you can see the four influent pumps here in the overhead view are located here, and there's also a discharge valve, I'll show a little bit more -- pardon me, I'm sorry, a gate valve here, both in the overhead view and in the elevation view here.

This is just a re-circled, not a contributing factor here, for the similar flows leaking influent slide gate, it's circled here in red and the slide is highlighted for you. The influent slide gate allows the district to stop the flow of incoming sewage into the plant.

According to deposition by Mr. Appleton, the slide gate accessibly may not have been repaired since the plant was constructed in the early '60s.

This is the district's pump room showing the influent pumps here that failed on the day of the spill, where they're located. The cause of the failure was in part electrical. Mr. Appleton will talk more about the electrical issues later.

This is a diagram showing the shunt trip switch here right in the middle. That was provided in Mr. Thoma's declaration just before orientation. We circled the shunt trip switch this next line here in red. Regardless of our agreement or disagreement with Mr. Tomas' testimony, it's clear there are water intrusion issues within the electrical conduits of the plant.

Another contributing factor to the sewer's overflow on December 19th was the emergency diesel pump shown here on the slide. The emergency diesel pump had intermittent problems on December 19th, including stopping and starting numerous times. The district used this pump, there was sewage around pumps when it failed on December 19th.

Another contributing factor to the sewer overflow was the emergency diesel pump's discharge valve. Showing the slide submitted to us by the district -- go back here. It's right here, and on the next slide we circled it in red to show it to you more closely. Due to the rising water because of the leaking influent gate this valve quickly became submerged not allowing the valve to be fully open. Unfortunately, this valve had been left in a closed position due to the standard operating procedures developed by the district.

Another contributing factor to the sewer overflow was the water intrusion issues which you described as ponding issues near the headworks. The ponding issues allow water intrusion into the electrical system shown here of

ponding, even during periods of low rain or alternatively during the winter when the ground water table is high.

This is a photo submitted to us by Jeff Appleton to the district in July 2006 showing the ponding water around the headworks. This ponding issue had never been resolved prior to the sewage overflow on December 2010.

While the previous photo showed the location of the electrical vault, I'll go back to that, I forgot to point that out. Right here, the overflow we've been talking about.

The next photo here is just another angle of the ponding issues in relation to where the flood wall was around the headworks.

MR. YOUNG: Mr. Fischer, I just want to ask you a point of clarification. Stop the clock. We heard testimony from Mr. Thoma that this area had been raised or somehow further protected I thought from water intrusion sometime before 2010.

MS. MACEDO: The area itself hadn't been raised, a concrete berm had been placed around it.

MS. THORME: Ms. Macedo cannot testify

today. She wasn't sworn and she's not allowed to -- Ms. Macedo cannot give testimony today. She was not a sworn witness.

MR. YOUNG: Correct. Do you know if anything -- if what we're looking at in that photo was the condition of the top of the vault area at the time of the spill in 2010? You said this is a 2006 photo from Appleton?

MR. FISCHER: That's correct.

MR. YOUNG: Okay. Is this the way the area above the vault looked in 2010 when the spill happened?

MR. FISCHER: I don't know the answer to that question.

MR. YOUNG: Thank you. Go ahead.

MR. FISCHER: So one of the problems of the ponding, I'd like to explain, can lead to electrical shorts and in fact it did. So that's why I'm showing you this slide here of the ponding.

This is the district's main budget item No. 16, we heard this before. This is the actual language highlighted here, we highlighted this. Anticipated electrical system upgrade for the fiscal years 2010 and 2011 which says, "As a

result, there have been several instances where the wiring has failed and has caused an electrical fire or loss of power."

Now I'd like to transition and tell you about the sequence of events during December 19th and 20th. The overflow we talked about today commenced on a Sunday morning. The day before the overflow a predicted storm had brought nearly three inches of rain to the area; however, the plant was unattended by personnel on the morning of the 19th until an alarm notified an operator that an in-person response was needed. The former chief plant operator arrived shortly thereafter, approximately 10:30 a.m., all four influent pumps failed because of electrical problems. The CPO and other plant personnel tried to use the emergency diesel pump to divert the flow from the headworks into the plant; however, the emergency diesel pump had intermittent operational problems throughout the day. In addition, the discharge valve of the emergency diesel pump was in a closed position and could only be partially opened due to the rising water of the headworks room.

Shortly after the electrical failure sewage began to back up and overflow from manholes

and other locations in the district's and Oceano's collection system and also backed up sewage inside of homes in Oceano. The overflow lasted most of the day on 19th and small spills persisted on 20th. The pump discharge valve was fully opened by the district personnel around 2:30, an additional pump was borrowed from Pismo Beach and was operational around 6:00 p.m.

Moving to the next slide. Around 8:20 p.m. pump No. 3 was restarted and in combination with the emergency diesel pump, around ten o'clock p.m. the overflow had stopped. In addition, on December 20th in the morning additional sewer overflow was experienced in several locations.

The regional board was notified of the spill by the chief plant operator. Because of the size of the spill and resource issues, the regional board sought assistance from the State Water Board Office of Enforcement in this case, along with a number of other matter. The State Water Board commonly does this type of practice throughout the state to assist all regions in the state.

This slide summarizes the investigative

work the prosecution team did to develop the case. In addition, the regional board provided additional personnel from the investigative board, especially Matt Keeling early in the process, Katie DiSimone is here, and Harvey Packard more recently in the room also. The ultimate decisions as to whether to settle or file a penalty amount are always going to be made by the region.

So March 2010 after being called to assist, the office of enforcement conducted a facility inspection of the plant, followed by issuance of a notice of violation and 13267 order. And extensive review of the district's response to that NOV, followed by numerous technical meetings with the district both in person and on the phone. And additional investigation was conducted by the office of enforcement in the sewer backups in the private residences.

Settlement negotiations failed to resolve the matter primarily because the disagreement concerning the volume. And the district's score kept changing, for example, in terms of the number of homes affected, how the district's net adjustment of law was applied, determining, et cetera.

Settlement negotiations broke off May 2012, the complaint was issued on June 19th and the matter was set for hearing in September.

The actions and inactions of the district which led to the overflow and resulting discharge of untreated waste into homes and surface waters which ultimately reached the Pacific Ocean was a violation of the district's NPDES, the National Pollution Discharge Elimination System permit and the sanitary sewer order.

This is a slide, a photograph that was provided to us by the district. Here you'll see it's comprised of penalties for discharge violations, it also includes $63,000 for nondischarge violations. These violations arise because of the district's failure to properly investigate and report the overflow that occurred in private residences. The backups in the private residences were clearly caused by the district's overflow on December 19th and 20th.

Under the sanitary sewer order the district was required to report NC waste, and to track these types of spills and makes them publicly available. However, the district has

claimed that these spills were instead private lateral sewer discharges, PLSDs, caused by problems or failures within the homeowner's sewer lateral, not owned or maintained by the district.

And while the district recorded at various times the number of difference homes being affected, our investigation confirmed 11 separate residences experienced sewer backups shown on the slide. Where a sewage backup inside the home, either from a toilet, sink or tub or a combination of those three. The integrity of the self-reporting program that we have with CIWQS depends on the accuracy of information submitted by the discharger such as the district.

The language in the actual sanitary sewer order shown here, it clearly states that the district is required to report these spills because it caused the spill. A sanitary sewer overflow here in the slide is defined as, and I'll read it, wastewater backup into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of the sanitary sewer system.

Because the district failed to investigate and comply with reporting for all

known sewer backups 401 days late for the certification we included the $63,000 penalty. The maximum penalty could have been assessed at $2.4 million; however, the prosecution team exercised discretion to collapse each of the violations to a maximum of 38 each yielding a $63,000 penalty here. This penalty affects reporting violations only for six residential backups that the district admits occurred at all and certified late as private lateral through the dischargers.

To the extent the prosecution team later discovered additional five backups that were confirmed by interviewing residents, that should be reported by the district and CIWQS, and those are also subject to penalties.

Thank you, and I'd be happy to answer any questions at this time that you may have.

MR. YOUNG: Ms. Macedo, do you have any further questions for him or is it now cross-examination time?

MS. MACEDO: Yeah, it's cross. I guess on this slide I just wanted to clarify that the maximum penalty, Mr. Fischer, is for reporting violations only and not the discharge violations?

MR. FISCHER: That's correct. That is a nondischarge part, we wanted to cover that, it was brought up at the beginning, talking about nondischarge violations.

MS. MACEDO: And Ms. DiSimone will go over the discharge violations and how we arrived at the penalty on the greater detail, but I don't have any further questions for you.

MR. YOUNG: Ms. Thorme.

CROSS-EXAMINATION

BY MS. THORME:

Q. Thank you. Good morning, Mr. Fischer. Make sure we're still in the morning. Were you the primary author of -- can we get it turned over to us so we can -- were you the primary author of Exhibit 1, the technical report?

A. I was one of the authors of that report.

Q. And who else was an author?

A. Leo Sarmiento and Dr. Matthew Buffleben who are both in the room here. Matthew's here and Leo's here.

Q. Okay. And are you a civil engineer?

A. I'm a mechanical -- a registered

mechanical engineer for the State of California.

Q. Okay. And so is it within your professional specialty to render a professional opinion in a matter of a civil engineering nature?

A. Please explain that. I don't understand that question.

Q. Well, it's my understanding that it's separated out by categories in engineering, so there's civil, there's electrical, it's kind of like a doctor, you know, where you're a brain surgeon and not delivering babies, that kind of thing.

A. I don't have an answer for you. Are you saying that I shouldn't have stamped this report, is that what you're asking me?

Q. I'm just asking what the limitations of your engineering skills are and do they cross into the civil engineering?

A. We have a registered civil engineer registered on this report. I'll certainly delve into those areas. Dr. Matthew Buffleben is a registered civil engineer.

Q. Have you ever worked for a city or a sanitation district?

A. No, I have not.
Q. Has Mr. Sarmiento?
A. Yes, he has.
Q. Okay. And --
A. Extensively.
Q. He's not testifying here today, though, is he?
A. He's not testifying here today.
Q. How many sewer spills have you dealt with personally?
A. Are you talking about SSOs, all of them or are you talking about sewer spills in homes or are you talking about sewer spills from collection systems?
Q. I'm talking about how many sewer spills have you responded on the day that a spill has happened?
A. I'd have to say none on the day that it's happened.
Q. So how many sewer spills have you actually estimated volumes for besides this case?
MS. MACEDO: I'm going to object to the extent that you're questioning Mr. Fischer about the volume of the spills. We designated

Dr. Buffleben on that subject.

MR. YOUNG: But I think she can ask the question and if he can't answer the question --

MS. MACEDO: I'm happy to let him answer, but we did describe areas of testimony and Mr. Fischer was not designated on that subject.

MR. YOUNG: Okay. But his name is on this report, right? It does contain that information.

MS. MACEDO: Okay. This information will be covered -- I mean, to the extent that we were going to present our entire case and then allow the witnesses to be cross-examined as a team, Dr. Buffleben is going to cover extensively how our methodologies differ, so I'm going to allow Mr. Fischer to answer, but if he wants to defer to Dr. Buffleben he can.

MR. FISCHER: I would like to defer to Dr. Buffleben, but I can tell you that I've done over 30 inspections, investigations of my own myself, and done about 50 at the State Water Board the last few years. And so it would be hazardous for me to even attempt to say how many I've been involved in and the calculations, numerous.

/////

BY MS. THORME:

Q. So you've actually done volume calculations for those spills where you've investigated?

A. Yes.

Q. Okay. And how many of those spills were during flood events?

A. I don't know.

Q. Okay. And how many sewer spill enforcement actions have you worked on?

A. Again, out of the 30 numerous on-site, you know, investigations, inspections I've done there's been a handful, I can't give you an exact number, probably between five and ten.

Q. Okay. And how many times in those 30 cases that you've worked on has the water board questioned the sewer system operator spill volumes?

A. I can tell you this, that the whole purpose of these inspections are verifying the truth of what's being reported into our database system. So we go out there to verify what we have certified in our database matches what the records say, and it doesn't always line up. So that's mostly what we do. In terms of the number I don't

have a number for you, but numerous.

Q. But normally in these sewer spill cases isn't the volume really related to the estimated start and stop time?

A. It may be; however, what we're finding as the office of enforcement joined at the head with our division of water quality who runs this program is the majority of the spills we investigate do not have accurate estimations on the books what actually happened. And this is the first case I'm aware of where we actually did extensive engineering analysis on our own to look at everything that was submitted to us. Often we don't get these records; so --

Q. But in a sewer spill case they have to report within two hours of the spill starting; isn't that correct?

A. That's not correct.

Q. Why is that not correct?

A. If you read the amended MRP at the water quality board 008-0002-EXEC page -- Attachment A, Page 1 it says, "For any discharges of sewage that result in a discharge to a drainage channel or a service water, discharger shall as soon as possible, but not later than two hours

after becoming aware of discharge, notify." Now, important, "Notify the state OES, local health and the regional water board."

Q. Okay. So someone has to be notified within two hours of becoming aware, and then if it's a category one spill they have to have their certification in within 15 days; isn't that correct?

A. They have to have additional stuff in there, they have to have a draft report requirement within three calendars days or a certified report in the system with CIWQS within 15 calendar days.

Q. So that is a pretty compressed schedule to get all of that information into CIWQS?

A. If you say so. I don't agree with that and so --

Q. But my point is, is they're scrambling, number one, to stop the spill; number two, to notify people within two hours of becoming aware, get their three-day report in, get their CIWQS stuff in and at the same time they're investigating all of the facts. That is on the ground running to get that done, whereas the office of enforcement can come in later and has

the benefit of additional time to make tweaks to estimates that might not be available to --

MS. MACEDO: No question pending.

BY MS. THORME:

Q. -- to the district; isn't that correct?

A. As the office of enforcement action we're going to look at whatever the discharger does. If they're up to their eyeballs with one person out there running around trying to get everything done it may be a violation and we'd consider that in the enforcement action. It's not what's being discussed here today.

Q. But isn't essentially the office of enforcement second guessing the estimates that were made by the district?

A. Every investigation that we conduct we went to get to the truth of whether the spill volume was reported correctly. So this is no different than any other case that we did. We take a look what was submitted to us, if we don't agree with it we do our own analysis.

Q. But why would anyone want to be a sewer system operator if they make their best estimate and someone comes in and second guesses them?

A. That's their job to ensure that this regulatory program has -- is beneficial and is working. And like I said earlier, we work in large step with the people that manage this program, I used to manage this program, the longer I have a history in it, we're out there to verify again what's been certified under penalty of perjury into our data system is true and correct when we go out to the site. If we don't agree with it we'll do our own analysis and come up with our own analysis of what was we think is true and correct.

Q. Okay. Have you ever seen a case in California where the upset defense has been allowed?

A. Are you talking about both combined sewer systems that take both storm water and sanitary or just separate sanitary sewer systems?

Q. In any case.

A. No, I have not.

Q. Okay. Are you aware that there's already a shortage of qualified sewer system and treatment plant operators in California?

A. No, I'm not aware of that.

Q. Okay. How many times has the office of

enforcement performed a volume calculation for a sewer spill?

A. I mentioned it earlier, I think there would be too many for me to count. Like I said, 30 sites, some sites can have up to a thousand spills. So, you know, what we typically do when we did out, to look at all thousand is impractical, we might look at ten. So it would be numerous; however, I can tell you that for the ten we do check we look at all the records and we interview all the people involved with the spill, determining the start time as mentioned earlier, other factors that we need to evaluate whether it's truthful what they reported.

Q. Do you conduct sewer spill training?

A. I used to, not anymore.

Q. Okay. Did you present in May of 2011 a sanitary sewer overflow reduction program training?

A. I don't remember.

Q. Bringing up Exhibit 66, does this look familiar to you?

A. I want to just make clear that I'm one of three staff that work on this program. I'm on the enforcement side, we have two other full-time

staff that work on the compliance side. It could be either one of us giving this presentation. I don't see my name on here, it's possible it could have been mine.

Q. But is this coming from the State Water Board and their training of operators?

A. We don't train operators as the office of enforcement; however --

MR. YOUNG: Mr. Fischer, why don't you just try to answer the question as it's posed as best as you can.

THE WITNESS: I would say yes.

BY MS. THORME:

Q. If you can go to the next line in that training, same page.

A. This is not my presentation, by the way.

Q. But this is training that has been done by the State Water Board, and are these various methodologies that the State Water Board has presented as ways of estimating sewer spills?

A. This is not a complete list, but this is a partial list of ways you could do it. We learn every day there are more and more.

Q. Okay. And the next line on that page,

please. So this is stating that volumes can be estimated using various approaches, is that true, Mr. Fischer?

A. Yes.

Q. Okay. And that the spill circumstances may dictate which method is appropriate and whether multiple methods need to be used; is that correct?

A. Yes.

Q. And that the person estimating the spill should make the best judgment on which method to use?

A. The person doing it, sure.

Q. Okay. And that there are other engineering estimating methods that might be used?

A. True.

Q. Okay. And wasn't this training done after the sewer spill happened in 2010?

A. It wasn't my presentation, but it appears it's in May 2011, I haven't verified the date, if you say so, okay.

Q. Okay. So given that the district used one of these approved methods in the middle slid on that page --

A. Approved, I -- okay.

Q. -- that was recommended, why are they being challenged as being wrong?

A. This is not inclusive of every method in the state that you would use to estimate a sewer spill. There's many iterations of what you're looking at here. These are in compliance, you're going to hear about it more later. That's all I have to say.

Q. Okay. Now, you had mentioned that there's this sanitary sewer overflow waste discharge requirement and I'm going to call that SSO WDR.

A. Sure.

Q. Okay. And that SSO WDR is where you got the designation of sanitary sewer overflow that you referred to in your presentation; is that correct?

A. Yes. It's on Page 5 of the order, Section 8 definitions.

Q. Right. So it's on Exhibit 56-5?

A. Can I just check to make sure it's the same?

Q. Sure.

A. I'll assume that it is. We can

continue.

Q. We can pop it up if you want to see that.

A. I've got it right in front of me, so no problem.

Q. I just want to make sure that we're getting that definition from the same place.

A. Okay.

Q. So you're comfortable that that's in the sanitary sewer overflow WDR?

A. Yes.

Q. Then that classifies what a sanitary sewer overflow is, and then the monitoring and reporting program is a separate document from the waste discharge requirements; is that correct?

A. That's correct.

Q. So that is our Exhibit 57. So then does that document bring down the different types of sewer overflows into different categories?

A. That in fact does.

Q. Okay. So a category one spill, can you describe that for me?

A. Category one spill is -- and I'll just read it so there's not any mistakes.

Q. We have it up here in the screen if you

want it.

A. It's right here. "All discharges of sewage and ultimate failure in a sanitary sewer system that equal or exceed --

Q. You might want to slow down a little bit.

A. I'm sorry. "Discharges that exceed a thousand gallons result in discharge to a drainage channel and/or a service water or discharge into a pipe that was not fully captured and returned to the sanitary sewer system."

Q. Okay. And then if you can go to the next page 57-3 there's also a category two spill and a private sewer lateral discharge?

A. That's correct. Wait a second.

Q. So basically the category two is any other noncategory one spills; is that correct?

A. Anything that didn't go to surface water over a thousand gallons or is not fully captured and returned.

Q. And then there are private sewer laterals which are generally in-home spills?

A. That is not correct. Those are private lateral sewage discharges defined here in the MRP PLSDs.

Q. Okay. Aren't many private sewer laterals in-home spills?

A. The in-home spill that you're referring to here, can you define that?

Q. No, I'm not referring to any spill. I'm just saying in general many private sewer lateral discharges are in-home spills?

A. I don't know the answer to that.

Q. Okay. Or they can be from someone's clean-out on their lateral; is that correct?

A. Correct.

Q. Okay. So if we can go to Page 4 of Exhibit 57, please. Does the sanitary sewer overflow WDR require that estimates be given for each spill location?

A. No, it does not; however, for wastewater backup into private --

Q. I'm not talking about in-home spills at this moment. I'm just talking about the requirements of the MRP.

A. Well, wastewater backups in buildings on private property, those are defined in the order. Those each individually have to be reported. Nothing else does.

Q. Okay. But if you look at paragraph 9

here, don't you have to tell the location of the SSO by entering GPS coordinates?

A. I can tell you because we've studied this and we've seen this in practice with many of the audits, many discharges simply had five manhole overflow in one location and that's acceptable at this time in our database.

Q. Okay. So also paragraph G says that you have to have the SSO scores which identify a manhole clean-out or et cetera. So does that not indicate that there's a specific locations for each spill that you're supposed to be reporting?

A. That's an example. There could be many other sources.

Q. If you could pull up Exhibit 68 for me, please. Doesn't the CIWQS reporting program currently require that input from each manhole be entered into CIWQS?

A. Like I said earlier, Ms. Thorme, it doesn't require -- the order doesn't require that. CIWQS has been set up to do that, but in practice that's not what happens, and that's not what we have today in the system. If you talk to the program staff and we've talked to them. It's in there both ways. It can be one location even

though it was multiple locations or it can be one individual location and be certified.

Q. So on this it has physical location detail, so this is a blank CIWQS report so it doesn't have anything entered into it, but at paragraph three it says spill location name, four, latitude of spill location, five, longitude of spill location. If you have multiple spill locations you're saying that they don't have to enter each one of those spill locations where they know it's coming out of a manhole at a certain location?

A. I'm saying if you talk to the program staff right now they are finding it acceptable in one central location if you have multiple for the non-wastewater backups in the homes that are not defined in the order.

Q. Okay. But how would you put that into the form?

A. Like I mentioned earlier, it's up to the discharger to do this. We have set up a database to the individual; however, there's nothing in the order that says every single location must go in to CIWQS independently.

Q. So you never instructed anyone at the

district to input each manhole's data separately?

A. I don't actually remember what I told you now.

Q. Can I have Exhibit 46-9, please. Paragraph two, so this is an e-mail from Heather Billing who is part of the district's engineering staff, and the second paragraph says, "My understanding from Jim is that SLO CSD needs to report the SSOs from each of the 21 manholes separately." Did you not tell the district that?

A. Perhaps I did, but it's not required.

Q. Okay. And are all of the manholes that spilled during this event within the district's jurisdiction?

A. Talking about the manhole locations that have been reported to us by the district?

Q. Yes.

A. They are beyond the district's trunk sewer system, some of them.

Q. So were some of them within the jurisdiction of the satellite collection system?

A. That's correct -- well, some of them overflowed in locations reported to us beyond the district's trunk sewer system.

Q. And does the district NPDES permit for the wastewater treatment plant extend to the satellite collection systems?

A. I don't know.

Q. Okay. We can pull up Exhibit 28-6. If you could look at the second paragraph that is highlighted here. And does that state that the satellite collection systems retain ownership and direct responsibility for the wastewater collection and transport systems up to the point of discharge into interceptors owned and operated by the discharger?

A. Yes, it does.

Q. And is the district registered separately under the SS0 WDR from the satellite collection systems?

A. Yes, they are.

Q. Okay. Because I think you testified earlier that the collection systems are regulated separately under that order?

A. Both collection systems are, yes.

Q. Yes. And is the office of enforcement now trying to modify the monitoring or reporting program for the SSO WDR to allow this event base reporting so that individual manholes no longer

need to be reported if the spill occurs from a single event?

A. That's incorrect. The office of enforcement, my job is not to do anything with the program; however, like I said earlier, I represented earlier to you, I'm joined at the hip literally with our regulatory program managers. They're the ones in the driver seat, we are the ones in the field collecting the information, based on our experience, given the recommendations, but they are ultimately the ones who make the decision.

Q. Is that now a new recommendation in the new monitoring or reporting program?

A. Yes, it is.

Q. Okay. So if you could look at Exhibit 59-7, please. So this is the new proposed monitoring reporting. If you look at paragraph two, so this says that for reporting purposes if one SSO event results in multiple appearance points the enrollee shall complete one SSO report in CIWQS. But that's not currently in law; is that correct?

A. That's correct. Can I just pause for just a second while I look at something evidence

related to that in this proposal, is that acceptable?

Q. Sure.

A. Okay. So this is in the draft; however, if you go to Page 16, you can pull that up. At the top of the page item No. 8-C, the draft has required in the draft, I point out, description of address of SSO failure location or locations. We still want to know what was affected in an area fashion there, regardless of what was entered into the database.

Q. Okay. But this proposal was not around in December of 2010; is that correct?

A. That's correct.

Q. Okay. And would this encompass private sewer laterals that are also part of a single event?

A. I don't know. Talking about a private lateral sewage discharge event --

Q. Yes.

A. -- reports? I don't know.

Q. And is it your understanding that private sewer lateral discharges are going to continue to be voluntarily reported under this new monitoring reporting program?

A. Yeah, it's currently stated for the board the private lateral sewage discharges that are not caused by failure flow condition within a sanitary sewer system publicly owned are proposed to be voluntarily reported in to CIWQS. So yeah, we're not mandating those all have to be reported in to CIWQS; however, we're still looking for the records for those sessions here about record keeping that's related just for the record.

Q. Okay. And when was the ACL complaint issued in this case?

A. The ACL was issued on June 19th, 2012.

Q. And after that complaint was issued did staff and legal counsel from the office of enforcement go down to Oceano in July and August of this year?

A. Yes, we did.

Q. Did you talk to individual homeowners trying to determine if there were more in-home discharges?

A. The office of enforcement's investigative process includes taking more than one staff in the field to investigate whether or not -- what the impact from the spill was, period.

Whether it was private lateral -- I'm sorry, wastewater map in the home --

MR. YOUNG: Excuse me, could you just give her a direct answer? It sounded like a yes or no to me.

THE WITNESS: Okay. Yes.

BY MS. THORME:

Q. Okay. And why would you make so much effort investigating in-home spills if they're not required to be reported?

A. That's where we differ, and so the answer is those are required to be reported and we're going to explain more about that later.

Q. Okay. And if you were so concerned about these in-home spills why didn't you come down to this investigation right after the spill event when these issues were very clear in people's mind and not a year and a half later?

A. This is a complex investigation with a lot of different components to it. We never stopped investigating until the complaint's issued, this is the way it happened. We did not get word from the regional board right when the spill happened to come out and check it out. There was a delay in that. We had numerous

meetings with the district back and forth. This process took a year and a half, so I don't have an answer for you.

Q. Are you aware that the district undertook a great deal of effort to try to determine where the private home spills were?

A. No, the only evidence that I saw from the district asked about if you saw a manhole overflowing.

Q. Can we have Exhibit 67, please. Have you seen this exhibit, Mr. Fischer?

A. I have.

Q. Okay. So what do you think this document is?

A. This is a spreadsheet that was given to us of some of the investigative work done by the district to basically look at the different homes in the area if they were impacted by sewage.

Q. So in the ones that were in read that were the ones that were reported in the CIWQS where they had information they reported those in-home spills?

A. Our evidence I believe we only have six that were reported as private lateral sewage discharges in CIWQS, so that looks like more than

six from here.

Q. When did the district report in-home spills that it was aware of?

A. The certified documents that we have are March 6th, 2012 certified by the district for CIWQS for the wastewater backup to the private residences, again, certified as private lateral discharge reports. We don't have -- that's what we have, excuse me.

Q. Okay. And can we get Exhibit 7, please, the first page. So this is a spreadsheet, we have no idea who prepared this or where it came from, but it says on there "SSO volumes certified in CIWQS as of 10/5/11." Where did that date come from?

A. I don't know.

Q. If you could get the next page for me, please. This is one of the CIWQS reports for one of the in-home spills, that if you could blow up the first half of that for me, please. So this states that the draft was submitted on 3/6/12, which is the first version of the draft that you see in paragraph No. 2, and it was certified the same day. So I believe the allegation was that they waited to certify their reports and it was

untimely certification. So if it was reported and certified on the same day how is that an untimely certification?

A. Let me read to you the actual language out of the permit, that's what we go by. And it says in the monitoring reporting program 2008-0002-EXEC, Page 2 it says, "Category two SSOs. All SSOs that meet the above criteria for category two SSOs must be reported to --

MR. YOUNG: Slow down --

MS. THORME: We can pull this out so the board members can see it.

MR. YOUNG: -- for the court reporter.

BY MS. THORME:

Q. Paragraph five and six.

A. Okay. No. 5 here, "All SSOs that meet the above criteria for category two SSOs must be reported to the online SSO database 30 days after the end of the calendar month in which the SSO occurs."

Q. And how do you categorize these as category two spills?

A. These are spills that don't meet the criteria for category ones as certified by the district and that's what we want.

Q. But in paragraph six doesn't it say, "All sewage discharge that meet the above criteria for private sewer lateral discharges may be reported"?

A. Okay. That's the part we're missing here. Let's go to page -- the sanitary order. Do you have that still? Okay. I'm sorry, it's in the same document on the top of Page 2. Actually it's above this. Yeah. No. 3, this is private lateral sewage discharges, sewage discharges that are caused by blockages or other problems within privately owned laterals.

Q. When you interviewed homeowners during your investigation did you inquire whether those homeowners each had a backflow prevention device as required a state law and county ordinance?

MS. MACEDO: I'm going to object to the extent it calls for legal conclusion.

You can answer whether you interviewed them.

THE WITNESS: I don't believe we asked everybody that question, no.

BY MS. THORME:

Q. Did you confirm the existence of these devices in each of the 11 instances that you said

were category two spills?

A. No.

Q. Okay. Did you check to see it there were permits for those devices at the county?

A. No, we didn't.

Q. If the reason there was a sewer backup into the house was the lack of a required backflow device, then how was that the district's responsibility?

A. My response to that is a backflow prevention device can be a sewer relief valve that allows sewage to come out of from garden into the home, the clean-out. It doesn't mean -- again, we had determined that these are SSOs that were not reported by the district. These were not private sewage lateral sewage discharges as defined here on Page 2 of the MRP.

Q. I'm not sure that answers my question.

Can you read that question back for me, please.

(Record read.)

THE WITNESS: The order says what it said. I don't have the authority to change the order, so we look at the order and the orders says the SSO caused by the failure in the publicly

owned portion of the sanitary sewer system. As stated before, that's how I came up with the determination.

BY MS. THORME:

Q. But the definition of private lateral sewage discharge says problems within a privately owned lateral. So if the problem in the privately owned lateral is they don't have a backflow prevention device to keep the sewage when it's surcharging in the main out of the house, that was our argument is that that is not the district's responsibility.

So I mean, maybe it's semantical or -- but there are two different definition here. So one of the questions I have for you, if you can put up Exhibit 480-2 is you had showed this earlier and had little circles around things, and we don't have that document, but it looks to me that there's approximately 32 homes in these two areas.

A. Sounds about right.

Q. So your investigation found 11 of them had them. So potentially the other houses have backflow prevention devices and didn't flood. We need to know why all the houses didn't flood. Do

you have an answer for that?

A. I think you're going to hear about this a little bit more later when Matthew talks about the volume. So I don't have an answer for you right now.

Q. Okay. So in your technical report if we could go to Exhibit 1, Page 18, please. So it says, "As required under the amended MRP Section A-6, the discharger failed to certify each of the six individual sewer backup reports in CIWQS database within 30 day after the end of the calendar month." So if we could switch back and pull up side by side A-6 on 57-3.

So A-6 is the private sewer lateral discharger. So on the one hand you're telling us that it's not a private sewer lateral discharge and in your technical report it's saying that it was required for them to certify these backups within 30 days under A-6 which says that it may be reported and there's no certification requirement. Can you explain that, please?

A. Can I see the technical report?

Q. Let me switch it back.

A. You know, I believe we already submitted some corrections that are oversights in

this report in some lengthy amount of documents, so I don't know if that was included in the corrections or not, but we'll take a look at it right now.

MR. BUFFLEBEN: Yes.

THE WITNESS: What page is that, Melissa?

MS. THORME: Page 18. Then can we bring up the administrative civil liability complaint, please? Page 6, paragraph 24. It must be after that.

MR. YOUNG: I think this is a good time for us to take a break.

MS. THORME: Okay.

MR. YOUNG: So we'll resume -- actually, what we need to do is we have three people that I'm going to take out of order, then we'll take our lunch break. You probably have a lot more for him, I don't know, but I've got to call a timeout at some point on him and we'll switch to the three people that have raised their hands.

Sir, we'll start with you, if you can come over here. So you'll each have two minutes each. Okay. And please state your name.

MR. BROSS: I'm Larry Bross. I do live in Oceano. I didn't have a back spill. I'm concerned about the fact that only the SAN district was chosen by the prosecution team for liability here, and I think it goes beyond the SAN district. I think the county -- because you see, if you don't have a flood you won't have these problems. And I was here in '82 when we had a greater storm than we had then. It was the perfect storm, we had the high tide and the storm coming at the same time. That's when Pismo pier went down. None of this was flooded, none of it. Okay. And understand this, that nothing was flooded by the Arroyo Grande Creek, it's Meadow Creek that -- I haven't got enough time to explain to you, but it's Meadow Creek that creates this situation. And it's the gate in the levy that is the gravity gate, because you see, Meadow Creek runs into the Arroyo Grande Creek under the levy. And I was there in '82 when we lifted the gate and the water flowed out and there was no story. Okay.

And the county could have done the same thing this time, they didn't. So I believe that they are liable. All right. And go from there --

and let me say one more thing. Oceano has a lot of very poor people there. And I don't care what you say, the rates will be raised. A resident in Oceano just looks at the bill, it's water which has just been raised. There are going to be people, farm workers who are going to be losing their homes, okay, and not going to be able to pay because of this action. Thank you.

MR. YOUNG: Thank you, Mr. Bross. Okay. Julie Sacker.

MS. STACKER: Good afternoon. My name is Julie Stacker and I did swear to tell the truth. I didn't think I had anything to offer today's proceedings until I read the letter from Mayor Ferrera to your board, specifically with item No. 2, he tries to say derogatory things about the prosecution. What he says is something about how a local news agency acquired letters from assemblyman Katcho Achadjian. I was in a sanitation district meeting where Mr. Wallace spoke about its asking our legislatures Assemblyman Achadjian and Senator Blakeslee to write on behalf of the district.

I was the source who called Karen Velie of Cal Coast News and told her that the

legislatures had been contacted, and it is my understanding that she got the letters from the legislatures that they are public record.

Something that occurred to me today in your earliest testimony from the electrician, I did listen to the August 15th south county -- south SAN district board meeting, there was an electrical item on their agenda. They had taken three bids and they were awarding a contract. One of the board members asked the current superintendent if he had contacted Thoma Electric to bid on the current job, and Mr. Bellargio the current superintendent said that his son worked for Thoma, and that he did not want there to appear to be a conflict. So I don't know if that has ever been disclosed, the relationship with Mr. Thoma and the Bellargio family.

MR. YOUNG: Thank you for your comments, Ms. Stacker.

Last speaker for this morning. Sir, can you identity yourself.

MR. EHENS: I'm Steve Ehens, I live at 547 Security Court.

MR. YOUNG: Your name again?

MR. EHENS: Steve Ehens, E-h-e-n-s. I

live at 547 Security Court and I was one of those homes that (inaudible) top of the sink and the bath tub. I believe my home is on a divert valve system, I'm not really sure. It doesn't really matter, we were overwhelmed with it. It was a foot and a half of water, then right outside my door about ten feet night is a sewer manhole which was gushing out there. So I was getting it from both ways.

I'm not really sure what of the long and short of all the legal stuff, what it is, but I do know this is a twofold problem. One of them is the sewer plant is not up to snuff, that's the bottom line. And another thing is it's maintenance, they're not maintaining the control channels, the flood channels that are both on the sanitation property, and adjacent to it to get the water out of the area. If the water hadn't been there the pumps wouldn't have failed.

I mean, I've been to every board meeting that I could get away from work to go to, and they keep telling me it's this person's problem, the state's problem, this or that, but until you guys correct this flooding issue that we have in the control -- flood control district

we're I going to have this again.

If it was to rain again it would happen again, right now. I don't even think they've got far enough. If we got another foot and a half of water like we had that day or that night it would happen again. Everybody on the island, as we call it, got sick. I got sick, my son got sick, all the neighbors got sick, I assume there are many names of people that got sick.

This isn't like who's going to pay the bill, we're dealing with people's lives here, you know. People are getting sick from sewage. Whatever needs to be done needs to be done and it needs to be done quickly.

And as for the fine, I think you should go back into the neighborhood to address the environmental impact that happened and to take care of these flood control channels. And a lot of the egrets and the herons and the stuff that we used to enjoy would come back. And we'd also have a way for the water to get out of the neighborhood. If we can't get it out of the neighborhood it's going to flood the sanitation district and we'll get it again. Thanks for your time.

MR. YOUNG: Thank you for your comments. Okay. Next we will take our lunch break.

(Lunch recess taken.)

MS. MACEDO: I'm going to make a statement for the record then I believe we're being to resume with Ms. Thorme's cross.

MS. THORME: Correct.

MS. MACEDO: Okay. So Ms. Thorme before lunch was questioning Mr. Fischer about what appeared to be a typographical error, and the prosecution team took a look at the documents over lunch and confirmed that there did appear to be a typographical error, and that error appeared in both the complaint and the technical reports. And rather than attempt to argue that the meaning and the intent of the violation was clear in our briefing we will not do so at this late date. And we will forego the $63,000 in reporting violation. In terms of the penalty that will reduce it by $63,000. We would prefer for this not to have precedential value, so our arguments regarding whether the spills have to be reported or whether they are PLSD type spills is not an issue for the board to consider. And that's the statement.

MS. JAHR: I just want to make sure if the board members have any questions about what will now not be considered violations or what we are looking at now.

MR. WOLFF: That's fine.

MR. YOUNG: Okay. So we will resume then with Mr. Fischer.

MS. MACEDO: Yes.

MR. YOUNG: And Ms. Thorme was continuing her cross-examination.

MS. THORME: Yes. Thank you.

CROSS-EXAMINATION (resumed)

BY MS. THORME:

Q. Mr. Fischer, prior to this enforcement action did the office of enforcement also investigate Mr. Jeff Appleton for allegedly violating the operator certification regulations?

A. Yes.

Q. And did the office of enforcement also send a notice of violation to the district for issues related to their O&M, operation and maintenance manual and standard operating procedures?

A. Yes.

Q. And did the district revise its operating and maintenance manual and standard operating procedures in October of 2010?

A. Yes.

Q. And did the district send those revised documents to the office of enforcement on November 1st, 2010?

A. I don't remember the date.

Q. Can I have Exhibit 14, page 1, please. That has a date of November 1st, 2010. If you can put up Page 10, please. And the CCs attach- -- or not CCs, the attachments. So does that refresh your recollection as to whether those were sent on November 1st, 2010?

A. Those weren't sent to me, but I'm familiar with it.

Q. Okay. And since you have those documents on November 1st, 2010 before the spill, did you point out at that time that the district was correctly operating and maintaining their plant?

A. I don't know. They were sent to me.

Q. Okay. It's a question for the prosecution team, so did you point out any errors

in the standard operating procedures at that point?

MS. MACEDO: No, I apologize. You clarified that the person being cross-examined is the only one who's going to answer your questions.

MS. THORME: Well, if he doesn't know then I would ask that he tell me who on the prosecution team would know so that I can not have to ask everybody the same question.

MS. MACEDO: If someone is going to answer that question later we will answer it, but he doesn't know.

MR. YOUNG: Well, he needs to answer the question.

MS. MACEDO: Yeah, he didn't --

THE WITNESS: I don't know.

BY MS. THORME:

Q. Who would know?

A. I don't know.

Q. And did you provide the local residents that you interviewed with any information?

A. I don't understand your question. What kind of information?

Q. Any kind of information about this

case.

A. Yes.

Q. Okay. We've marked this as Exhibit 115, and I can provide a copy. All right. Just so for disclosure we redacted the names to who these e-mails were given, but is this an e-mail that -- are these both e-mails that you sent?

A. Yes, they appear to be.

Q. Okay. So why were you sending -- let's go to the second page first. Why were you sending out the district's objections to people?

A. I was advised these were public documents.

Q. Okay. And why do you think that the residents would need those documents and why couldn't they just be put on the website for everyone to have?

A. I don't know.

Q. Okay. Then on the first page that this is an announcement about a meeting that you had on Wednesday night at Old Juan's Cantina restaurant. Did you actually hold that meeting?

A. Yes.

Q. Okay. How many people came to that meeting?

A. Four.

Q. Okay. What was the intent of that meeting?

A. Provide information.

Q. Okay. And did you or anyone on the prosecution team provide people with a sample letter to send in?

A. No, we did not.

Q. Did you or anyone on the prosecution team ever allude to the ability to maybe get part of the fine for local residents?

A. Absolutely not.

MS. THORME: No more questions.

MS. MACEDO: Redirect?

MR. YOUNG: Yes.

REDIRECT EXAMINATION

BY MS. MACEDO:

Q. Mr. Fischer, early in Ms. Thorme's questioning she asked you why the office of enforcement sometimes doesn't just accept initial estimates that are reported to the regional boards from dischargers. Do you recall that?

A. Yes.

Q. Okay. Are you aware that the initial

estimate made to the regional board in this case was approximately two to three million gallons made by Mr. Appleton the former chief plant operator?

A. Yes, I am.

Q. Is that size of a spill enough to trigger investigation by the office of enforcement?

A. Yes.

Q. And the first entry entered in to CIWQS by the district, was that substantially lower?

A. Yes, it was.

Q. And is the disparity between the amount initially entered by the district and the amount reported by Mr. Appleton, is the disparity between those two figures, is that in and of itself enough to trigger an investigation by the office of enforcement?

A. Yes, it is.

Q. The Oceano discharges were caused by the overflow on December 19th and the district influent pump failure, correct?

A. Yes.

Q. Isn't this a violation of the district's NPDES permit which only allows end of

pipe discharges?

A. Yes, it is.

Q. To the extent that you've met with homeowners in the Oceano area and provided them with public documentation, has it always been your goal to provide them with accurate information?

A. Yes, it is.

Q. And encourage them to attend today and provide the board with their statements regardless of whether they were in support of the prosecution team or the district?

A. That's correct.

MS. MACEDO: Nothing further.

MR. YOUNG: Re-cross?

RE-CROSS EXAMINATION

BY MS. THORME:

Q. I just have one question. If you could bring up Exhibit 86 at page -- just do the first page first so they can see what it is. So this is administrative civil liability case against eastern municipal water district. Did you work on this matter?

A. No, I did not.

Q. Okay. So this was a 2011 sewer spill

case. If you could turn to the next page, 86-2, and pull up paragraph nine for me, please. So is it unusual for the gallonage to change in a sewer spill case? In this case it says that they had originally estimated 2.39 million but additional information was provided justifying a reduction to 1.6 million. So my question is, is that unusual for the gallonage amount to be changed based on new information?

A. I don't know.

MS. THORME: Okay. Thank you.

MR. YOUNG: Are we finished with this witness?

MS. MACEDO: Yes. You want board member questions?

MR. YOUNG: Let's start at this end. Mr. Jeffries.

MR. JEFFRIES: No questions.

MR. YOUNG: Mr. Harris?

MR. HARRIS: One question, Mr. Fischer, and it goes back to I think the discussion regarding the backup from the plant through the trunk line and ultimately into the other municipality's collection system.

MR. FISCHER: Yes.

MR. HARRIS: I was just wondering are there -- I think the district was trying to draw a line about whether or not they would be responsible for that backup. Are there any cases recorded currently in CIWQS or any prosecuted that would be similar where a district's trunk lines backup into someone else's collection system having a spill and then that primary collector or treatment plant itself was responsible?

MR. FISCHER: I can't speak for the enforcement action but certainly for reporting that has been done that way, yes. I'm familiar with cases like that.

MR. HARRIS: Thank you.

MR. YOUNG: Dr. Wolff?

MR. WOLFF: Thank you. To your knowledge someone with a mechanical engineering background can operate a water treatment plant with the proper licensing?

MR. FISCHER: I don't know. I don't remember the requirements for that.

MR. WOLFF: Thank you.

MR. YOUNG: Mr. Jordan?

MR. JORDON: No.

MR. YOUNG: Mr. Johnston?

MR. JOHNSTON: No.

MR. YOUNG: Okay. Thank you. We'll let this witness go.

MS. MACEDO: I have one question if you don't mind. I believe the evidentiary objections that were submitted last week, Exhibit A came in wherein Mr. Fischer provided a declaration, if you could switch to D. So I just want to confirm that, Mr. Fischer, you assisted with the preparation of the materials submitted with both the prosecution team's case in chief and rebuttal and that your signature appears on the top of this page?

MR. FISCHER: Yes, it does.

MS. MACEDO: Okay. And we prepared what was I believe exhibits 1 through 24 and 99 through 113.

MR. FISCHER: Yes.

MS. MACEDO: Thank you.

MR. FISCHER: Thank you.

MR. YOUNG: And just so I follow the point that Ms. Macedo --

MS. MACEDO: That's your foundational requirement. There you go.

MR. YOUNG: Okay. I understand that,

but what about as to any of the hearsay exceptions?

MS. MACEDO: Well, the witness appeared and was able to be cross-examined, and was cross-examined.

MR. YOUNG: Okay. On his testimony but not as everything in those documents. So I'm just wondering what we wanted to do was make sure that -- if you want the documents to come in or for all purposes --

MS. MACEDO: Do you want me to go through documents one by one?

MR. YOUNG: No, I think you need to ask him, you know, whether if he deals with the business records exceptions, that's what I'm thinking needs to be done.

MS. THORME: Yeah, there needs to be more foundation laid for hearsay than just saying that he prepared and put these documents together.

MR. YOUNG: For the hearsay exception.

MS. THORME: And they need to be authenticated.

MR. YOUNG: The documents are coming in as hearsay.

MS. MACEDO: Right. I'm happy to go through every document.

MR. YOUNG: Well, if you can -- I think you're going to need to if you want to get them all in, then you can put them up on the screen and go through the steps.

MS. MACEDO: I'm happy to do business record exception and hit every document. I guess I'd prefer to do that at the end, just to get through the main testimony. Do you have a preference?

MR. YOUNG: I don't have a preference one way or the other with that.

MS. MACEDO: Okay. Is that all right?

MR. YOUNG: That's all right.

MS. MACEDO: Okay.

MR. YOUNG: Next witness.

MS. MACEDO: Thank you.

MS. DISIMONE: Hi, I'm Katie DiSimone staff engineer here at the Central Coast Water Board. I'm also -- I've been here for a number of years, close to ten total, but I took a break in between and went to work for the City of San Luis Obispo as a water project manager working on improvements of its wastewater treatment plant.

So there's a little background on me. This is the first time many of you have seen me here, but I've worked here for a while, so thank you for entertaining me here today.

I am doing my presentation of the penalty calculations presented here today. I'm taking a bit of a departure than the typical PowerPoint presentation efforts and instead I'm going to use an Excel spreadsheet so we can walk through exactly how the penalty was calculated that you're considering today.

So while our region has issued many ACLs over the past years the proposed penalty presented for your consideration today is based on the relatively recent enforcement policy penalty calculation methodology adopted in May 2010.

The 2010 policy associated methodology were created to ensure a consistent, fair method of calculating penalties across various regions for various types of violations, and in consideration of water code section 13385(b).

This discussion of the methodology we'll walk through in this spreadsheet will probably sound familiar and ring some bells for you. As section manager Harvey Packard has

previously briefed the board on this methodology earlier this year.

MS. THORME: And Mr. Chairman, if I could interject, if she's going to put things up on the screen we need to print them as she talks about them so they can go in the record. Because if it's just going by on the screen it won't get into the record.

MR. YOUNG: I take it we don't have paper copies of this already generated?

MS. MACEDO: No, it's going to be created as she talks. And I'm happy to print it as soon as it's a completed document and then provide it for everyone, but it's being created so people just don't look at it and not listen to her as she presents.

MS. JAHR: The final product, however, is already in its attached in the technical report, right?

MS. MACEDO: That's right.

MS. JAHR: To the minus 63-?

MS. MACEDO: Minus 63-, that's right.

MS. THORME: My understanding she was going to move things around potentially.

MS. DISIMONE: It will look the same as

what has already been put into evidence.

MS. JAHR: Is that acceptable to you?

MS. THORME: Yes.

MR. YOUNG: Let us know what exhibit number you're looking at and what page.

MS. MACEDO: Well, we're hoping you'd follow along on the screen. That's the best we can do.

MR. YOUNG: Okay. This is a part of the technical report?

MS. MACEDO: It's in the technical report which is Exhibit 1 to the prosecution team's submission on July 27th.

MR. YOUNG: Okay.

MS. DISIMONE: Bear with me one second while I make that slightly larger. So with that, the penalty policy calculation methodology has ten steps to determine the final liability including consideration of type of discharge, impact to beneficial use, culpability, ability to pay and various other factors.

The prosecution team and the district agree on a few of the steps but definitely not all of the steps or the factors that go into the determination as part of this methodology. So

today I'll walk through the steps, the factors, where we had agreement and where we have disagreement. As a general -- I'm going to ask a question. Is this large enough for the board members to see?

MR. YOUNG: We can see.

MS. DISIMONE: And the district to be able to see on the board clearly.

MR. YOUNG: Yes.

MS. THORME: Yes. Okay.

MS. DISIMONE: So with that you can tell there's ten factors -- ten steps, excuse me. And what I'm going to do is scroll up to the top, start with step on.

Step one is called a potential harm factor. And it's an evaluation of potential harm to beneficial uses considering that harm that may result from exposure to the discharge. Within that step one we're going to actually have three -- four factors, if you will, up here in the top right-hand corner in green of the spreadsheet.

The four factors are potential harm for discharge violations, characteristics of the discharge, susceptibility of cleanup or abatement, and deviations from requirement.

So let's walk through the first factor. Potential harm for discharge violations. As we look at this there is a pull-down scale that comes with this indicating that there's an availability of a score between zero and five, where zero is considered negligible and five is considered major, and that describes the threat to beneficial uses; in other words, negligible threat or major threat.

Of note here, if you refer back to the 2010 enforcement policy, I do believe all the board members have that policy for consideration during their weighing of the evidence presented here. Scores zero through three do not include restrictions on beneficial use as a result of discharge, whereas scores four and five are both explicitly stated that they acknowledge the discharge caused restrictions on beneficial uses.

The difference being between scores four and five is with regards to the duration of the restrictions on beneficial use. A score of four would be less than five days and a score of five would be greater than five days.

The prosecution team selected a score of five, a major threat to beneficial uses for

this particular action and violation. This is acknowledging that sewage flowed into creeks -- untreated sewage flowed into creeks, lagoons, Pacific Ocean. Sewage flowed into private residences directly exposing residents to wastewater. Reports of illnesses have been presented in the prosecution team's evidence, both acute and chronic exposure effects.

Beneficial uses of the water that were impacted by the spill included potential source of drinking water, aquatic habitat, recreational uses both direction and nondirect or contact and noncontact. But additionally the beach was closed for multiple days as a result of the spill. While the prosecution team recognizes that beach conditions were also affected by high surf and flooding at the same time as the spill occurred, a sewage spill of this magnitude without the surf and flooding would have still resulted in beach restrictions and closures.

In this particular case those beach restrictions were in place longer than five days. The prosecution team believes that that evidence supports the selection of the threat score of five. So I'm going to fill that in here for you

and select five.

The district has proposed or has argued in their briefs and evidence that the score of two, in other words, below moderate, is appropriate. You can refer to the enforcement policy for a description of below moderate, but the description includes where harm is minor. A score this low fails to acknowledge the county imposed beach restrictions on nearly one dozen confirmed residential sewer spills and the reported acute potentially chronic illnesses reported after exposure to the spill.

Looking at the next factor which involves the physical, chemical, biological characteristics of the discharge; in other words, what exactly was spilled, what are those characteristics. In this case we're talking about untreated sewage combined with storm water flows. So in this particular drop-down the score ranges from zero to four, similar to the other, zero being negligible risk, four going all the way up to a significant risk.

The prosecution team has used a score of three, above moderate, to describe discharge material. This is consistent with other wet

weather SSOs that were researched by the prosecution team. And the district, however, proposes to use two which will be a moderate description. We don't feel this is appropriate and a failure to acknowledge the dangers inherent in untreated sewage disclosures. Pathogens, bacteria, viruses, metal, excessive nutrients and organic floating, floating materials, personal hygiene products, any number of things that people put into their sewer system, both industrially, personally, you just don't know.

So I would like to note that the enforcement policy is written and the scores given encompasses a wide range of types of discharges or spills that could be contained. So the scale of zero to four can even include things like chlorinated drinking water all the way up to industrial waste. A score of three, again, just to reiterate, is consistent with other ACLs within the state for wet weather sewage spills.

Factor three is fairly straightforward and is called acceptability of cleanup or abatement. This one we have an agreement on. Both the district and prosecution team agreed on less than 50 percent of the spilled materials can

be recovered for a cleanup or abatement action and therefore we choose that. And that actually assigned a score of one. It's not clear on the spreadsheet, but that particular assignment generates a score of one. If you were to make a determination that greater than 50 percent could have been cleaned up the score would be zero.

I'm going to now take those three factors that I've just described and add them together, five, three, one is nine, but I can still do that math. So we're going to take that nine and go to table one of the 2010 enforcement policy which I have recreated here just for demonstration purposes. This is the same table as the one that's presented in the 2010 enforcement policy.

The potential harm scores, the sum that I just talked about of those three factors in which case ours is nine, I would get out a laser. It's nine right there. And in order to read the final thing we need to for step one we're going to have to make a determination that is on the Y axis for deviation from requirement.

So in this particular case we're going to have to decide whether the deviation from

requirement fits minor, moderate or major as the correct description. What does the deviation from requirement reflect? It's the extent to which the violation deviates from the specific requirement; in other words, how far away from compliance with the requirement are we. And in this case we're talking about the deviation from the prohibition of spilling or discharging of untreated sewage at a collection system.

So minor would be described as the general intent to comply, the effectiveness of the requirement generally remains intact. Major would mean the requirement was rendered ineffective. The prosecution team fits somewhere in between the two descriptions. Moderate is an appropriate description, the requirement is partially achieved. So while not all the sewage from that day spilled and a collection system didn't completely fail, they were effective partially and therefore partial achievement was required.

We do not feel that it meets minor intent. This is a fairly major gallon spill, I think it would be inappropriate to term this a minor spill where effectiveness generally was intact.

Furthermore, it would be difficult to argue that the discharger had an intent to comply when there were no electrical weaknesses within the wastewater treatment plant wiring and grading, valve operations that were unaddressed, especially with regards to the electrical as was seen in 2004, major budget items, making decisions to save money and therefore jeopardizing the ability to comply with the requirement in a reasonable manner does not meet the minor definition.

Using moderate as our selected deviation we can come back to the main table select moderate from the pull-down menu, and then use this newfangled button that says determine harm and per gallon per day factors for violation one. When I press that button magic happens and step one has the total score of nine that we discussed, and it also populates the two green squares within step two's per gallon factor and per day factor, with a per gallon factor per day of .5 each.

So for clarification, if you were to compare with what the district is proposing you would instead go to table one and use a total score of potential harm of five and choose minor,

moderate or major. At this point I can't give you a clear answer what the per gallon and per day factor would be that the district has proposed because they've simultaneously argued it's somewhere between minor or moderate. And it's unclear to me from the evidence that's been presented, which would be the argument they say applies. So with that we have a couple lines of our table filled, we're done with step one. Let's move on to step two.

Step two is the assessment for the discharge violation. Under water code section 13385 where deemed appropriate such as for large scale spills both per gallon and per day assessments may be considered. We feel this is appropriate here and have included such in our penalty calculations. Under the water code section 13385(c) the maximum per gallon penalty allowed under the water code is $10 per gallon; however, in consideration of large spills the water board can consider a maximum of $2 per gallon under their discretion. The prosecution team is using that recommendation and using $2 per gallon as the adjusted max per gallon.

And with regards to the statutory

maximum per day on a per day factor, according to section 13 again, according to water code section 13385(c) it's $10,000 per day. I'll fill that in. And now we have a couple of remaining factors to fill in, the gallons and the days. I'll start with the easier discussion item. The spill occurred on December 19th and 20th, 2010, so I'm going to put two for the number of days. And the gallons -- the per gallon penalty amount applied after the first thousand gallons spilled, so in this case the prosecution team has estimated the total gallons spilled as 1,139,825 gallons. And I'm going to subtract off a thousand gallons to be consistent with the regulation policy, so it's 1,138,825 gallons.

So filling in step two with those last bits of information has completed step two, and we can move on to step three, which would be per day assessments for nondischarged violation. Previously in the original consideration that you had in front of you at the start of the day we did include the reporting violations, or I should say non-reporting violations. And as we've just testified to we're going to take those off the table due to typographical error, so normally this

would be filled out, I'm going to leave it blank. I guess it's maybe a question of consistency. May I leave this blank? For the purposes of my demonstration can we agree to leave it off?

MR. YOUNG: Sure.

MS. JAHR: Yes.

MS. DISIMONE: Okay. I will do that. You will all be pleased to know that will save about 15 minutes. And since these are now zeros and it generates an initial -- the spreadsheet generates an initial amount of the APL in the total of $1,148,825.

We now move on to step four which is called additional factors. These are adjustment factors that the board can consider, and essentially they describe the violator's conduct and can make adjustments up or down to the final ACL amount based on the discharger's conduct, or the violator's conduct.

The thing to remember with these remaining factors as we discuss them is that these are sliding scales. Anything great -- a factor greater than 1.0 will result in an increase to the final ACL amount. Any factor less than one will be a multiplier and will decrease the final ACL

amount.

The first factor we're going to look at under step four is culpability, and culpability in this case, higher liabilities should result from intentional or negligent violations and for accidental or non-negligent violations. The test for this under the policy guide is what a reasonable and prudent person would have done or not done under similar circumstances.

In this particular case we're not just talking about an operator working at the wastewater treatment plant, but rather the district as a whole and how their actions play a part in the reasonable and prudent test.

So in evaluating the adjustment multiplier given in the policy is anywhere between .5 and 1.5. The prosecution team in this case has selected a 1.1. So again, for clarity, the maximum we could have assessed was 1.5, we've chosen just over a neutral factor.

We do feel that the district has culpability in their actions and that it was not reasonable and prudent to defer the major budget items for electrical repairs since 2004, that the standard operating procedures were deficient in

that to close all 12-inch valves and then subsequently that 12-inch valve created problems during the spill. Standard operating procedures were revised after the spill as a result.

It's a flood prone area, there's known grade issues that weren't addressed sufficiently to prevent some of the intrusion of water, so while there was a flood and we are acknowledging that that does contribute to the problems experienced, it does not release the district from the problems they encountered with regards to electrical repairs which could have in large part prevented the problems and the eventual failure.

With that I'm going to move on to cleanup and cooperation. This is describing the extent to which the discharger voluntarily cooperated in returning to compliance and correcting environmental damage. This factor can go, according to policy, and we're using .75 to 1.5. In this particular case the prosecution team is recommending a one, a neutral. We don't feel they went to any superior or less than superior. A one is essentially an average rating. We feel they behaved according to what regulations dictated, and we're not discounting for any issues

with their response in this case.

The third factor is listed as a history of violations. It's important to note that you cannot go lower than one, a 1.0 factor on this, but if there was a history of repeated violations a minimum multiplier would be 1.1. In this particular case we're not finding that there is a history of repeated violations so we're going to consider increasing the amount but we're going to leave that also at a factor of one.

I think I'd like to just touch on one thing. It wasn't in my notes but I would like to address it. I'm very sympathetic to the public input that I heard with regards to the flood causing the problems here. The electrical problems and the way that these issues happened and the pumps failed and the shorts that were experienced didn't require a flood of this magnitude. The district had problems prior to this flood with their electrical system. That's clear in the language that was brought before you in evidence describing the major budget items for electrical repairs, that there were need to replace with waterproof wiring, several instances of failure causing loss of power previously, and

that seals had not been installed, they had deteriorated wiring.

It wasn't a flood that was needed, it was merely water in contact with wires which could result from rainfall events, wash-down water, delivery trucks, dust control water. This could have been from a number of different sources, not just a flood.

So while I'm sympathetic the flood was a compounding issue with regards to complexity of what was experienced on that day by the district, it did not need to be a flood of that size to cause those problems. And that is at the heart of the prosecution team's presentation and considerations. And I think a 1.1 culpability score is quite conservative given those factors.

Moving on to step five, that is simply a new sum total after factoring in step four multipliers. And so with the 1.1 culpability factor we did increase by 10 percent the base liability amount to $1,263,707.50.

Step six, we've heard a lot about this step earlier, or we started to, and that was the ability to pay and continue in business. So at the start the prosecution team has presented

evidence that they've examined the district's financial records and concluded that the district has the ability to pay. With that it now switches to the district, and the district must provide an affirmative defense; in other words, clearly demonstrate an inability to pay in order for the board to adjust the recommended penalty under step six.

With regards to ability to pay -- take a moment here. The ability to pay today has focused thus far on issues with regards to a $5 million, roughly, cash reserves or liquid accounts and whether or not there could be a theory that that money could be saved for -- that that money could be saved for -- whether that money could have been saved for larger projects, future projects, but the district was anticipating that the wastewater treatment plant or otherwise. And I heard the district say that the 1.4 million is beyond their ability to pay.

I find this curious because in my job at the water board as dealing with the permit compliance for the wastewater treatment plant for the district their wastewater treatment plant permit NPDES permit No. R32009-0046 fax sheet F,

planned changes. I'd like to describe this. It says, "Addition of a second secondary clarifier and an aeration tank" -- I left off the dimensions from the description for ease -- "is planned during the time frame of this permit. These additions to the secondary treatment process will improve the facility's ability to handle anticipated increased strength BOD and TSS of wastewater due to water conservation efforts of the member agencies. These changes will also provide redundancy in the secondary equivalent biological treatment process in the event of an emergency shutdown, mechanical failure or routine maintenance."

MS. THORME: Can we get a page number of that?

MS. DISIMONE: That's F-6.

MS. THORME: Is that in --

MS. DISIMONE: In the order.

MS. THORME: In the order. What exhibit was that?

MS. JAHR: I believe it's Exhibit 28.

MS. DISIMONE: It's order R32009. I don't have the evidence list in front of me.

MS. JAHR: 0046, Exhibit 28.

MS. DISIMONE: Thank you. And again, that was Page F-6.

The plant does needs these improvements. These are -- this was highlighted in a recent inspection that I performed at the plant, I'd say about roughly four months ago. Currently the secondary treatment process has no redundancy, it's a single fixed film reactor. And this need has been identified by the district many years past, and I'll pull from also Exhibit 6, Page 2765 is the description of a major budget item for fiscal budget year 2010 to 2011 is what I have on the screen currently. Scroll up to the top. This talks about long-range planned expansion. The total project budget is $8,500,000. This is actually done from previous budget years but had it at $12 million. And those facts and figures can now be found within that same exhibit, just on previous pages.

As it says in this exhibit and on this page the district -- in this paragraph here, I'm sorry. I can enlarge it. It says here, also as part of the SRF process, in other words, the state revolving fund process, staff, meaning the district, is also working on a rate study to

determine if current rates are sufficient to qualify for the loan, getting information from the member agencies has proved cumbersome, and it goes on to say that they're working on a rate study.

As a staff member of the water board interested in looking at compliance with the permit, and in regards to this particular penalty and why I feel it's important as a message to the district about the importance and urgency of needed projects, not just electrical projects but also things likely redundancy within your treatment processes, especially for secondary treatment. According to the permit this work was going to be completed during that permit -- this current permit cycle. This permit expires in two years.

If the rate study isn't competed or out according to this document, I don't have final engineering drawings, I don't have a project out for bid, I don't have construction started, and I only have two years of this permit left. This to me is failing to adjust the urgency of previously identified needs. The district needs to hear that message, and I think the ACL is a method of doing that.

What I don't read on here, getting to previous comments I've heard during today, is that the district isn't mentioning a separate fund set aside in pre-planning of this. What I see is we think that the rates currently might be adequate to qualify for an SRF loan. I worked previously for a city in developing SRF loan applications and budgeting for major improvement projects at a wastewater treatment plant, and if I had had $5 million planned for this junior budget item I believe I would have mentioned it.

So going back to ability to pay. We're entering a factor of one. We don't feel that this needs to be decreased, we believe that the district has the ability to pay. We do not believe that the district has met the affirmative defense to show an inability to pay.

Step seven is a mouthful that says other factors as justice may require staff costs. So if the water board believes that the amount determined using the above factors is inappropriate the amount may be adjusted under the provision for other factors as justice may require, but only if express findings are made to justify this. Staff costs are included within

this amount for $75,000 as -- I'm sorry, for $75,000, and so those are included in there.

MR. YOUNG: Which is 25,000 more than what's in our exhibit, right? And that's because of --

MS. MACEDO: Yes. At the time of the complaint staff costs were 50,000, at the time of the initial submission of evidentiary brief they were 63-, and at the time of the rebuttal brief they were 75-. And we estimated that we would accept 75- unless you the board wanted specific information and we would calculate an exact amount, but we would be willing to accept a $75,000 award.

MR. YOUNG: Okay.

MS. DISIMONE: And so moving on to step eight, economic benefit has also been discussed previously. We heard testimony from Dr. Gerry Horner that the economic benefit district derived from delaying major budget items for electrical repairs at the plant was $177,209. Wonderfully entering that number in gets us almost to the end of our presentation of the ten steps.

Step nine being the minimum and maximum liability amounts. These are straightforward from

the enforcement policy and water code. The minimum ACL has to be 10 percent over the economic benefit derived, so in this case the formula entered here is 10 percent greater than the $177,209 yielding a minimum liability amount of $194,930. So the maximum liability amount, the next part of step nine, and that is calculated as $10 per gallon exceeding the first one thousand gallon spill plus $10,000 per day. So in this case it is as if the per day factor of two days -- or excuse me, it's as if the per day factor and the per gallon factor were not applied and instead multiplied by the maximum statutory limit for each of those, $10 per gallon and $10,000 per day.

Step ten is simply a final tally of what our final liability amount would be after the multipliers and factors considered and described in my previous part of the presentation, and the total final liability amount in step 10 would be $1,338,707.50. For clarification and just to reiterate, that amount takes out the 63,000 that was previously on the table at the beginning of the day for consideration. So by showing a live demonstration of this, this would be the new amount for consideration based on the prosecution

team's recommendation, that includes acknowledgement of removing that 63,000 non-discharge violation for the failure to report.

MS. THORME: So can we have this printed and marked as Exhibit 116 then?

MR. YOUNG: Sure.

MS. DISIMONE: Absolutely.

MS. MACEDO: Yes.

MS. DISIMONE: I can do that. I just will probably coordinate getting it off the laptop and onto the printer when I'm done with being crossed.

In summary, the penalty presented here today consistent with the 2010 water quality enforcement policy, water code represents a conservative and fair assessment of the factors affecting the final penalty amount and the conditions of the spill. We are hopeful that the penalties will emphasize the importance and urgency of promptly performing maintenance and identifying necessary improvements to meet permit conditions. I talked about the challenges the district is facing in the near future with regards to plant expansion, and it's important that they

sense this urgency. With two years left in their permit and the expectation that that work was going to be done before then, I fear that we're on a course to not meet that.

The district is expected -- the recent inspections also verified that there's an unlined sludge drying bed and other things which were also part of their major budget improvement. The district has work to do and I hope they feel the urgency to do that.

MR. WOLFF: Can you repeat the last sentence, please? I didn't understand that.

MS. DISIMONE: Sure. I would hope that -- the district has a lot of remaining work to be done with the plant expansion to include a redundancy within their secondary treatment process as well as other major budget items, such as unlined sludge drying beds which were a part of the discussion during my recent inspection there.

And I hope that the district is able to feel the sense of urgency to perform that work given that their two years -- they only have two years left in their current permit cycle and that redundancy within a secondary treatment was expected before the end of this permit cycle.

The district may not appear to recognize that urgency and I would not like to be back in front of you on an upset of failure to comply because a secondary treatment system had a problem and they failed to recognize that urgency. So with that said I am open to questions.

MS. MACEDO: I'll save mine for redirect.

MR. YOUNG: Okay. Cross.

CROSS-EXAMINATION

BY MS. THORME:

Q. Ms. DiSimone, can I have you stand at the podium so I can actually see you?

A. Yes.

Q. So you were not the district's water board contact at the time of the 2010 spill; is that correct?

A. No.

Q. Was it Matt Keeling?

A. Yes. Okay. Wait. Was that correct? Yes, it was correct.

Q. Was Matt Keeling the person who was their contact at that time?

A. Yes, I believe so.

Q. Okay. And did you have any involvement in drafting the prosecution team's Exhibit 1 technical report?

A. No, ma'am.

Q. Okay. And did you review any of the staff people's inspection reports prior to the 2010 event?

A. Can you repeat that?

Q. Yes. Did you review any of the regional board's inspection reports of the plant, prior -- that were in time prior to the 2010 event?

A. I'm a little hesitant what time frame you're asking me. So have I ever reviewed any of the inspection reports from --

Q. So say there were inspections done annually of the plant, is that about right? How often is the plant inspected?

A. I would defer to the record on that. I am not the case worker since --

Q. Okay. So my question is, assuming it's inspected annually, did you go back when you were preparing the penalty factors and look at the inspection reports for 2008, 2009, 2010?

A. Yes, I reviewed various parts of the

record, including inspection reports.

Q. Okay. And did any of those inspection reports indicate that this 2010 spill was likely?

A. I don't recall that.

Q. What is your understanding of "upset"?

A. In what context?

Q. In the permit requirement context.

A. In the permit context, an upset event, as I believe you're describing, would be with regards to an event which is related to the discharge of violating technologically based effluent limits.

Q. Okay. And does the permit -- district's permit have specific provisions allowing the defense of upset?

A. Which permit would you --

Q. The NPDES permit.

A. Can you repeat the question?

Q. Does that permit have specific provisions allowing the defense of upset?

A. Yes. Wastewater treatment plant permit does.

Q. Does it also have the defense of

bypass?

A. The wastewater treatment plant permit does.

Q. Okay. And isn't the prosecution team alleging that the cause of the spill occurred at the wastewater treatment plant?

A. That is correct, that the influent pump failure caused the backup in the collection system.

Q. And can you provide me of any examples where the defense of either upset or bypass have been allowed by this regional board?

A. I cannot.

Q. And do you know why the permit contains those defenses?

A. Because the NPDES allows that. NPDES permit allows that.

Q. Do the federal regulations not require that permit have upset and bypass defenses that include language that is copied from the regulations into the permit?

MS. MACEDO: Objection. Calls for a legal conclusion.

You can answer if you know.

MS. DISIMONE: I don't see much

difference between my answer and what you just said.

BY MS. THORME:

Q. Are you aware that the federal regulations also included upset and bypass defenses?

A. Yes.

Q. Okay. And do you think wastewater treatment facilities can operate perfectly 100 percent of the time?

A. No.

Q. So you said that the district didn't need a flood to cause the spill. If that's the case, how come it never happened for 25 years?

MS. MACEDO: Objection. Calls for speculation.

You can answer.

MS. DISIMONE: I don't know the 25 year history of what went on, what was recorded. I don't believe everything that happens at a wastewater treatment plant gets recorded.

BY MS. THORME:

Q. So you're alleging there were spills that weren't reported?

A. That's not what I'm alleging.

Q. Okay. Can't machinery even if well maintained have occasional times of malfunction?

A. Sure.

Q. What previous regulatory actions have been taken against the district?

A. I'd have to refer to the project records. Off the top of my head I can't specifically answer that.

Q. Okay. So you're not aware of any effluent violations and mandatory minimum penalties?

A. Yes, I am aware of effluent violations. And with regards to the specifics of those, I'm fairly -- I prefer to give a full, complete answer without the project records. I don't want to speculate.

Q. Okay. And are you aware that from the time 2000 when the mandatory minimum penalty statute went into effect and now that the district has only been penalized $6,000 in mandatory minimum penalties for effluent limit violations?

A. What was the question?

Q. Are you aware that since 2000 to now, that the district has only been given mandatory minimum penalties for $6,000 worth of effluent

violations?

A. I would have to verify that.

Q. All right. Can you pull up Exhibit 95-2, please? If you could pull up the yellow part. Are you aware of what this document is?

A. It looks like a query of CIWQS's database, but I did not develop this, so I am not entirely sure.

Q. So if this was a CIWQS download, when you were asking for all the discharges and all the penalties and it's $6,000, would you question that?

A. I didn't generate this, so I'm uncomfortable verifying whether or not that information is correct.

Q. Okay. And can you pull up Exhibit 101 for me, please? So did the prosecution team prepare this Exhibit 101?

A. Yes.

Q. Okay. And what did you do to prepare this?

A. I would defer to Matt, as he was the primary generator of this exhibit.

Q. Okay. So you stated that you had

identified that the district has a need for doing additional major budget item projects; is that correct?

A. Yes.

Q. And would it be better for the district to use its money for projects or penalties?

A. I'm -- I think that's a bit of an odd question, and I'm not quite sure how to answer that.

Q. Okay. All right. So in the recovery factor, was the district given any credit for the storage and continued treatment of effluent coming into the plant all day?

A. Can you repeat the question?

Q. This is -- every time I have to repeat it it's cutting into my time.

A. I believe that it was -- that you're asking how was the discharge volume calculated?

Q. No, I'm not.

MS. MACEDO: Are you talking about the susceptibility to clean up the --

BY MS. THORME:

Q. This is the recovery step that you had just went through. There were certain steps and one of them is the recovery step.

A. There is no recovery.

MS. MACEDO: Are you talking about susceptibility to clean up and abatement?

BY MS. THORME:

Q. Right. Cleanup and cooperation.

A. Step four.

MS. JAHR: Yes. She's talking about step four.

BY MS. THORME:

Q. Yes. I was calling it the wrong thing. It was one of the adjustment factors. And so my question was, were they given credit for the storage and continued treatment during the day? Because you're looking at whether 50 percent was recovered or not, so what do you use as the basis of that?

MS. MACEDO: I'm sorry. You're talking about the susceptibility and cleanup factor, which is in step one?

MS. JAHR: There's two steps involving cleanup and --

MS. DISIMONE: You're talking about cooperation and cleanup in step four?

MS. JAHR: No, I think she just said 50 percent, which is step one.

BY MS. THORME:

Q. I'm sorry. So less than 50 percent of the discharge is susceptible to cleanup or abatement. So the question is, did you take into account that had they not been able to keep treating and storing, that the number would have been higher?

A. I missed what you had decided in coming back to the podium. So what -- which part of this table are we talking about? I apologize.

Q. Factor three.

A. Factor three of step one?

Q. Yes.

A. Okay.

MS. MACEDO: Did you give them credit?

MS. DISIMONE: That is a separate issue from the 1,138,925 gallons that was -- that is at issue for the spilled volume. The type of holding that you're describing within the lagoon while the spill was happening, that eventually made it through to the headwork and were going through the treatment process, is not a part of this penalty.

BY MS. THORME:

Q. Okay. So where was credit given for the fact that they kept treating all during the

day and meeting their effluent limits out into the ocean?

A. Because you kept treating and did not bypass any wastewater treatment plant -- any water that went through the wastewater treatment plant did not bypass any treatment process, that is how you have ended up getting credit for it. You didn't have a bypass event, so you treat it.

Q. Okay. So what evidence of sickness is in evidence? You mentioned that there was evidence of sickness that you have in your case.

A. The district has references -- the prosecution team has done interviews with homeowners and residents, and I sat here and heard public testimony that --

Q. But that's not evidence.

A. -- that he was sick.

Q. That's not evidence. That's hearsay. So what evidence do you have?

MS. MACEDO: Are you asking her?

MS. DISIMONE: I can defer to other prosecution team members for specific evidence, the document numbers to refer to.

BY MS. THORME:

Q. What percent of the water that

eventually went out to the ocean was sewage?

A. I don't have that number.

Q. Okay. And are the staff costs that are in this table, are those discretionary?

A. Could you clarify what you mean by "discretionary"?

Q. Are they mandatory that this water board has to give you those costs, or is it a discretionary function that they don't have to give you those costs?

A. It is a determination that they make under the enforcement section or enforcement policy 2010. The board can decide that that is appropriate cause under that particular step.

Q. Okay. So it is discretionary then?

A. Yes.

MS. THORME: Okay. No more questions.

MR. YOUNG: Redirect?

MS. MACEDO: Yes. Just a minute.

MR. YOUNG: I'd just like to clarify something. I thought that we heard that public commentor Steve Ehens, I thought he said that he had taken the oath.

MS. THORME: It's still -- the public comment period is not -- under the hearing

procedures the public comment period is not evidence.

MR. YOUNG: Okay.

REDIRECT EXAMINATION

BY MS. MACEDO:

Q. Ms. DiSimone, in the susceptibility cleanup and abatement factor, step three of step one, the district and prosecution team actually agree about that factor, do they not?

A. They do.

Q. And that factor is either a one or a zero based on whether greater or less than 50 percent of the matter can be cleaned up; isn't that correct?

A. That's correct.

Q. Whether or not the material was cleaned up, correct?

A. That's correct.

Q. Ms. Thorme just asked you what percentage of the material discharged into the Pacific Ocean and other surrounding water bodies was sewage, correct?

A. She did.

Q. But isn't the -- doesn't the permit

also prohibit sewage when it is mixed with storm water as well?

A. It does.

MS. MACEDO: I have nothing further.

MR. YOUNG: Any recross? Okay. We'll go to board questions. Mr. Johnston?

MR. JOHNSTON: Good afternoon.

MS. DISIMONE: Hi.

MR. JOHNSTON: So under the permit is sewage and storm water mixed treated in a discharge, treated the same as if it were all initially sewage and had no storm water mixed with it?

MS. DISIMONE: Yes.

MR. JOHNSTON: So a gallon of discharge mixed sewage and storm water is the same as a gallon of discharged sewage that had no storm water mixed in it?

MS. DISIMONE: Yes, to some extent, under the permit, yes. If you're trying to differentiate how to describe the characteristics of that mixed waste versus another waste, I would recommend looking at factor two under step one, where it talks about the characteristics of the discharge. And I adjusted with wet weather SSOs

that where sewage is mixed with storm water that's assigned a factor score of three.

MR. JOHNSTON: That's where sewage -- okay. So the sewage has been assigned a factor of three and being mixed with storm water, and what you're saying is it would potentially have been assigned a higher number factor if it were not mixed with storm water?

MS. DISIMONE: Could have.

MR. JOHNSTON: Thank you.

MR. YOUNG: Mr. Jordan?

MR. JORDAN: Ms. DiSimone.

MS. DISIMONE: Hi. That's close enough.

MR. JORDAN: Okay. I just have a couple questions on step four. And I tend to be agreeable with your statements on culpability, that you felt it was a conservative number, but I'm confused on your presentation of the ranking on the cleanup operation, the history of violations being a neutral number. I'm just wondering if you could tell me some more about that because it seems like in the description you reward the discharger's behavior. You say they responded quickly, they notified the public, they

responded to their notice of violation, and yet for the cooperation and culpability you give them a one. It's like if you did something wrong you immediately call into a debit or however -- an assessment, but what would you have to do to actually earn some credits in that category, above what they did?

MS. DISIMONE: I didn't -- there would be voluntary cleanup efforts that we typically see. From myself, there was proposals about an ecological study about the impacts of the spill afterwards that had actually -- I've seen district records that indicate they were going out to bid for that type of report and study, and yet that was never done. I haven't seen that report mentioned by the district or discussed.

There's difficulties in obtaining information concerning the prosecution team before my time on the case, so I think on balance I'm sensitive to the emergency nature of a spill during a flood time. And I acknowledge that there's a lot that goes on and a lot of coordination effort. I'm certainly sensitive to that as a former employee of the city operating a wastewater treatment plant, I get that. But I

also don't feel that they went beyond what was baseline required in dealing with the cooperation after the spill and in the subsequent investigations reporting and discharge calculations.

MR. JORDAN: Have you done more than -- have you done the spreadsheet process of more than one spill?

MS. DISIMONE: This penalty calculation methodology is new for this board. It came about with a 2010 enforcement policy, so the answer is no. But this is the board's first time with it as well.

MR. JORDAN: Would you say then, generically, your stance on the cleanup and cooperation line is that if you just do what's legally required it's a one?

MS. DISIMONE: Yes.

MR. JORDAN: Is that kind of your philosophical line in the sand and you work from there?

MS. DISIMONE: Yes.

MR. JORDAN: Okay. And then on the history of violations, I get -- I get that explanation. I understand what you're saying.

But then on the history of violations you have none. I don't -- again, I just don't understand from a common sense standpoint of why that's -- why that's a neutral grade rather than a reward, so to speak?

MS. DISIMONE: It takes a --

MS. MACEDO: You can't go lower on that factor.

MR. JORDAN: Oh, you can't. I'm sorry. That's only a penalty, though?

MS. DISIMONE: Yes.

MS. THORME: Ms. Macedo is testifying again. That's not true.

MR. JORDAN: I won't listen to her. Can you go any lower than that?

MS. DISIMONE: My previous testimony did include the recognition that you cannot go lower than that.

MR. JORDAN: I understand. And then on step seven on the justice category, the dollars you're justifying for staff time, do those staff dollars come back to the region or do they stay in the abatement fund?

MS. DISIMONE: That's a good question. I'm going to have to defer to someone else on

that. I don't believe they come here. I think they're part of --

MR. JORDAN: So would there be -- would there be another witness coming up that --

MS. DISIMONE: For the staff -- for the staff costs, though. Oh, that. Half of the total penalty amount is able to be set aside for supplemental environmental projects. So in that sense the 75,000 is rolled into that total penalty amount. A portion of it could come back locally as a step four supplemental environmental project.

MR. JORDAN: I actually just looked up the water code section 13385. It's like two lines that talks about adjustment. It says -- well, it says and other factors that justice may require, that's as little as it says.

MS. DISIMONE: I would point you to the 2010 enforcement policy as being further guidance for that. There's a little more than two lines on that. But in essence, the board has to make specific findings if they are to determine that there are other factors that would require adjustment to the final penalty amount proposed here as justice may require.

MR. JORDAN: Does that -- in your opinion does that phrase "justice," also include damage to the members of the community or other types of occurrences like that? Typically, when you hear that word justice in this setting, you start to open up to all types of things that go on out in the community. You've identified just hard costs for staff?

MS. DISIMONE: It's the board's discretion, that particular factor may go up or down at the board's discretion and determination of what other factors there could be.

MR. JORDAN: Okay. Thank you very much.

MR. YOUNG: Dr. Wolff?

MR. WOLFF: Thank you. You were asked earlier about the district if machinery fails, and you answered yes. From your experience working with the San Luis Obispo treatment plant, would that be the reason why a preventative maintenance program is very important in having redundancy systems in good condition and good operating condition is critical?

MS. DISIMONE: Absolutely.

MR. WOLFF: Thank you.

MR. YOUNG: Mr. Harris?

MR. HARRIS: Just to clarify the 75,000, that's not all regional board staff costs, that would also, I believe, the office of enforcement itself?

MS. DISIMONE: Correct. As the prosecution team mentioned in the opening statement with regards to the entire --

MR. HARRIS: So you're a water resource control engineer, correct?

MS. DISIMONE: I am.

MR. HARRIS: And you're a permit writer at the regional board?

MS. DISIMONE: Yes, I am.

MR. HARRIS: How long have you been writing permits?

MS. DISIMONE: I've been writing permits for a little over a year I've been into this program. Previous to that I did cleanup, and then with the city I was -- City of San Luis, I was also involved in wastewater treatment plants permitting extensively.

MR. HARRIS: Have you ever taken the U.S. Permit writer's class?

MS. DISIMONE: Yes, I have.

MR. HARRIS: And based on what you learned in that class and based on your experience, do you think the event that we're discussing today would qualify as an upset?

MS. DISIMONE: No.

MR. HARRIS: Do you think the event that we're discussing today would qualify as a bypass?

MS. DISIMONE: No.

MR. HARRIS: All right. Thank you.

MR. YOUNG: Mr. Jeffries, any questions?

MR. JEFFRIES: No, they've been asked already.

MR. YOUNG: Okay. All right. Does that conclude this witness?

MS. THORME: Mr. Chair, I just wanted to ask one follow-up question to get an answer for a board member --

MR. YOUNG: Go ahead.

MS. THORME: -- Jordan.

So if you could pull up Exhibit 102, Page 15, please. So this is one of the prosecution team's exhibits, which was the ACL for the North Tahoe Public Utility District, which

actually occurred on the very same day, December 19, 2010. And as you can see there, they were given an adjustment down for 20.9. Were you aware of that, Ms. DiSimone?

MS. DISIMONE: I was not aware of that.

MS. MACEDO: I was not aware of that either, but to the extent that we're talking about the North Tahoe ACLC North Tahoe, actually, the regional board of the recommended penalty from the prosecution team, so if you want to bring that to the board's attention I'm happy that you did.

MS. THORME: Well, I didn't bring that part of it to it. If that's what you're testifying, that wasn't it.

MR. YOUNG: Mr. Harris, any questions?

MR. HARRIS: No.

MS. MACEDO: Shall we call our next witness?

MR. YOUNG: Yes. And can we find out -- do we need to break for the reporter?

THE COURT REPORTER: I think she's coming at 3:00.

MR. YOUNG: At three o'clock. So we are going to have to break. It's three o'clock.

Let's take a break.

(Recess taken.)

MR. YOUNG: Ms. Macedo, call your next witness.

MS. MACEDO: Absolutely. I'd like to call Jeff Appleton to the stand.

DIRECT EXAMINATION

(Jeffrey Appleton)

BY MS. MACEDO:

Q. Mr. Appleton, good afternoon. I just want to confirm for the record that you took an oath this morning?

A. Yes, I did.

Q. Okay. And can you state your full name for the record?

A. Jeffrey Wayne Appleton.

Q. And where do you currently work, Mr. Appleton, or who are you currently employed by?

A. South San Luis Obispo County Sanitation District.

Q. And what was your most recent title there?

A. Operator three.

Q. Can you describe your duties there?
A. For what position?
Q. Operator three.
A. Operation of maintenance of the district's wastewater treatment plant.
Q. And what did that include?
A. I never actually performed the duties of an operator three; so --
Q. Okay. How about before operator three, what was your -- what was your prior position?
A. I was a plant superintendent.
Q. There you go. And what were your duties as plant superintendent?
A. The overall operation and maintenance of the district's wastewater treatment plant, including filing monthly water quality discharge reports, attending board meetings, overseeing the day-to-day operations of the wastewater treatment plant, personnel management. Basically I was the one in charge at the treatment plant.
Q. Okay. How many employees reported to you?
A. It varied. On an average it was between seven and nine.
Q. Okay. Who did you report to?

A. To the district administrator, John Wallace.

Q. Did you report to the district board at all?

A. I did attend bimonthly district board meetings where I did have a superintendent's report. And I would report issues to the district board of directors.

Q. Were you present on the day of the spill in question, December 19th, 2010?

A. Yes, I was.

Q. Now, have you been present all day today as we've been talking about some of the preventive maintenance issues?

A. Yes, I have.

Q. Okay. I'm going to ask you to look at a few of the exhibits that we've gone through, a handful of documents that you may have seen before. And the first one I'm going to put in front of you is Exhibit 2. So on the front page of this document it indicates that this is a 2004, 2005 fiscal year budget. I'd just like to point out that on the bottom of the page it indicates that you were plant superintendent at this time; is that accurate?

A. Yes, it is.

Q. Okay. I'd like you to flip to Page 3 of this document. And I'll represent to you that this is an excerpt of another fiscal year budget from the district. Unless you can recall whether -- I mean, are you familiar with budgets from the district?

A. Yes, ma'am.

Q. Did you play any part in preparing them?

A. Yes, I did.

Q. Okay. And you can take a second to review this.

A. Okay.

Q. Do you recall this particular main budget item?

A. Yes, I do.

Q. And we talked about electrical issues at your deposition. Do you recall that?

A. Yes, I do.

Q. Okay. And do you recall the electrical issues leading to, as it's described in this document, either electrical fires or a loss of power?

A. Yes, I do.

Q. Do you recall specific instances when that happened?

A. Yes, I do.

Q. And can you describe those for me?

A. There were several. Some of the ones that stick out in my head, at one point after the San Simeon earthquake, one of the operators came into my office and told me we had a fire inside a pull box, an electrical pull box at the plant. And in responding I could see smoke billowing out of the electrical pull box, which was rather frightening to me.

Fortunately the fire was inside a portion of conduit. It wasn't actually inside the pull box on the No. 2 primary clarifier. The staff did have to do an emergency repair that day and pull a new piece of wire to keep the plant in operation.

We had other issues with the wiring. I remember at one point we had another fire inside the conduit for the No. 1 primary clarifier lighting system. It was somewhat of a standard occurrence at some point during the year that we were going to have a conduit that the wiring had failed inside and we'd either have to pull it

ourself or have an electrician come in and pull it.

Q. So our evidence indicates that since at least 2004 the electrical system was scheduled as an MBI, and that stands for main budget item, correct?

A. The district term actually is major budget item.

Q. Oh, excuse me, major budget item. It was scheduled for an upgrade since at least 2004. And does the fact that this MBI is still on the budget in 2010, 2011, mean that that major budget item had not been completed?

A. That is my understanding of the district's budget process, yes.

Q. Okay. Despite the fact that these -- at least two fires occurred, correct?

A. Correct.

Q. Okay. Did you ever bring the problems with the electrical to anyone's attention, other than including them on the budget reports?

A. Yes, I did.

Q. Whose attention did you bring them to?

A. On several different occasions to

members of John Wallace's staff, John Wallace, himself. It was also discussed in depth with the board of directors in several board of directors meetings.

Q. How did you bring it to their attention? What did you -- did you ask for it to be fixed, did you say that it proposed a danger, what did -- how did you do that?

A. Well, I think it's obvious that it was requested to be fixed, because it was placed into the major budget item list. It was obvious that there was deficiencies in the system that were potential hazards. I remember on one occasion when I actually took a section of burned wiring to the board of directors meeting and presented it to the board of directors so they could see what we were dealing with at the plant. We weren't electricians, we were wastewater treatment plant operators. So it was a very difficult situation for us. There were times where we had to repair it to keep the plant running. That wasn't really what we were certified to do.

Q. I'm going to ask you to take a look at another exhibit. This is 99 to the prosecution team's rebuttal evidence. Before I do that, your

attorney's asked me to clarify that you are here appearing pursuant to subpoena. You received a subpoena from me, correct?

A. Yes, I did.

Q. Okay. Thank you. Are you familiar with the district's seal in the top left-hand corner?

A. Yes, I am.

Q. Have you seen standard operating procedures from the district before?

A. Yes, I have.

Q. Okay. Have you ever prepared or received them before?

A. No, I haven't.

Q. Okay. So it appears that this was issued on October 29th, 2010. Do you see that date?

A. Yes, I do.

Q. Okay. And that it was issued by Mr. Bob Barlagio. Do you know who Mr. Barlagio is?

A. Yes, I do.

Q. Okay. So going to Page 2 of this document, it indicates that -- on B-3 it indicates to close all 12-inch valves. Do you see that?

A. Yes, I do.

Q. Now, does that present any problems to you?

A. Yes, it does.

Q. And why is that?

A. During my tenure as the plant superintendent, since the early part of 2000, the valve had been chained and locked in an open position. It was in a sub-grade pit that had the possibility of flooding. And that valve was critical for the standby diesel emergency pump to work. If the valve was closed, the pump couldn't work. So it was obvious that that valve needed to be kept in an open position, so if the pump needed to be started you wouldn't have to go below grade to where the open channels were, the sewage channels that might flood.

Q. Now, I'm going to continue on in this exhibit. And on Page 3 of this exhibit, this standard operating procedure is dated May 6th, 2011. Do you see the date?

A. Yes, I do.

Q. Okay. And again, we're looking at section B, but now instead of five steps there are six steps. And do you see a new step four? And

does that more accurately reflect what you think the correct procedure is?

A. Yes, it does.

Q. Okay. We also discussed earlier this morning some water intrusion issues. Do you recall that?

A. Yes, I do.

Q. And we talked about some grading issues that you, I believe, brought to the attention of the people at The Wallace Group. Do you recall that?

A. Yes, I do.

Q. Okay. And this e-mail was one that was submitted by the district in Exhibit 71. Down here it indicates that in 2007 the headworks project had some water ponding issues. And to deal with that one of the things that was done was this. Do you recall this photo being shown this morning?

A. Yes, I do.

Q. Can you describe what this photo shows?

A. Sure. This is the pull box that flooded the day of the spill. After completion of the headworks retaining wall, the grading, the

slope of the ground had changed significantly. And what resulted was a low spot, basically a swimming pool directly over the pull box, so even a minimal amount of water drained directly into the pull box.

We knew that there was obvious conduit issues, all of the main motor leads for the influent sewage pumps, a 480 volt ran through this box. And we were very concerned about having moisture inside of it.

What the staff did is they saw cut about a four-inch section around the edge of it and we placed a berm, a concrete berm or a ramp around it to raise the elevation. What it did was it raised the elevation about an inch and a half above the level of the water, when it was a standing puddle there. And it basically formed a little island in the middle of a great big pond. That was the low spot that surrounded the headway structure.

MR. YOUNG: Can I just get clarification on when this photograph was taken?

BY MS. MACEDO:

Q. Sure. Mr. Appleton, do you recall when this photograph was taken?

A. Not specifically. Sometime in 2007, I think.

MR. YOUNG: And the purpose for that, is that a plastic cover that I see, the top fits into the bottom?

MR. APPLETON: No, it's a metal ring. It's a metal cover and a metal ring that sits into it. It's traffic rated.

MR. YOUNG: Is that meant to be waterproof?

MR. APPLETON: No.

MR. YOUNG: So what we see in white is all metal?

MR. APPLETON: The inside circumference of the lid is a metal frame, the actual box itself is made out of concrete.

MR. YOUNG: I see. The two pictures are the same thing, one at an angle?

MR. APPLETON: Yes.

MR. YOUNG: Okay.

BY MS. MACEDO:

Q. And the purpose of the berm shown in this photograph, it wasn't to deal with the electrical issues, correct?

A. That is correct.

Q. And in fact it didn't deal with the electrical issues, correct?

A. It did not.

Q. When small amounts of water were applied to this, what would happen?

A. Basically, the raised section would protrude from the puddle, the puddle was, depending on where you were standing, out anywhere from 6 inches to 12 inches deep around the headworks. So that made a little island and all of that water would not run into the pull box and affect the leads.

Q. Did ponding issues still exist after this fix?

A. Yes, they did.

Q. Okay. Is this the -- I can rotate it. Let me see. Is this a final view?

A. I believe so, yes.

Q. Okay. And so the water would just run away rather than in?

A. Well, actually, the water would puddle up around it. And the lid was high enough to where the water level didn't pour into the box.

Q. Thank you. We also talked a little bit about -- we also talked a little bit about the

leaky influent gate and the emergency bypass pump.

Had any issues with those -- those pieces of equipment or those factors at the plant been brought to anyone's attention before December 2010?

A. Yes, they had.

Q. And whose attention were they brought to?

A. Specifically, John Wallace's, my direct supervisor. But as I also said, I discussed situations like this with the district board directors during the bimonthly board meetings.

Q. Okay. Let's take those in order. What was John Wallace's reaction when you brought problems such as that to his attention?

A. He said he had engineers looking into it.

Q. What about the board of directors?

A. They followed John Wallace's lead.

Q. Okay. Was anything ever done in terms of responding to the problems?

A. Which specific problems?

Q. Let's talk about the pump.

A. Okay.

Q. Was anything done in terms of pump

issues?

A. We did initiate conversations with pump manufacturers. Most of it was done in-house, though, by my staff. The former shift supervisor Scott Mascolo spent months e-mailing and talking to the text support from the pump manufacturer. I don't believe that the administrative staff was too involved with it, but we never did correct the problems with the pump.

Q. Okay. And what about the leaky influent gate?

A. John Wallace had been made well aware of that. I sent him an e-mail with documented pictures of the gate leaking. Again, another engineering project was authorized for a headworks repair project, but it had never been completed by the time this spill had happened.

Q. Who was in charge of conducting the engineering project?

A. That would be John Wallace and his group, the Wallace Group.

Q. Okay. When the actual physical labor for either replacing or improving some of these things, the ponding issues, repairing the leaky influent gate weren't completed, were any reasons

given? Was it that the district didn't have money, that they were too expensive? I mean, were you given a concrete reason?

A. I don't think I was ever given a concrete reason. It was more along the lines of we're continuing to look into it from an engineering standpoint. Some issues at the plant suggested a pull box. We couldn't wait, so we did what we could in-house. We could fix a very obvious problem, but issues such as the leaking influent gate were never repaired. They were discussed at length many, many times, but no actual work has ever been done on the structure.

Q. In terms of the berm that we just looked at, Exhibit 71, who was responsible for doing that?

A. The operation staff did it in-house.

Q. Okay. So it didn't really cost the district anything?

A. Materials.

Q. Okay. You heard Mr. Thoma speak this morning?

A. Yes, I did.

Q. Did you have any disagreements with his testimony?

A. Yes.

Q. Do you recall what they are?

A. Well, specifically, the shunt switch issue and the sequence of breakers tripping in the MCC building on the day of the spill. I was the operator responding to the MCC building and I know what breakers were tripped. The No. 4 influent pump breaker was tripped. The MCC No. 1, it was a 100 amp breaker which feeds the four influent pump breakers was also tripped. Myself, personally, tried to reset both breakers the morning of the spill. Neither one would reset.

I believe Mr. Thoma said that the No. 1 MCC 100 amp breaker was tripped, but the pump breakers weren't. That's not correct.

Issues with the shunt switch were known the day of the spill. The shunt switch cover had to be removed and all of the water drained out of the conduit the day of the spill and contact cleaner sprayed inside of it, because it was still connecting the signal and preventing the breaker from being reset. We let it dry out for an hour or so while the contractors were working downstairs on the pumps. So water from the conduits for the shunt switch was very well-known

the day of the spill.

Q. Okay. Mr. Thoma said he interviewed some district employees to understand what happened on the day of the spill. Did he meet with you?

A. No, he didn't.

Q. Okay. I believe the district is going to put forth a number of witnesses for its case in chief, but I don't believe they're putting forth any current employees or anyone who currently works at the district itself. You're the only person who responded to the spill that day and is a current district employee. Can you tell us about the day of the spill?

A. Sure. Where would you like me to start?

Q. Well, when did you get a call that you needed to report to the plant?

A. I received a call from Rick Jackman, who was the operator on duty that weekend at approximately 8:30. I don't remember the exact time, but it was about 8:30.

Operator Jackman informed me that there was severe flooding happening at the plant. They had received several alarms. I think he had

another operator there that he had called in for assistance, Billy Longhill. And neither one of them felt comfortable with some of the issues that they had to handle, so they requested my assistance.

I responded to the plant. Arrived 10 or 15 minutes later. Arriving at the plant, I found that all the site drains were backed up and overflowing. They were deluged with water. There was large amounts of water encroaching upon the plant from the security court area.

I met with the operators and they gave me a brief run-down of some critical issues that they were facing. There was a failed alarm on the generator, the standby generator. We found out that it was afloat. There was water in the room, but the generator was elevated high enough that that wasn't a critical issue at the time.

The sump pump situation was, in my viewpoint, very critical, because we had water that was pooling around the influent structure and was backing up from the site drainage, and couldn't evacuate the water fast enough. I was afraid that very quickly the water would start to pour into the structure.

I think that at some time around 9:15 I was notified that the influent pumps had failed. One of the operators that was on duty came out. I don't remember exactly what I was doing, but they told me the pumps had failed. So I responded to the MCC room and that's where I found the tripped breakers, the 100 amp service breaker and also the No. 4 influent sewage pump breaker.

I attempted to reset them several times. They wouldn't reset, so I immediately went to the influent pump room to eyeball the pumps themselves to see if I could find out what was happening.

Entering the influent structure, it became obvious that it was flooding. It's a two-story structure, the upper level is a landing where there are check valves and piping. And then a story below that is where the pump rooms are located.

Going down the stairs to the upper landing, I saw water shooting out of the cracks in the concrete, two or three feet. And there was water pouring out of the penetrations through the wall. Electrical conduit boxes had water pouring out of them.

I entered the pump room and went downstairs and found water pouring out of the light fixtures, out of the sockets in the wall. Water was pouring out of the thick head connections along the -- the large influent pump motors, and there was about a foot of raw sewage in the room. Obviously, the sump pump was overwhelmed or had failed to keep up.

The sewage was about six inches away from covering the motors. To me it was very important to try to keep the motors from becoming covered with water. If they were only damp, that means I could have them dry in about 12 hours and have them put back on line. But if they became submerged they'd have to be rewound and that would take days and we wouldn't have any pumping.

So my first action was, I left the pump room, I think Operator Jackman was waiting upstairs and I told him we have to close the influent gate, the pump room is flooding.

As we were closing the influent gate, which is supposed to shut down all of the water flow downstream into the pump rooms and wet well, I informed Operator Alan to start the standby generator -- or start the standby pump. We have a

large diesel pump at the front end of the plant.

As Operator Jackman and I were closing the influent gate, Operator Alan informed me that the pump wouldn't start. So I told him keep trying. We have to close this gate. The gate takes -- it's a two-man job and it takes a while to get the gate closed.

We eventually got the gate closed and the sewage immediately began pouring out of the influent structure. It had filled up the collection system. And since we had shut off the gate there was nowhere else for it to go. So sewage began pouring out of the influent structure.

I went to the emergency standby pump, I tried to start it. I spent several seconds with it. There was some type of a fault in the software controller, it has a computerized software controller for the pump. After several seconds I couldn't get it to start. I knew we were in big trouble, so I went inside and started making some calls for assistance.

One of the first calls that I made was to a local contractor. His name is Chuck Ellison and he runs a company called Fluid Resources

Management. They specialize in wastewater and wastewater treatment plant systems. I knew that they had a skill set to deal with the issues that we were facing, because there were multiple issues. We needed an electrician, a millwright, a plumber and everything else. And Chuck's company could handle all of it.

Chuck responded a short time later, I do not remember the exact time, I was busy with other things, with two of his crew members. He asked me, "Where do you want me to start? Where do you need help at?"

I said, "Start at the pump. See if you can get the pump running."

At this point I think I informed one of my operators to start making the proper notifications to water quality health department. Aaron Allan was assigned to do that. We had, basically, a flow chart at the plant that had the numbers on it. And I gave it to him and I said, "Start calling people. Write down who you talked to and what time you talked to them and document it."

I went back inside to see how we were doing with the emergency standby pump. One of the

FRM employees were able to start the pump, I'm not exactly sure how. We started the pump and immediately found out that the discharge valve was closed, which was located downstairs in the wet pit. The wet well had four feet of sewage in it, but if we didn't get the pump started we were in big trouble.

So I entered the pit and tried to open the valve. I got it open about halfway, maybe a third. I'm not really sure, that's a guesstimate, because it was kind of busy, until the water got deep enough and I couldn't open it anymore. The sewage got deep enough and I had to evacuate.

The pump was running and we were pumping some. Water was leaking through the influent gate and water was overflowing from the main trunk line and it quickly filled up the entire wet well. It was about 20 feet deep and it was -- where this valve was located was about 20 feet below the raw sewage that we had to pump out.

So I told one of the operators to get another portable standby pump that we had. We had a six-inch diesel standby pump and we began de-watering the wet well area. We were finally

able to get the wet well area de-watered about two o'clock in the afternoon. Was able to open the discharge valve on the standby pump fully, but it wasn't pumping enough to prevent the spill and the overflow.

Previously in the day I had made a couple calls to some public agencies. I had called Shane Taylor at the City of AG, and Mike Ford, I believe, with the City of Grover, to see if they had any pumps we could use, and they didn't.

When I contacted the superintendent of the Pismo Beach Wastewater Treatment Plant, Steve Stewart, and I knew he had several big pumps. And I said, "Man, if you can help us, we really need some help."

He did bring a pump over later that afternoon. It was about 4:00 or five o'clock. The pump wouldn't start, the battery cables were corroded. The battery was dead. It took us a couple hours to get the pump started.

By this time I had sent the contractor down into the pump room. They had ascertained that one of the influent pumps was still serviceable if we had conductors that were above

ground. Fortunately, we had begun that process earlier in the day to run spare conductors above ground. I knew the conduit in the ground were full of water and I didn't trust putting it back in service.

We got the Pismo pump started. About 8:30 or nine o'clock that night we were able to bring the No. 3 sewage influent pump back online. And at that point we were able to start lowering the level of the water in the collection system.

About ten o'clock it was down low enough that we weren't in the spill mode. We removed the three influent pump motors. They had not been submerged, fortunately for us, they only got damp. We had them transported to a local repair shop, where they dried them. And the following day they were replaced, go back in service and brought back online.

The following morning -- we were experiencing a lot of problems the previous day with the standby pump stalling out. We couldn't figure out why. We thought it was a software problem with the controller, or it just died. And every time it died sewage would begin to flow out of the influent structure.

The following day it happened again, we had another spill. We received a report that at the corner of North Swing and Coolidge, a street in the local area, had overflowed that day, so we responded to it.

I believe that the repair shop had the influent motors done by about four o'clock that day. And they were reinstalled and back up and running by about ten o'clock that night. So by about ten o'clock Monday night we basically had pulled all the motors, transported them, dried them, rewired everything and had the plant back up and running and meeting our discharge requirements.

Q. You know, I put up on the screen a page from Mr. Thoma's declaration, and I'm certainly not an electrician, but this is the pull box in the headworks room, yes?

A. It's an illustration that represents a pull box.

Q. I'm sorry. You're right. Now, did this -- I'm pointing on my screen and that's not helpful at all. This here is a pull box, correct?

A. Yes.

Q. And on the day of the spill, did it

fill completely with water?

A. Yes, it did.

Q. And did anyone have to drain it?

A. No. All the water drained down through the conduits into the motor connection heads.

Q. Now, on the day of the spill, Mr. Appleton, do you know how high the flows were?

A. The last documented flow rate that we had before the flow meter fell, was a flow rate of 8.4 million gallons per day.

Q. Do you know the general capacity at the plant?

A. There's two different capacities. There's the dry weather capacity, when there's no precipitation or I/I, and there's a wet weather capacity. The plant's dry weather capacity I believe is five million gallons per day. And I think -- I'm not exactly sure of the wet weather capacity but I do believe it's nine million gallons per day.

Q. And what's the largest flow capacity you've ever seen at the plant?

A. Well, we weren't actually able to verify the data, but by calculating the curve, we actually had a flow that went off the chart. We

have a circular chart, the top range is ten million gallons a day. And we actually saw a flow that flatlined at ten million. And then we calculated the flow curve, there probably was a peak flow of 13 million gallons, 13 or 14 million gallons a day flow rate.

Q. And when was that?

A. I don't remember the exact time frame, other than it was around the time of the San Simeon earthquake.

Q. And in evaluating some of the paperwork in this case, since you've been involved in giving a deposition, and you came up with the spill estimation, you noticed the different discharge points, including the manholes and the private residences. And it seems that you may be the only one who noticed that the discharge at the headworks existed. Can you explain a little bit about that?

A. Sure. After the influent pumps failed and we were unable to start the emergency standby pump, the collection system filled up and there's an opening, a grading that set directly over the incoming trunk line located within the flood valve containment wall around the headworks. So we were

able to actually visualize and see the water level coming up when the influent pumps failed. I'm not sure if that answers you question, but --

Q. So for example, this is a photo of the headworks?

A. That's actually the opening in the headworks wall where you can access where the control gate is, the influent control gate. You can walk through that door there and you can see grading there and there's some pipework that goes down in the influent line.

When the influent pumps failed and we closed the gate, raw sewage started pouring out of that doorway there at a depth of about six or eight inches.

Q. So this would represent an additional discharge point on the day of the spill?

A. If it was not taken into consideration by other spill amounts, absolutely. There was spilling numerous times during the day. That's the standby pump, the big black unit there, that you can see. And the standby pump failed numerous times throughout the day and it takes several minutes to restart it. And every time during the restart process, again, raw sewage would flow out

of that doorway in massive amounts.

Q. Did you assign anyone from the district to take either video or photographic evidence of either particular manholes or discharge locations on the day of the spill?

A. I don't know if I did specifics on discharge locations, but I gave Operator Jackman a camera and told him, "Your job today is to take pictures and document what happens."

Q. Okay. And have you ever seen those photos?

A. No, I have not.

MR. YOUNG: Let's take our break and we'll change out reporters.

MS. MACEDO: Oh, sure. Thank you.

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(Marcy Styles, CSR No. 10604, replaced Judy J. Williams, CSR No. 7314.)

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REPORTER'S CERTIFICATION

I, JUDY J. WILLIAMS, CSR. No. 7314, Certified Shorthand Reporter, certify:

That the foregoing proceedings, pages 1 through 263, were taken before me at the time and place therein set forth;

That the testimony of the witnesses and all objections made at the time of the examination were recorded stenographically by me and were thereafter transcribed;

That the foregoing is a true and correct transcript of my shorthand notes so taken.

I further certify that I am not a relative or employee of any attorney or of any of the parties nor financially interested in the action.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Dated this_____day of _____, 2012.

_____

JUDY J. WILLIAMS, CSR No. 7314

Friday, September 7, 2012

Saturday, September 8, 2012

San Luis Obispo, California

* * *

MR. YOUNG: Okay. Folks, we're going to resume our hearing.

And Madam Court Reporter, would you like to have everyone -- do you need anybody to introduce themselves to you?

THE REPORTER: Yes, please, that would be helpful. Thank you.

MR. YOUNG: Okay. Melissa, why don't you start on this end (indicating).

MS. THORME: So we're representing the South San Luis Obispo County Sanitation District.

My name is Melissa Thorme, T-h-o-r-m-e, and Olivia Wright, W-r-i-g-h-t.

MS. MACEDO: And I am Julie Macedo, M-a-c-e-d-o, for the prosecution team.

MR. YOUNG: Okay. And you know who we all are because we have tags up here.

MS. JAHR: And my tag is wrong. My last name is Jahr, J-a-h-r.

MR. YOUNG: All right. Where were we, on

Mr. Appleton? Was Mr. Appleton --

MR. JOHNSTON: That's the name of the witness.

MR. YOUNG: Mr. Appleton, do you want to go ahead and identify yourself again?

THE WITNESS: Yes.

MR. YOUNG: We have a new reporter.

THE WITNESS: My name is Jeffrey Wayne Appleton. I live in Grover Beach, California.

MR. YOUNG: Okay. Let's continue.

MS. MACEDO: I just have a few more questions, Mr. Appleton.

DIRECT EXAMINATION RESUMED

BY MS. MACEDO:

Q We were talking about the discharge point -- or excuse me, the headwork being discharged point on the date of the spill. Can you approximate how many gallons discharged from the headworks?

A I can approximate it. They did a rough calculation. There is a way to calculate the weir overflow rate if you know the width of an opening and the depth of the water flowing out of it. It is a rough approximation.

But the rough approximation that I did during the time of the sewage that was flowing through

the doorway, and how it ran into the ground, I came up with a rough amount of approximately 700,000 gallons.

Q And what is your approximate estimate -- or excuse me, what is your estimate of the volume of the spill on December 19th, 2010?

A My calculations came back with the number that I reported to water quality and my draft was 2.5 million gallons to 3 million gallons. It was a range. One was a last known flow rate, which was 8.4 million gallons per day. And one was with a more realistic flow curve, and that resulted in a spill amount of 3 million gallons per day.

And I used the numbers that were generated by the data telemetry flow meter units inside the plant and both on the headworks and the head fall. And they calculate the amount of flow that passes through them. And I used those numbers in calculating my spills.

Q And have you ever deviated from that estimate?

A No, I have not.

Q Have people tried to get you to deviate from that amount?

A Yes, they have.

Q And who has tried to get you to deviate

from that amount?

A Primarily the District administrator, John Wallace, and his assistant, Tom Alexander.

Q Okay. I anticipate questions will be asked by District counsel about a matter that was taken by the Office of Enforcement against you in 2011. So I'm just going to ask you a couple of questions about that.

There was an operator certification action letter that was filed against you in 2011; isn't that correct?

A That's correct.

Q And what was the basis of that claim?

A I don't remember the specifics. It had to do with improper sampling techniques and record keeping at the wastewater treatment plant.

Q And insufficient evidence was eventually found to support that claim, correct?

A That's correct.

Q And do you recall the attorney who issued that letter?

A I believe it was you.

Q Yes, it was me. And so you don't have any reason to do me any favors at this hearing, correct?

A No, I do not.

Q And have I ever met you prior to issuing that letter?

A No, you have not.

Q And have I told you since speaking with you at your deposition, that had I spoken to you in conducting the -- sort of the investigation now, connected to this and all of this, you know, I'd like you to know if I had to do it all over again, things may have turned out differently. So to the extent that we did issue the letter and --

MS. THORME: Objection; counsel is testifying again.

MS. MACEDO: It's --

MR. YOUNG: It's true.

MS. MACEDO: Okay.

MR. YOUNG: Okay. There is a lot of this going on, and I don't know how to control it, because we're not in the same environment that I'm used to operating in, and we're supposed to be more flexible.

BY MS. MACEDO:

Q How about this --

MR. YOUNG: So --

BY MS. MACEDO:

Q -- have I promised you anything for your

testimony today?

A No, you have not.

Q And has anything you said today been untruthful?

A No, it has not.

MS. MACEDO: Okay. No further questions for this witness at this time.

MR. YOUNG: Cross?

MS. THORME: Yes.

CROSS-EXAMINATION

BY MS. THORME:

Q Good afternoon, Mr. Appleton.

A Good afternoon.

Q Are you currently on administrative leave from the District?

A Yes, I am.

Q Okay. And I think you just discussed the investigation by the office of enforcement against you with Ms. Macedo; is that correct?

A That's correct.

MS. THORME: Okay. Can you switch over, please, so that we can have the screen? Thank you.

And could we have Exhibit 42, please?

(Brief pause in proceedings.)

BY MS. THORME:

Q Was this the letter of --

MS. THORME: No, that is the earlier letter. The first page. The first page. Yes, okay.

Q So this is -- is this -- so was this the letter that you received, a letter that proposed disciplinary action on January 12th, 2011?

A My eyes are not what they used to be. I can't read that --

MS. THORME: Can you pop --

THE WITNESS: -- from here.

MS. THORME: -- up -- no, pop up the date, please?

THE WITNESS: Do you have a hard copy I can read from?

BY MS. THORME:

Q Can you see it now?

A That date is January 12th, but I can't read the rest of the letter.

Do you have a hard copy I could review or --

MS. THORME: Do you have hard copies of all the exhibits?

MS. MACEDO: No.

/ / /

BY MS. THORME:

Q So you don't recall when you received that?

A Not specifically.

MS. THORME: Okay. Can you pop up the signature page for me, please?

Q So this is page 5 of that letter, and since Ms. Macedo was testifying that she sent this letter, can you tell me whose signature that is on the letter?

A Mr. Seta, Sato (phonetic).

Q Okay.

A I don't know.

Q Thank you.

And did this letter propose to downgrade your grade three wastewater treatment plant operator certificate to a grade two?

A I don't know. I can't read that letter, so I can't comment on it.

Q You don't remember --

A No.

Q -- what they were proposing?

A No.

Q And what was the result? Did you get a letter of reprimand from the State Water Board?

A The result was that I appealed the downgrade, and I won. They did not downgrade my certificate.

Q Did you receive a letter of reprimand from the State Water Board?

A Yes, I did.

Q Okay. And so did they find you liable for some violations of the operator certification regulations?

A I don't remember the specific language.

Q Okay. And when did you receive this subpoena to appear here today?

A I believe it was yesterday or the day before. I'm not sure when.

Q So in relation to the spill event in 2010, you testified that you closed the influent gates as one of the first steps?

A That's correct.

Q And was that to protect the downstream processes?

A It was to achieve two different objectives.

One was to prevent the wet well from flooding, which unfortunately, that happened anyway. But the other one was also to maintain a sufficient

pool of water for the emergency standby pump to a pond.

Q Okay. And did you take that action intentionally?

A Take what action?

Q To close the influent gates?

A Yes.

Q Okay. And did you shut down the storm water sumps to the plant?

A No, I did not.

Q Did you tell anyone to shut down the storm water sumps? I believe you testified that you shut them down so additional water was not coming in the head ways earlier.

A I do not recall testifying to that.

Q All right. So do you know whether the storm water sumps were shut down to protect the plant?

A At some point they were.

Q Okay. And that was not you that did that?

A No, it was not.

Q Okay. And had you ever seen water migrate into the headworks at any other occasion before, that caused an electrical failure?

A No.

Q Okay. And the day that you said that

there was a 13 million-gallon influent into the plant, was there a spill that day?

A No.

Q And did you and others divert flows from the collection system to the sludge lagoon and sludge drying beds to avoid more sewage and storm water being spilled?

A We did use the portable six-inch pump to dewater the headworks area after it flooded, so I guess the answer is "yes."

Q And was that done intentionally?

A Yes.

Q And did you and others hook up an emergency diesel pump to bypass the nonfunctioning influent pumps?

A No.

Q You didn't hook up an emergency diesel pump?

A No, I did not.

Q No staff member hooked up an emergency diesel pump?

A No, they did not.

Q Okay. And what was the big pump that was pumping out the headworks when the inflow pumps failed?

A The emergency standby pump.

Q Okay. That is not diesel?

A It is diesel.

Q Okay. And was that intentional?

A Was what intentional?

Q Was hooking up the emergency bypass pump intentional?

A I didn't hook it up. It was already in place.

Q Okay. So it was ready to go?

A Yes, it was.

Q Okay. And was that done as a precaution before the storm?

A Yes.

Q Okay. And did you start up the engine before you went to open the bypass valve?

A No, I did not.

Q Did anyone?

A Evidently not, because it was in the closed position when the pump was started.

Q Okay. And I think you testified with Ms. Macedo earlier that you had seen the standard operating procedures at the plant?

A I saw the standard operating procedures that she presented on the screen here.

MS. THORME: Okay. If we can have Exhibit 99,

dash, 2, please.

Q So did you open the valve before you started the engine?

A I did not.

Q Okay. And if the treatment plant was running normally and wasn't hooked up to the bypass plant, would the plant run even though the bypass valve was closed?

A I'm not sure I understand your question. Did the plant run --

Q On a normal day, if the bypass valve was closed, would the treatment plant run?

A Yes.

Q Was the primary cause of the spill on December 19th, 2010, the large accumulation of floodwater that caused an electrical pump -- an electrical problem that shut down the influent pumps?

A No.

Q What was it?

A The pump failure was due to water migrating to the conduits and caused --

THE REPORTER: Could you repeat that, please? Caused a short --

THE WITNESS: Caused a dead short in the motor conduits.

BY MS. THORME:

Q Okay. But that was caused by floodwater?

A It was a combination of flooding and sewage.

Q Okay. And was the spill event reported to the required agencies within the two-hour time frame?

A To the best of my knowledge, yes.

Q Okay. So today you said that you had others call those agencies; is that correct?

A That's correct.

Q But in your deposition, you said that you made those calls. Which version is correct?

A Aaron Allen made the majority of the calls. I did make a few calls. We were both working on the telephones.

Q Okay. And how much experience do you have in estimating sewer spills?

A Well, I have been employed at the District for 20 years, and I have seen a lot of sewage flows. And I'm very familiar with how much a certain quantity of water can represent. And so I would say that while I have never had to calculate a spill amount before, I'm well familiar with volumes of water.

Q Okay. But you have never been involved

in another spill-reporting event; is that correct?

A No, I have not.

Q Okay. And your spill estimate was between 2.2 and 3 million gallons for the spill; is that correct?

A That's correct.

Q Did you formally certify, under penalty of perjury, that volume estimate?

A No, I did not.

Q And did the District ever certify final spill volume estimates?

A I do not know.

Q Okay. And do you know that the State Office of Enforcement did not adopt your spill estimate?

A Yes, I know that.

Q And did you know the District and two other experts have calculated the event spill volume, and none of them came close to your estimate?

A All of the estimates that were presented by the State, as well the District, used hypotheticals, visual estimates and past monikers.

My method of estimating, it was the only one that used hard-data facts from the flow meters at the plant. I used numbers from the flow total from

meters. So all of the other ones were hypothetical. Mine was factual.

Q Okay. And are the electrical pull boxes at the plant, designed so rainwater or groundwater that does enter those boxes, drains to a sump that is pumped to be treated?

A I'm sorry, but could you repeat the question?

Q The electrical pull boxes at the plant, are they designed so that rainwater and groundwater that does enter those boxes, drains to a sump that is pumped to be treated?

A I'm not sure. Some of them maybe, but I'm not sure if all of them do.

MS. THORME: Okay. No further questions.

MS. MACEDO: I have no redirect.

MR. YOUNG: Okay. Let see if the board has any questions. We will start at this end.

Mr. Jeffries?

MR. JEFFRIES: I don't know where to start.

MR. YOUNG: At the beginning.

MR. JEFFRIES: Okay. The electrical conduit box in question, how far is it from the pumps themselves?

THE WITNESS: Well, it's located above grade at

ground level. The pumps themselves are two stories below ground in a pump room, so maybe 14 feet in the line distance.

MR. JEFFRIES: And in your experience in the tenure at the agency, have you ever noticed water coming out of those particular conduit pipes in the past?

THE WITNESS: I have never noticed water coming out of the particular motor leads that went into the influent pumps. That would have been a very noticeable warning sign for at 3 force 8 power (phonetic).

We did have a lot of problems in the past with water intrusions through other penetrations such as piping and electrical conduits and the head ways area.

MR. JEFFRIES: Did you or any of the maintenance crew of the agency, replace any wiring within those conduits in question?

THE WITNESS: For the influent pumps?

MR. JEFFRIES: Yes.

THE WITNESS: We did not. We had a local contractor through resources management who did it and actually ran it above ground conductors in a spare piece of conduit because I was not comfortable trying to reenergize the conduits that were in the ground.

MR. YOUNG: But that was after the spill?

MR. JEFFRIES: After --

THE WITNESS: After.

MR. JEFFRIES: No, I'm talking about before the spill?

THE WITNESS: No, sir.

MR. JEFFRIES: Because the previous testimony by Mr. Thoma or is that --

MR. YOUNG: Thoma was the first one.

MR. JEFFRIES: Right. He stated that there should have been some kind of plug within those conduits to stop the water from coming into that unit where the pumps were located and to trip the circuit breakers. And I'm just trying to visualize or find out how those conduits were not protected?

THE WITNESS: Well, the state of that pull box was very well known. We had been discussing that particular pull box in the general overall plan of the reconductor project for approximately seven or eight years.

It was well known that the conduits weren't sealed that led to the pump ground. It was well known that the box had cracks in it, and there was a lot of groundwater that had entered it. The site -- didn't work.

THE REPORTER: I'm sorry -- excuse me --

THE WITNESS: -- the department --

MR. YOUNG: Slow down.

THE REPORTER: -- I'm sorry, but could you please slow down?

MR. YOUNG: Slow down.

THE WITNESS: I'm sorry.

MR. YOUNG: Slow down.

THE WITNESS: Where was I?

THE REPORTER: You said something didn't work.

THE WITNESS: Okay. I think I know where I was at.

The condition of the pull box was well known to both myself and the staff, to the administrators and the board of directors.

We would have annual major budget item meetings where all the major budget items would be talked about, and this was one of the major budget items that was talked about on an annual basis. We had myself and my staff would meet with the administrator staff, and we would impress upon them the importance of these major budget items, so this was discussed annually.

MR. JEFFRIES: I -- well, I was trying to determine -- and I realize that because it had been

brought up in budget cycles over the two or three years or maybe longer than that, that there was a major item on the budget to do something with that box.

And so subsequently -- and it's obvious to me that there was some minor repairs done to the box by raising the lid because of the water issues getting into the pull box itself.

So then the flooding of the pull box, evidently draining of the conduits into the pump rooms, which tripped the trip -- the circuit breakers, which caused the whole issue to start to fail. And, you know, I don't know how you did what you did, quite frankly, just listening to what you presented.

But besides that, what I want to know is was this information aware -- where you aware that this pull box -- it was obvious that there was an issue with the pull box, and that is why the lid was raised up above.

And why -- you mentioned something earlier in your testimony that there was a change in the area after the earthquake, is that correct, did it sink?

THE WITNESS: What happened after the earthquake, we obtained FEMA funds -- the District did. The former flood wall was about two feet high. And

FEMA said, We will give you funds because of this damage, but you have to meet it. Meaning the one hundred year flood levels.

MR. JEFFRIES: Right.

THE WITNESS: So the whole retaining wall around the headworks was tore out. It was re-graded and re-blacktopped. But as a result of the engineering, instead of the water all flowing away from the headworks --

MR. JEFFRIES: It flowed --

THE WITNESS: It -- what they made was a depression around the entire area so we have a puddle anywhere from a foot to two-and-a-half feet deep, that extended out from the headworks and also covered up the pull box and subjected it to flooding.

MR. JEFFRIES: Okay. And so those conduits go directly from that pull box into the pump station itself?

THE WITNESS: That's correct.

MR. JEFFRIES: The conduits filled up with water. The water went into the circuit breakers. The circuit breakers tripped.

THE WITNESS: Actually, the water went into the motors themselves where the connections were made, and the circuit breakers are located in a different

building, but they have a sensing capability to sense a short, and that is what tripped the breakers.

MR. JEFFRIES: Okay. I have got the picture. Thank you very much.

MR. YOUNG: Okay. Just so I'm clear about the seals.

Mr. Thoma testified that the seals on the conduits should have been put in back in the '60s sometime, and that they were not.

And he also said that after construction, after installation, that it would not be easy to see that the seals were no longer -- that they weren't there.

Are you saying that the District was aware that the seals were missing?

THE WITNESS: Yes, sir.

MR. YOUNG: So what Mr. Thoma said earlier, was not accurate?

THE WITNESS: That's correct.

MR. YOUNG: Okay. Mr. Harris?

MR. HARRIS: Prior to the spill, were you ever present when the regional board did their inspections of the plant?

THE WITNESS: Yes, I was.

MR. HARRIS: Were any of the issues that we

talked about today, discussed with the regional board staff, or did they point that out to you at the time?

THE WITNESS: Well, we talked about a lot of issues today, so I really can't be --

MR. HARRIS: Well, I'm thinking about the susceptibility of the junction box, the pull box to flooding, maybe the condition of the standby --

THE WITNESS: I don't believe we ever brought that to any of the inspectors' attention.

MR. HARRIS: Okay. Thank you.

MR. YOUNG: Dr. Wolf?

DR. WOLF: There was a lot of discussion about the seal -- seals, plural. In addition to moisture-intrusion protection, aren't seals also generally required for a fire protection to prevent propagation of fire within conduits in case of a short?

THE WITNESS: Yes, they are. It's called the class one dead one requirement. It has to do with electrical connections that are made within the proximity of an explosive (phonetic) source.

DR. WOLF: Correct. And that is why the seal also has to be fire rated by UL?

THE WITNESS: That's correct.

DR. WOLF: Okay. Thank you.

My next question pertains to the

emergency backup pump, which is the pump operated by the diesel engine. And you mentioned that the pump was -- the diesel engine had problems being on and off.

Realizing that yourself and your team, as you described earlier, are not electricians nor diesel mechanics, was there a budget to perform maintenance using an outside agency of these diesel engines?

THE WITNESS: I don't know if there was a specific budget. But in my rule as the plant superintendent, I did have the authority to make repairs up to $1,000. And anything higher than that would have to be approved by the District administrators or the board of directors.

The pump itself, during the time that we were trying to troubleshoot it, didn't require repair costs because we had not purchased it yet. It was still in the purchasing stage. It took about three years of having the pump on-site and having numerous problems with it, having to send it back to the factory several times before we actually accepted it.

So the pump was very problematic and even at the time we accepted it, the staff in total made a recommendation to Administrator Wallace that we didn't want the pump. We told him it's a lemon, that we're going to have problems with it.

But the manufacturer offered the District a significant discount, and so we bought the pump at the discount price.

DR. WOLF: All right. Was there an extended warranty?

THE WITNESS: Yeah, you know --

DR. WOLF: That was --

THE WITNESS: -- I can't remember.

DR. WOLF: That was my attempt at humor. Obviously, it didn't go very well.

All right. So my next question is in a facility like the water treatment plant, where you have a lot of complex systems, both mechanical and electrical, to keep up with the technology and with the state of the industry in operation and maintenance, was there a budget to have yourself and your team get some training?

THE WITNESS: Yes, we did have a budget for membership schools and trainings, and my operators went to numerous classes throughout the years. I would leave it up to them on their particular area of interest. If I have someone really interested in mechanical seals, I'd sent him to one of those classes. So we did have an ample budget for training.

However, the problems with the standby

pumps were beyond what small troubleshooting skills you could have gotten from a one- or two-day seminar. They had to send out a factory worker out from Texas for detection to actually figure out what the problem was with that pump on several occasions. It was a very problematic pump.

DR. WOLF: Thank you.

Did you experience mistripping of the circuit breakers after the events, the coordination study having been performed, prompted by the fact that there was miscoordination between the main circuit breaker and the downstream breakers causing all pumps to fail, actually, rather than only one?

Did you experience, in the years you worked for the plant, other problems sometimes with some of the breakers?

THE WITNESS: Not really. Breakers were somewhat of a sensitive subject at the plant. The MCC building is where we dealt with a lot of the three-phase, high-voltage electricity, and so we tried to keep up our preventative maintenance on the program on the buses (phonetic) and the breakers.

But whenever we noticed something that was out of kilter, especially on the electrical system, we would have it addressed by our certified

electrician.

DR. WOLF: So were these breakers -- was there electrical testing performed on these breakers?

Earlier in the testimony of Mr. Thoma, he mentioned that he would hire an outside agency to perform the electrical testing of the breakers which, you know, would be a primary injection testing.

So when you mentioned maintenance, that was just basically operating the breaker on and off, or was there actually verifying its trip settings?

THE WITNESS: Well, that will take a little bit of an explanation. In the past, the board of directors had to authorize a maintenance mechanic's slash electrician position at the plant. And so I had several maintenance mechanics over the years that were also certified electricians that could tighten lugs on breaker boxes and do low testing and things of that sort.

But several years ago before the board of directors eliminated that position, and I no longer had certified electricians on the staff, there were certain restrictions that would prevent people who aren't trained in proper electrical procedures from doing work inside of the breaker boxes. And so our maintenance program, we had contracted out over the years to

various electrical contractors.

But we did have a computerized maintenance program that generated work orders on a regular basis. Most of those work orders were based upon manufacturers' recommendations.

DR. WOLF: Okay. And my last question is when you responded to the emergency and water was coming down from the light fixtures and out of the junction boxes, I'm sure there was some electrical safety concerns associated with your activities.

THE WITNESS: Is that a question?

DR. WOLF: Yes, that is a question.

THE WITNESS: I'm sorry. I didn't understand the question.

DR. WOLF: Okay. Let me rephrase the question.

When you responded to the emergency in the basement, and you saw water coming out of the light fixtures and out of the junction boxes, I would assume that there was some serious electrical safety hazard concern that you had when you were trying to get the plant back in operation?

THE WITNESS: You would be correct.

DR. WOLF: All right. Thank you.

MR. YOUNG: Mr. Jordan?

MR. JORDAN: Thank you, Mr. Chair.

Hello, Mr. Appleton. Probably the conditions of your appearance and the subject matter aren't very pleasant, so I want to thank you for being here today.

Can you remind -- I think one of the questions you answered to District counsel was concerning the standby pump and you set that up for storm events?

THE WITNESS: At the beginning of a rainy season, we actually -- during the summer months, when there was not a heavy chance of rain or wet weather, we would store it inside the storage building just to keep it out of the saltwater and the atmosphere down there.

But at the beginning of the fall -- and I don't remember exactly when it was. It was somewhere around September or so. The pump was pulled out of the storage building. It took about three hours to physically make the hard connection to the pump.

So my thought was if we ever had an emergency and it took me three hours to get the pump hooked up, I would be in deep trouble.

Anyway, so we hard connected the pipe to the pump sometime in September, the middle of September and the pump was basically left there through the weather -- through the wet-weather season.

MR. JORDAN: In your experience, is that something that happens at every treatment plant, some type of backup like that, or is there a particular reason that you would hard install it for the wet season?

THE WITNESS: Due to the difficulties and the length of time it took to actually hard connect it to the discharge pipe. It was an hours-long process, and such as when we had the spill on the 19th, if we had to spend three or four hours hooking the pump up before we could even get it running, we felt it was time that was going to be wasted while we were trying to deal with in an emergency.

So we felt the better solution was to actually put it in place, hard pipe it and have it ready to start up and run in case of a spill, in case we would lose pump capacity.

MR. JORDAN: And then earlier you talked about the generator. You also had problems with the generator, right?

THE WITNESS: We didn't actually have problems with the generator. We had an alarm that the generator room was flooded. There was a small float that sits on the floor and as the water level comes up, it activates the float. So there was probably six inches of water

in the generator room.

But the generator itself is on a pedestal and it sits a foot and a half or two feet above the floor level, so it was not a major concern for me at the time.

MR. JORDAN: And between the two of them, I think you mentioned before and again, in another answer, that you had to have a fluid prime the pump. Is there not a process that is easy to -- during September until whenever that season is, that you have the pump hard hooked up and you have the generator ready to go, but you're not continually testing those?

THE WITNESS: We did test -- actually, I want to back up and point out one thing.

The pump has a self-prime function. It has the gas-charged cylinder, where it would start to prime itself, so it could start pumping. We have had problems with that throughout the years too, but it was capable of being started to dry and self-priming itself.

As far as running the pump. We did have in our preventive work order system, a work order that was generated on a regular basis to run the pump, test the pump. But due to certain restrictions from local air quality, we had a limited amount of time that we

could run the pump. And I don't remember the specifics, but I think the longest that we were able to run the pump I think at one time, was either 10 or 15 minutes.

MR. JORDAN: Okay. And really more of my question would be, how often did you run it to test that it was working?

THE WITNESS: At least monthly.

MR. JORDAN: Okay. Thank you.

MR. YOUNG: Mr. Johnston?

MR. JOHNSTON: Yes. Good afternoon, Mr. Appleton.

Okay. So there was testimony that the standard operating procedure for running the diesel bypass pump involved first opening the 12-inch valve and then starting the pump.

And you just testified that you would routinely, for brief periods of time, start up the pump, test the operation. When you did that, would you run through that whole procedure, open the valve, start the pump?

THE WITNESS: No, sir. The valve, during the time that I was a plant superintendent, was actually locked with a chain and a padlock and left in the open position. I had been on a leave of absence prior to

that year, and evidently sometime during my leave of absence, some maintenance work was done on the valve, and it was not placed back in the open position and locked. Whenever it is was through being worked on, the valve was left in a closed position.

MR. JOHNSTON: Okay. So it had been locked in the open position before?

THE WITNESS: Yes.

MR. JOHNSTON: Okay. And so can you explain why? Was it simply a human error that the pump -- when there was an operating procedure of open the valve, start the pump, that what was implemented was in reverse?

THE WITNESS: I'm not sure if I understand your question.

MR. JOHNSTON: Okay.

THE WITNESS: The operating procedure that was in place in October of 2010, was erroneous, because it said to keep the valve in closed position and only open it when you need to run the pump.

MR. JOHNSTON: That's correct.

THE WITNESS: And then the District later, I think in May of the following year, issued another SOP that said the valve should be in the open position before the pumps are started. I didn't author either

one of those.

MR. JOHNSTON: I'm referring to the earlier one. And unless I'm mistaken, the earlier one said when you shut down the pump, you close all 12-inch valves, and when you start up the pump, before you start the pump, you open the discharge valve.

THE WITNESS: That's correct.

MR. JOHNSTON: So that was the earlier -- so that was the SOP that was in effect at the time of the incident?

THE WITNESS: That's correct.

MR. JOHNSTON: So my question is, was it simply human error that that SOP was not followed? That instead of opening the valve, and then starting the pump, the sequence was starting the pump and then opening the valve?

THE WITNESS: I guess you could say it was human error. I was out there and the man in charge who tried to start the pump -- I had never seen that particular SOP that instructed for that valve to be closed, or I would have stricken it from the record, and I would have corrected it.

My previous way of dealing with it where -- the 12 years that I was a plant superintendent, was I had a four-foot section of chain

and a padlock. And when the work was done, the valve was left in the open position and the chain and padlock were placed on it so it could not be closed.

When I went to start the pump, I never thought of opening the valve. I had never seen that SOP that stated to open the valve, so that is kind of what happened.

MR. JOHNSTON: Are you testifying that it was your -- your assumption that the valve was already open?

THE WITNESS: That's correct.

MR. JOHNSTON: Okay. Let's talk about seals for a minute.

I understand you had authority to do maintenance work less than a $1,000. The District put up an exhibit that said ultimately, We're replacing the seal that caused the problem was an 8- or something in the high three figures, 8 or 900 bucks. I don't remember exactly how much.

If the -- I understand that there was a $200,000 -- or approximately -- rewiring project that had been on the books for a while, and that had not been done.

But would, if, as you testified, it was known and routinely discussed that there was a lack of

seals in the conduits between the -- that vault and the pump room, would it not have been within your authority, without a major capital project, to simply install the seals?

THE WITNESS: It would have been within my spending authority of the thousand dollars, but the project was started in 2004.

And Administrator Wallace's office was one hundred percent responsible for the reconductoring (phonetic) the project. They did all the specs. They did all of the inspections. Basically it was hands off for the operation staff. Administrator Wallace -- Administrator Wallace's company was totally responsible for the reconductoring project.

MR. JOHNSTON: So are you testifying then that you as superintendent didn't do anything about the seals because you figured eventually the project would get done, and the seals would be taken care of then?

THE WITNESS: No, that is not my testimony.

MR. JOHNSTON: I'm just -- then maybe you can explain to me a little better.

THE WITNESS: Sure. My testimony was I had informed my direct superior on many previous occasions. I sent e-mails with pictures. I spoke to the board of directors about it, and I told them of the necessity.

And it's not just an 8- or 900-dollar fix on these three conduits. The whole conductor system of the plant was in a state of disrepair.

So it was my viewpoint that this is a project that I informed my direct supervisor on a regular basis of the critical necessity to have it fixed. It had been going on for years, but it was above my spending limit. And the actual -- I saw the invoices from UC electric to do the reconductoring project, to do the headworks area and it was $38,000. It wasn't $700 or $800. It was much, much more that was involved in this project than just putting in sealants.

And that is why when it was labeled as a reconductoring project -- when it was first labeled back in 2004, it was an electrical system upgrade, and that included pull boxes, seals, conduit. So it wasn't really part of the assignment that my direct supervisor, Mr. Wallace, had given me. He had made it plain and clear that his staff was going to deal with it.

MR. JOHNSTON: Well, I'm particularly interested in this question because the budget item that we looked at mentioned reconductoring, and the first witness, Mr. Thorme (sic) -- was that his name?

MS. THORME: Thoma.

MR. YOUNG: Thoma.

MR. JOHNSTON: Pardon me?

MS. MACEDO: Thoma.

MR. YOUNG: Thoma.

MR. JOHNSTON: Thoma, I'm sorry.

The first witness, Mr. Thoma, testified that the reconductoring project just involved replacing wires, and then even had those wires been pulled, the electrician would not necessarily have -- they would have noted that no seals were present, because they would have been able to pull the wire through. But because they didn't know the routing of the wires, that they would not have necessarily known that the seals were necessary.

And your testimony is the first that we have heard today that indicates that the District was aware of the problem of a lack of seals between the vault and the pump room, which, by anybody's account, no matter how you sequence the events that led to this, is pretty much the critical question, or it appears to be.

So -- but it is your testimony then that the -- specifically the discussion had happened with Mr. Wallace and with the board, that there was a lack

of seals in those conduits?

THE WITNESS: Yes, sir.

MR. JOHNSTON: Okay. Next, perhaps you can explain to me this. There has been testimony that the reconductoring project was on the major budget items list year after year from 2004, 2005 on until the incident. And I guess what I -- I don't understand in any detail how the budgeting process works in the District.

Would it be normal that there would be many more items on the -- that that list was kind of a wish list, and that it would be normal that only a limited number then would be funded at any given year? Or was that a list of urgent items in as many -- you know, and most of them -- can you give me some sense of that?

THE WITNESS: Well, my information of the budgeting process was myself and my staff members would meet around budget time with the administrator and his representatives. We would talk about carryover items that were left over from the previous year's budget, such as reconductoring. And then we would also suggest new projects or new pieces of equipment that we thought of. And it was during this discussion process, the group discussion that a sense of priority about each

individual item could be labeled, so to speak.

It was an annual topic of discussion, the pull boxes. And not just this pull box at the plant, but all of the pull boxes at the plant. This isn't the only pull box that is in this type of condition that is below grade and has the possibility of flooding.

So every year during the major budgeting process, this would be discussed. Typically the board of directors would visit the plant around budget time and actually have a site visit. We actually took the board of directors out into the plant, opened up the pull boxes and showed them the bad shape that the wiring and the hangars, the groundwater intrusion from the cracks of the concrete.

So both Administrator Wallace, and all of the board of directors had at least an annual experience to come to the plant -- an annual opportunity to come to the plant and view the things on the major item list. And this was done almost every year with the pull box issue.

MR. JOHNSTON: Okay. So you refer to it as a carryover item. In other words, an item that was in the budget that had not been done and would sort of flop over to the next year?

THE WITNESS: That's correct.

MR. JOHNSTON: And were there a large of number of carryover items each year or -- I'm just trying to get a sense or if this major projects -- major budget -- I don't want to use the wrong term -- major budget items on the list was an expansive list from which a limited number of projects were selected each year, or if it was a list of stuff that really needed to be done and virtually all of it got done every year, and these pull boxes kept getting pushed back?

THE WITNESS: I think it was a combination of both. I think there were high-priority critical items that were included in the list, and then I think there were also wish-list items that it would be great if we got it someday.

But the thing about the budget that I think is important is that once District staff, operation staff and John Wallace's staff came up with a list, it was presented to the District board of directors, to our local politicians, and they approved that budget.

So in essence, from that point forward, when the politicians approved that item, and it was published in that year's budget, it is an approved item. It is not a wish list. It is an item that needs to be done.

MR. JOHNSTON: So what you're saying is that was actually in each of those budgets an approved -- in your understanding at least, it was an approved item. It was not just something on the wish list that didn't make it to the list of what got done. It was an approved item that was not done; is that correct?

THE WITNESS: That is correct.

MR. JOHNSTON: Okay. That's helpful.

Next, the -- you testified that this particular pull box, before the plant operation staff raised the level of the vault by six inches or so, would -- subsequent to the San Simeon earthquake and the regrading, that this particular pull box would end up at the bottom of a puddle basically, after rain events; is that correct?

THE WITNESS: No, that is not correct.

MR. JOHNSTON: Okay.

THE WITNESS: After the San Simeon earthquake incident, the flood wall around the headworks was rebuilt. The old one demolished. The blacktop was ripped out. Ten feet away from the structure, a new wall was built and a new base and asphalt was laid around the entire headworks structure, which radically changed the grading of the area.

And unfortunately, all the water backed

into the headworks area, rather than having slipped away to site drains. So it was after the San Simeon earthquake.

MR. JOHNSTON: Right. And then so from approximately -- and approximately when was it then that that work was completed?

THE WITNESS: I want to say that that was at the end of 2006, the first part of 2007, when the new flood wall was built.

And that was when I, very shortly thereafter, sent a very detailed memo to administrator Wallace, voicing my concerns about the pull box, and pointing out that the main motor leads for the influent pumps ran through that pull box, and that it was now at a low spot where water could enter it. And I think I specifically pointed out that this has the possibility to cause influent pump failure.

MR. JOHNSTON: Okay. So there was a three-year period then from the time that that project, the regrading and the flood wall project was completed until this incident, approximately?

THE WITNESS: Sure.

MR. JOHNSTON: Give or take. And if I understood your testimony correctly, when you had the significant rain events during that three-year period,

you would get ponding around the headworks?

THE WITNESS: That's correct.

MR. JOHNSTON: And that -- did I understand correctly, that when that ponding occurred, that the top of the -- of this pull box would be below water?

THE WITNESS: That's correct.

MR. JOHNSTON: And now describe to me the top of this pull box. It is not a sealed container, I understand. Does it have holes in it?

THE WITNESS: Yes, it does.

MR. JOHNSTON: So did this pull box ever fill up with water?

THE WITNESS: Yes, it did.

MR. JOHNSTON: And did the pull box then drain?

THE WITNESS: It drained through the conduits that ran down to the influent pumps. There are four, two-inch conduits, and each of those act as a passageway for all the water.

Not only that the box was full with, but all the water that kept following on the sides. Basically, we have four big straws with water coming out and pouring out of them.

MR. JOHNSTON: Now, I'm not talking about -- I want to be clear. I'm not talking about the day of the incident. I'm talking -- the three years between this

time this grading was completed until the time the incident took place --

THE WITNESS: Well --

MR. JOHNSTON: -- did that pull box fill up at various times during those three years?

THE WITNESS: We did notice it immediately after the headworks construction that it was definitely a problem, that the pull box allowed water to enter the conduits. And that is why the staff put that concrete berm around the lid. We raised it up, so that it was no longer the low spot.

It still was not ideal. It still was not high enough to be above a very deep puddle, but it was enough that if we were hosing down the blacktop or when we had light rain, at least this was not the drain spot.

MR. JOHNSTON: How much time elapsed between when the regrading was finished with the flood wall, and when you raised the box?

THE WITNESS: That, I don't remember. I believe that -- and this is an estimate on time. I believe the headworks construction was finished -- the headworks construction wall was finished in 2006.

We noticed problems with ponding during the rainy season of 2006, 2007, and I think in the

spring of 2007, when it finally dried up, is when we raised the box then.

MR. JOHNSTON: Okay. And during that winter, you observed that box filling?

THE WITNESS: We didn't -- no, we did not see the box fill up with water.

MR. JOHNSTON: Okay.

THE WITNESS: We did observe that the lid was the low spot, and that you could actually see water pools around the big holes that led down into where the conductor was.

MR. JOHNSTON: Okay. Finally, could you just walk me through the -- and I -- your process for making that 2.5 to --

THE WITNESS: 2.5.

MR. JOHNSTON: -- the 2.5 to three million-gallon estimate?

THE WITNESS: Absolutely.

After the spill, I was in contact with Matt Keeling of the local water quality, and he told me that he wanted me to prepare a spill report, and one of the items that he wanted me to include was the estimate of the spill amount.

The way that I approached it was that I looked at the plant's flow charts. We have an influent

flow meter, which measures how much water is coming into the plant. And we also have the effluent flow meter, which measures how much water is leaving the plant.

The day of the spill, the influent meter failed at approximately 10:00. Our last known flow rate was 8.4 million gallons per day. So --

MR. JOHNSTON: And that is influent?

THE WITNESS: That is influent.

Our effluent flow meter continued to work throughout the day. That was located in a different part of the plant at a different location. So we knew specifically how much water we were discharging throughout our outfall line.

I knew that the flow rate never fell below 8.4 million gallons per day during the flooding period. The rainfall was immense. We were flooding out of manholes.

So using 8.4 as a minimum flow rate, I calculated how much water was coming in, versus how much water we were pumping out. We had effluent data.

The difference is the amount of the spill. If you know how much is coming in, and you know how much you're pumping out, anything that is left over has to go someplace. And that was the amount that

exited through the manhole lids, through the clean-outs, through the headwork structure, any place that it could. That is how the spill happened.

That was with an estimated flow rate of 8.4 million gallons per day, our last verified flow rate. That is assuming that the flow rate never changed after that. That it had never increased. But a more realistic flow curve would have a peak flow rate of probably closer to 10 million gallons per day.

So using those two numbers of how much was coming in and how much was going out at the two different flow rates, I came up with a range for my spill calculation. My range was 2.25 million gallons per day, if the flow rate never exceeded 8.4 million gallons.

If the flow rate had indeed increased to somewhere to around 10 million gallons a day, then the spill amount would have been closer to 3 million gallons.

MR. JOHNSTON: All right. And did you take into account in those calculations, the 880 thousand gallons -- I think I'm getting that number right -- that was pumped out to other parts of the plant and ultimately processed?

THE WITNESS: Well, there are two items there.

In part of the process, the sewage was pumped into the holding area out in the lagoon, and it stayed there for the month that I was there. We never pumped it back to the plant.

But the hundred thousand gallons that was pumped out or whatever amount, it does not really matter, because we have a known flow rate. We have an influent flow meter that works that measures up to 8.4 million gallons and then it fails.

So we can just say it never got higher than that. Although we know it did. Let's just say it stayed at 8.4 million gallons. We started to pump it again at 10:00 at night. The difference between those two time periods equals 2.25 million gallons of spilling.

MR. JOHNSTON: Thank you.

MR. YOUNG: Do you have one last question, Dr. Wolf?

DR. WOLF: Yes. When in 2006 the regrading work was done to raise the walls after the earthquake, and there was some concrete work done, there was the demolishing of the existing concrete and putting -- raising it up. I forgot how many feet you mentioned. I think it was -- was it four feet or something like that?

THE WITNESS: (Nodding.)

DR. WOLF: And then removing the blacktop and then repaving. Someone must -- obviously this must have been done with design drawings to design the construction of the new retaining wall, rebars for concrete, the grading. So who was responsible for that design?

THE WITNESS: I do believe John Wallace's firm made those designs. I'm not exactly sure about that though. I do know that his company performed the construction management, and were the onsite inspectors while all the construction was being done.

DR. WOLF: So it would have been the District's responsibility of assuring the -- assuring the proper design and new construction probably done by an outside contractor, in terms of pulling the concrete and the asphalt.

So it was the District's responsibility to look at the finished product and looking at the grading and the -- making sure that these upgrades were not having unintended consequence of causing other problems, meaning the puddling of the water?

MR. YOUNG: Is that a question, Dr. Wolf?

DR. WOLF: Yes. It is a long question, but it is a question.

THE WITNESS: I'm assuming I missed something in the translation there --

DR. WOLF: I --

THE WITNESS: -- but I do not think it is the District's responsibility to make sure that the plans were right. That is the engineering company who produced the plans, and the engineering company who did the plant or the construction management.

The District as an entity or myself as a wastewater treatment plant operator, are not mechanical engineers or any engineers that would be able to review plans and things like that and make a judgment call. That is up to the contractors who did that work.

DR. WOLF: All right. So to -- I think I'm beginning to understand the picture.

So basically in this instance, the design was performed by the Wallace group, and the Wallace group also was the -- and is, the administrator of the District; is that correct?

THE WITNESS: That's correct.

DR. WOLF: So he serves these two functions?

THE WITNESS: That's correct.

DR. WOLF: All right. Sorry for my long question. Thank you.

MR. YOUNG: Okay. I think we're done with this

witness.

Mr. Appleton, thank you very much for appearing today.

Okay. Your next witness. Is this your final witness?

MS. MACEDO: This is the final witness.

MR. YOUNG: Okay. At this juncture, I believe you have 55 minutes.

MS. MACEDO: We're going to make it.

MR. YOUNG: And the District has 67 minutes.

DIRECT EXAMINATION

THE WITNESS: Good afternoon.

MR. YOUNG: And your name, please.

THE WITNESS: My name is Matthew Buffleben. I reside in Sacramento, California, and today I'm going to present discharge volumes, and I'm going to go over the methods and results.

So I've gone through quite a bit of detail. I will try to run through it relatively fast. You seem to be fairly knowledgeable, but you could ask me questions during or afterwards, if you want to. You will see specific items involving graphs and charts I will show you.

MR. YOUNG: So are you a State Water Board

employee?

THE WITNESS: Yes. I'm sorry. I'm a State Water Resource -- I'm a Senior Water Resource Engineer at the Office of Enforcements, and I'm a supervisor in that unit.

MR. YOUNG: Okay.

THE WITNESS: Okay. So discharge methods and results.

So estimating a spill volume. Spill volume, as we kind of alluded to earlier, can be estimated by various approaches. And the circumstances of the spill will dictate which approach and which method is the most appropriate.

Now, there are multiple methods that may be used and there are different variations for each approach. So as an engineer, I'd like to actually approach the problems from multiple methods.

But here we have two different approaches, two general approaches, and with widely different estimates. So I'm going to take you through those approaches today, and afterwards you will be able to see that the District's approach was unreliable and underestimated the flow, in our conclusions.

So the District's preferred method of approach is called the duration of flow method.

Basically to go about this, you know how long the spill lasted, the time of duration. And you know how much flow was coming out of your discharge point. You can estimate the volume.

So estimating the flow, if you don't have a flow meter at those discharge points, which you usually don't, you can use photos or charts to get an estimate of the flow or you can use tables out of the manholes so you can measure the height of the manhole. And at the end of the story, the District ended up with their method of duration of flow at 417,000 gallons.

So this is a chart, a flowchart, and I will go through this step by step a little bit. It's what is part of a method that is published by CWEA. And so this upper left, this manhole, you can barely see any water come out of it. It's five gallons per minute.

Probably the only reason you could clearly notice that there is any flow coming out of this manhole is during the daytime, it's bright and sunny, and you could see some water coming onto the pavement.

I would like you to keep in mind that December 19th was a much different event. It was wet and it was rainy. It was flooding a lot. And occurred

into the evening, so there is a lot of factors about doing these visual observations.

So the next slide over you have a pick hole flow. In this case it's -- the flow meter here was a calibrated gauge, and so this was at 25 gallons per minute. So the flow is coming out of pick holes and the manhole, and you can see the flow rate. You can see the break coming out of the manholes there.

And as we move over to the top right here, you can see the flow starting to come around the edge of the manhole. It's about 50 gallons of flow -- the flow is about 50 gallons per minute. And you can see water coming around the circumference of the manhole. So as it progressed, they increased the flow rate from 100, and then 150, 200, 225, 250 and then 275.

So I also wanted to mention that even though the photos in this chart is the maximum here of 275, that is not the maximum out of flow -- out of the manhole. And that is probably what the District would like you to believe in their calculation, but that is not the case.

So the other method --

MR. YOUNG: Before you continue --

THE WITNESS: Yes.

MR. YOUNG: -- I just want to know, is this an exhibit?

MS. MACEDO: Yes, it's number --

MR. YOUNG: What --

THE WITNESS: Yeah, so CWEA methods --

MR. YOUNG: No, which exhibit would it be?

MS. MACEDO: I'm getting it for you.

THE WITNESS: It's Exhibit -- it starts on 6 -- page number 6, dash 148.

MR. YOUNG: So it's Exhibit 6?

MS. MACEDO: Yes.

THE WITNESS: Yes.

MR. YOUNG: All right. I just wanted to make sure.

THE WITNESS: So to continue on.

So another way, if you don't have the photos in front of you, you could measure the height of the spray coming out of the manhole. So right here is a manhole, and the lid is lifted up a little bit. And so if you measure this height, you can estimate the volume by going over to this table here.

I know it's too small to read. But it's the height from the volume in inches, and you can look to find the corresponding flow rate. So measuring the heights of the spray coming out from the manhole, you

can get an estimate.

So the prosecution's preferred method is to calculate the spill volume. And it is called the pump station method -- the pump station data method.

When available, you use recorded flow data. And basically what you do is you record a normal flow day to a spill day. And the spill volume is just the difference between the two. What is the normal operations, versus what happened on the spill.

And our final calculations give you a number that cut to the chase. It's just over one million, one hundred thousand gallons.

So as we remember, December 19th, 2010, was not a normal day operation-wise. The day before had nearly three inches of rain, and there is flooding in and around the treatment plant.

So how do we go about estimating the spill volume?

This is the data of an effluent chart from the plant. So this is the meter that was working throughout the storm event. And you can see in the morning, the flow starts increasing out of the plant and peaks right up here at 8.4 at 10:26, and it suddenly drops off. This is the evidence that we have from the time the pump shut off and drops precipitously

down to zero.

Just to explain the scale and time, this is just over a 24-hour period and on the left-hand side, it goes from zero to MGD (phonetic).

So during the afternoon, as the District was successful and getting more pumps and working out the problems, getting a diesel generator, the flows increase out towards the plant and reaches a maximum amount of a little over 8.5, I believe around 10 o'clock that evening.

Also, we will talk about -- a little bit about the problems with the emergency diesel pump. And these spikes, these are likely dips and indications when they had to stop and restart the pump, and that is why I think it's so spiky here (indicating).

So to calculate the flow through this period, first of all, we have to kind of look through the dry-weather flow. Now, the dry-weather flow generally has very little variation. It kind of gives us a base flow through the system. So when we look at this (indicating), we picked August and four Sundays in August to see what happened on a typical Sunday, without influence of rain and wet weather.

So here we have the chart, and it has one peak around noon. And I think that is just under 5

MGD, and then it has another little peak later around 9:00, just under 4 MGD. But it's pretty regular that we can use this graph-based on the effluent meter data and the days that we average to help us determine the volume of the flow event.

So wet weather. We have storm weather. We have rain, and we have inflow and infiltration into the pipe system and the sanitary sewer system.

So inflow refers to water getting directly into the sewer system. So we have the manhole covers, and we have the pick holes within the manhole covers. And so that is how the water gets into the system directly. And possible nutrients (phonetic) is another common source of inflow into the system.

But we also have infiltration, and this is basically deep pipes. That is when the sanitary sewer system gets older and older, and the pipes get cracked and broken. You have intrusion, and so you have additional ways and pathways of water getting into your sanitary sewer system. So that is when we have a storm event, you will have a much greater flow during these storm events.

I should also mention that one of the reasons why the pipes crack is earthquakes, and those things can cause damage to the system, too.

So this is a hydrograph. I picked this from the exhibit from the cross -- from the District. And I chose this one because it starts around when the rain starts to fall pretty close to early in the day. And these bars are rainfall intensity. That is on the right-hand side here (indicating).

And the blue line is the flow. The flow, that is only due to the water, what is called rain day I and I -- rain day I and I.

So if you look at this chart, you can see that the rain peaks around 3:00 here. And then the corresponding peak happens about 6 hours -- 5, 6 hours later about 9:00, and then it peaks about 3 MGD. And so this is a height graph, and this is what we do and we use to look at rain events.

So now back to our problem of trying to estimate what is this curve. We know the plant fails. We're trying to estimate a volume on this top part of the graph and come up with a reasonable estimate that you can rely on in a finding.

So we have the red line, which once again represents the effluent out of the plant, and we have the blue line here that represents dry-weather flow.

So before the pump failed, we can actually get a good idea of what that I and I in the

system is, and you will see what that is doing. In this case, we're just going to subtract the blue line from the red line.

So this is what we get. We get this purple line. So this is what we calculated in developing our estimate. And you can see the purple line increase and that is the storm. And as the day progresses, it is going up and up, and then the pumps fail. So we have to decide what we're going to do at this point.

And for our calculations, we decided to hold the line constant for the rest of the day that we calculated the volume flow.

Now, the reasons we did this -- Jeff Appleton just spoke to this -- pumps didn't fail at the peak. So we think we underestimated the flow, especially at the first -- in the beginning of the few several hours. And the second reason that we held a constant for so long a period is because that there was flooding in the area.

And flooding is actually going to increase the I and I. It's not a typical rain-day storm event. So those were the two reasons why we kept that line horizontal for the rest of our calculations.

So adding those two lines together, the

dry flow and the wet flow together, we come up with a, what we feel is a reasonable amount of what should have gone through the plant during the storm day. And that is this green line on top of the graph.

Now, Jeff Appleton, he mentioned his calculation was 8.4, so he just basically drew a straight line from 8.4 to calculate the volume and the duration of the event. And he felt that it was more reasonable that it got up to over 10 MGA to calculate the volume from there.

We didn't use that method. We thought that the variations with the dry overflow would be appropriate and reasonable amount. We didn't choose the maximum amount to estimate the volume of the spill.

So I'm going to back up just a second here. So to calculate the spill volume, what I said before, what would happen on a normal operation of the plant and that is the green line. And then what was actually measured going through the plant.

So we subtract the red line during the spill event from the green line, to come up with what the spill volume is or estimate it is. So we get this curve that looks like this (indicating).

And so you could see the pump failed at 10:26, and then it decreases the flow rates throughout

the day and into the evening. And so eventually it goes down to zero.

So I'm now going to throw some numbers out to you. We have some decisions to make about how long we calculate the spill event for and what time periods.

And so we look at the District's evidence and at eyewitness accounts and testimony to try to figure out what is a reasonable time frame. So we actually looked at what a ten-hour event would -- the spill volume would be. And what an 11-hour event would be from --

MS. THORME: Can I ask what exhibits these are in, because we have never seen these documents before.

MS. MACEDO: These were just created for the power -- these were just created for the PowerPoint.

THE WITNESS: Yes. And these are all data that was provided by the District or that we had provided as our exhibits.

MR. YOUNG: And so this information is already contained in one of your exhibits?

MS. MACEDO: Yes.

THE WITNESS: Yes.

MS. MACEDO: Yes.

MR. YOUNG: Which one?

THE WITNESS: It is in our --

MS. MACEDO: XL.

THE WITNESS: -- XL spreadsheets. It should be 3 and 4.

MR. YOUNG: Okay. So this is just a representation?

MS. MACEDO: Yes.

THE WITNESS: Yes. I can pull up the spreadsheets, but they are not very nice to look at.

MR. YOUNG: Okay.

THE WITNESS: So here is our line. This is our calculated amount of what would have gone through the treatment plant for that time period. This is what was measured going through the plant. So we subtracted those two volumes. And then plus, we give them additional credit for diverting some of the volume to the storage, and the District had indicated that to be about 100,000 gallons.

So looking at these three different time periods for a ten-hour event, is just under a million gallons and for an 11-hour event, you've got 1.3 million gallons.

THE REPORTER: Excuse me, but could you please slow down.

THE WITNESS: Sorry.

So for a ten-hour event, that is from 12:00 noon to 10:00, you get just about a million gallons. For an 11-hour event, from 11:00 to 12:00, you get about 1.3 million gallons. And for a 12-hour event, from say, 11:00 to 11:00, it only increases just a little bit just adding that extra hour into it, it's just over 1.3 million gallons.

So this is where we have another decision point in trying to figure out what our calculated volume is.

So in this case, we thought, based on the District's testimony, that the pumps failed at 10:26. And the District estimated that the sewage -- the overflow, there's an additional capacity within the system, so that the spill probably didn't start until about 11:00 a.m. in the morning. But we decided we would be conservative in our estimate and calculated the volume from 12:00 p.m. to 10:00 p.m.

But noticing that there was such a big difference between the 10 and 11 hours, we actually used an averaging technique, and so that middle column in the middle are the lines that you see in the technical reports and in the ACL come up with a final volume of 1.1 million gallons.

So moving on, that is how we calculated

the spill. And I want to cover a little bit about the durational flow method, and why we find it so unreliable and inconsistent.

A number of other reasons is there is an inherent difficulty with this method because you have to really understand the discharge points, the number of manholes, the residences, where there is sewage coming out of. The flow rates that they used are highly suspect because there was manhole evidence that was pretty speculative, and there was -- we believe they were self-serving conclusions regarding the flow out of the manhole.

In addition to this method, it didn't include the storm water in the plant, which under the permit, the treatment plant was also supposed to treat the storm water.

So the manhole survey. So we have a lot of discharge points. So I think 21 or so is reported in CIWQS. So ideally for each manhole, you would have somebody there that would be looking at the flow. How much the flow is and how much is coming out of the manhole, and the time frame for what was coming in and out of the manholes.

Now, the District had very limited operations of the manholes. So what they end up doing

is they conducted a manhole survey after the flood and spillover.

So to just orient yourself, I am going to use some different terms here now. And so pick hole flow, which was an example from discharge about 25 GPM and then I will talk a little bit about annular lifted flows, which is these overflows.

So what the District does, is they went around and took photos of all the manholes they think had this discharge. So this manhole is S2A. That is on the Oceano Collection System District and is located on Aloha Place at Security Court.

And so it was assessed to see if there was a pick hole flow or annular flow. So what the District looked at is how much dirt, grime was coming around the circumference. How much cleaning was done, and also indicated how many pick holes there were to try to get an understanding of what type of flows were coming out of the manholes.

And so in this case from the flow from this manhole, they estimated it was about 65 gallons per minute from the key period of 11:00 a.m. to 7:00 p.m.

So they looked at the other manholes, and this was one that we think they got wrong about what

type of flow was coming out of this manhole. This was GD4. And originally they notice that there is two pick hole flows. So they just indicated that the pick hole flow out of this manhole, and they estimated the flow from the key period from 11:00 to 5:00 -- 11:00 a.m. to 5:00 p.m., which is 15 gallons per minute.

And even still -- but if you take a closer look at the photo, half of the rim on this case was clean. And so for some reason, they decided to go with a pick hole flow, even though there were indications that there was a large flow that came out of this manhole.

In another instance, this is actually a clean-out on the Oceano system. That is clean-out S2B on Security Court. So when the District did their survey a couple of days later, they noticed the cap was not in place. And they talked to one of the residents, and they said the cap was in place during the spill event.

While, I'm going to look at this a little bit later at the video evidence, but we have another resident that -- well, actually, Steve, who had talked earlier this morning, that said this manholes was discharging both the cap and --

MS. THORME: Objection; that is hearsay

evidence.

THE WITNESS: We have an exhibit that is also included as part of our -- that list Steve Ervins' (phonetic) testimony to this, and that is Exhibit 2.

MS. THORME: Okay. That is also hearsay.

MR. YOUNG: Do you have any kind of a report that was filed as part of the agency business where this information was put into?

MS. MACEDO: Yeah. Exhibit 103 is the chart that Jim Fischer had prepared in the course of his business. And it was submitted, and it has been declared hearsay.

MR. YOUNG: Right.

MS. MACEDO: But it was prepared as -- after he conducted interviews with all the residents and so to the extent that he is available for cross-examination, about what the residents said, he summarized what they told him and put it into the record. I can't recall -- even if --

MR. YOUNG: Well, what we're perplexed about is the record itself seems to have an exception --

MS. MACEDO: Right.

MR. YOUNG: -- as a government document?

MS. MACEDO: Right. He makes --

MR. YOUNG: So that --

MS. MACEDO: -- he makes it -- he interviews people in the regular course of his business, and it was at or near the time of conducting that interview.

MR. YOUNG: I understand, but what he is recording in there are statements made to him by others.

MS. MACEDO: Right.

MR. YOUNG: Why wouldn't those be hearsay?

MS. MACEDO: Those are hearsay. And then people come and corroborate them, so --

MS. THORME: That's hearsay.

MS. MACEDO: -- that is the best we can do.

MS. THORME: Our objection is that those people could have been brought in as witnesses, and we would be able to cross-examine and ask questions of them, and they were not. And so any of those statements are hearsay and cannot be considered as evidence in this matter.

MR. YOUNG: I guess they can't be considered as evidence to prove the finding that they might be used for. But hearsay is admissible, as long as it explains or is supplemented under testimony.

MS. MACEDO: Right --

MR. YOUNG: I'm trying to --

MS. MACEDO: -- it can't --

MR. YOUNG: -- look for the other testimony.

MS. MACEDO: No, but if it is being used to show why the prosecution team chose a factor of five for the harm, then evidence -- then Exhibit 103 is not being offered for the truth of the matter asserted.

MR. YOUNG: Any thoughts?

MS. MACEDO: So Exhibit 103 can come in as a business record, but notwithstanding the fact that public residents are coming in and describing their health concerns, because that is not evidence. I understand that.

But if those statements are not being offered for the truth of the matter asserted, but as evidence for why the prosecution team considered the selection of the factor of five --

MS. JAHR: They are using it to the truth of the matter asserted.

MS. MACEDO: No. I mean, I'm bolstering it for -- this is why we -- we were involved in the conversations.

MS. JAHR: Okay.

MS. MACEDO: And we -- we found that the beneficial uses were affected for the following reasons. You don't have to agree with the conversations. You have to agree with whether our

recommendation of five is accurate or not.

MR. YOUNG: I need to take a look at Exhibit 103.

MS. MACEDO: No problem. Do you want me to bring it up?

(Brief pause in proceedings.)

MS. JAHR: I have it right here.

(Discussion held off the record.)

MR. YOUNG: Let's go back on the record.

We're just trying to figure out how long we're going to go and whether we will take a dinner break, or whether when we complete deliberations tonight. It's kind of a logistical thing. We're not quite sure.

And at a minimum, I would like to finish all of the witnesses' testimony, and see what time it is. And if it is too late, we might stop, and the board will have to deliberate at a later point in time. If we have enough time, then the board will go into a closed session and deliberate.

Most of us are willing to spend most of the night to get that finished, so we just need to see what happens.

I do have a couple of housekeeping items. I do have a testimony card from Mr. Nichols, and he is

the board chairman of the Sanitary (sic) District.

MS. MACEDO: Sanitation District.

MR. YOUNG: Sanitation District. Not sanitary? Sanitation.

Okay. And I'm not going to let him testify as a public comment speaker, and the reason is he's the head of the District. He's got inside information. I'm concerned he may say things that inadvertently contradict what other witnesses have said. And it's going to be difficult for the other side if they can't cross-examine him. And it just makes it clean if he just does not testify.

If he wanted to testify as a witness, that would be different. Then he could testify that way, but not as a member of the public. So he is going to be excluded as a witness.

Now, as to the document that we have got, Jessica, this was document 103.

MS. JAHR: It's 103, yes.

MR. YOUNG: So here's --

MR. JOHNSTON: Is it this one (indicating)?

MR. YOUNG: No.

MS. JAHR: No. Sorry, 103 is not quite -- it's a spreadsheet type document.

MR. YOUNG: This -- let's put it on the screen

and --

MS. MACEDO: Yes.

MR. YOUNG: This is 103.

Jessica, did you want to go ahead and describe what we have decided on this exhibit?

MS. JAHR: Sure. So the objection is hearsay, and there is actually two levels of hearsay in this document. There is the document itself, and then there is the statement.

The document itself could come in as a business record or an official record. The second level of hearsay are those statements, and those do not have a hearsay exception.

MS. MACEDO: Okay.

MS. JAHR: And so those will be considered hearsay, and then therefore, for the board's edification, hearsay statements can't be used as a sole source for any finding. And so they can be used to support other evidence. But they can't be used as the sole source of any finding.

So we will allow this in, the document itself. But the hearsay statement within them -- or the statements within them by other people, will be considered hearsay.

MS. MACEDO: And that's fine. I mean, when I

mentioned earlier about the prosecution team's selection of the harm factor, that is not the only selection -- or the only evidence that we used to choose the harm factor. And that ruling is acceptable, and I mean, we don't contest it.

MR. YOUNG: Okay. And Ms. Thorme?

MS. THORME: I'm sorry, what was the question?

MR. YOUNG: Do you have any comments on how we're ruling on this exhibit?

MS. THORME: No.

MR. YOUNG: Okay.

MS. JAHR: It's 103.

MR. YOUNG: 103.

MS. MACEDO: Thank you.

MR. YOUNG: Moving right along.

MS. MACEDO: I'm sorry.

THE WITNESS: So let me back up a little bit.

So these -- the point of these couple of slides is the District didn't have observations, for the most part, or eyewitnesses on the 20 different manholes for the 10 hours, 11 hours of the spill. The spill happened during flood conditions and at night partially. And so they are relying on this post-flood, post-spill manhole survey.

And so the point I'm trying to get across

here is this survey is speculative in nature. And the first manhole, they probably got right. The second manhole, they said it was just a pick hole flow. I think we disagree with that conclusion.

This clean-out, they said with the survey, that there was no flow from this clean-out. And I'm going to show you in a few slides later, that there was flow coming out of the manhole. And that was actually from some resident testimony also under hearsay, also corroborates that. So that was the point of these slides.

So moving along. Flow rates. So the duration of flow method, they have to choose a flow rate. And the District has a tendency to choose the lower value of either the photo or the table. So let's look at this a little bit closer to give you examples.

So this is a photo from the District. It was at 2:30 in the afternoon during the spill. So not during the peak spill period. It is a location -- let me catch up here.

It is TR13B on North Spring Drive. So if you look at this photo, you can see some pick hole flow coming out of it. And the pick hole flow would go back to the previous chart, probably resembles more closely to the 25.

However, the District used the table to estimate the height and they estimated a flow during this key time period from 11:00 to 5:00, was 15 gallons per minute. So that is an underestimation. And -- well, here is the photo of the pick hole flow again.

The next photo, this is the manhole that is underwater. This manhole is just down the street. It's one of the key manholes. It's probably one of the larger discharge points of the manholes. It's GP13 on the corner of North Spring Avenue.

MS. JAHR: Can I just clarify?

THE WITNESS: Yes.

MS. JAHR: Are these exhibits in evidence?

THE WITNESS: Yes.

MS. MACEDO: Yes.

THE WITNESS: This is from Exhibit 4110.

MS. JAHR: 4110?

THE WITNESS: Yes.

MS. JAHR: Thank you.

MS. MACEDO: Just mention the dates from now on.

THE WITNESS: Okay. The date is 4-1-10.

So it's located on North Spring. Hopefully, I will get the name correct.

This photo is taken about 2:30. So as

you can see, this hole is totally underwater. Probably about a foot of water so you see a lot of disturbance on the surface.

So the District couldn't use the photo, so they are not using that method or they couldn't use the table method. So in this case, I looked at the -- it said -- um, it just used the maximum value of the table -- of the photo, which was -- as I mentioned before, was 275 gallons per minute during this time frame.

However, if you look at the table, since the table -- since the District didn't use the table in other measurements, they used the same method they used at eight inches, that would be over 420 gallons per minute out of this manhole. So the District consistently picks the lower value out of the two different systems.

The next one -- this is the clean-out. Now, the District presented this video evidence, and they did claim there was no discharge at this point. This is from a video screen shot from KSBY as part of Exhibit 116, I want to say.

MS. MACEDO: 106.

THE WITNESS: 106.

If you look at the corner -- and it's

circled in red -- there is clear disturbance. And there's only about three seconds of the video on this news clip, but there is a fair amount of disturbance on the corner of this screen.

And like we said, with the residence that the cap and the pipe valve was off, and it's pretty clear that there was discharge at this point.

So the District missed it on the manhole survey, and then they just assumed it was a pick hole flow anyways. Well, this is a pipe flow. It's a four-inch-diameter pipe, and it is discharging at this point. So it is going to be much larger than what they estimated at this point.

So let's talk about additional discharge -- additional discharge points that the District may or may not have missed.

So we have the headworks that Mr. Appleton talked about earlier today, and I will cover that in a minute.

We have some residence homes and some additional manholes, too. I won't talk about the -- too much about the additional manholes, but there were -- when we looked at the maps and the elevations of the manholes, it looks like the District missed at least one manhole, and it didn't evaluate that

discharge.

So this is a photo that was -- that Jeff Appleton testified about earlier, and this is at the headworks. And he testified that there was flow coming out of this gate.

We didn't know about this. The District didn't tell us about this. So we don't really have an estimate for how much flow was coming out of it.

But if you have six or eight inches of water coming out of this open door, that is a very large volume. I can't confirm 700,000 gallons because I need to know what the time frame was, and how long it was flowing at that rate, but I am willing to say that if that water level was that high, it is very substantial.

So the residents' homes -- there is some sewage in the homes. And so for three locations --

MS. THORME: I want to object.

MR. YOUNG: Hold on.

THE WITNESS: -- there is --

MR. YOUNG: Hold on.

MS. THORME: I want to object to this line of testimony, because there is no evidence to support this. This is hearsay evidence.

MS. MACEDO: That is not entirely correct. If

we go to a slide after this, there is a photograph submitted by the District.

THE WITNESS: This slide, yes.

MR. YOUNG: Why don't you give us that.

THE WITNESS: Okay.

MR. YOUNG: Why don't you give us that first.

THE WITNESS: Okay.

MR. YOUNG: The evidence to support that slide, let's see that first.

THE WITNESS: So this slide is from Bates number 2943. And this photo is not the best photo, but it is a photo from the resident's home. And I will take a few minutes to look at it. This is a bathtub in the back of the bathroom, and there is sewage in the bathtub. You can tell by the gray water.

MR. YOUNG: And who took the photograph?

THE WITNESS: The resident.

MR. YOUNG: And when was it taken?

THE WITNESS: During the flooding event, the spill day, and it was given to the District. And the District submitted it to us as evidence as part of their exhibits. And this is shown in their exhibit on 2943.

MS. THORME: But the photo is still hearsay because we don't have the person who took the photo to

authenticate the photo.

MS. MACEDO: You produced the photo for us. It's a statement against interest.

THE WITNESS: The resident also gave testimony as part of Exhibit 103, too.

MR. YOUNG: Hang on one second.

(Discussion held off the record.)

MR. YOUNG: I have some questions -- go ahead, Jessica or -- well, okay. The two claims -- the District claims also each of the homes was recovered, is that the District's statement?

MS. MACEDO: The photograph was submitted to us --

MR. YOUNG: I understand.

MS. MACEDO: -- in evidence by the District.

MR. YOUNG: I understand that.

MS. MACEDO: Okay.

MR. YOUNG: But the interpretation of what is in the photograph?

MS. MACEDO: It can be done by either party. I'm telling you --

MR. YOUNG: No --

MS. MACEDO: -- what we say.

MR. YOUNG: Okay. You're telling us, but what the statements are on there, the District claims all

sewage in the homes was recovered.

MS. MACEDO: That is a statement from a document that the District submitted to us, and we can pull that up.

MR. YOUNG: Is that true?

MS. MACEDO: Yes, that is in evidence.

MR. YOUNG: I'm asking Ms. Thorme.

MS. THORME: I'm not sure what document she's talking about. So --

MR. YOUNG: Well, I'm just --

MS. THORME: -- if she can pull up the underlying document that supports that statement, that would be fine.

MS. MACEDO: You bet.

THE WITNESS: It's 29, page 43 is the photo and the e-mail is page 2.

MS. JAHR: And it is the page beforehand, and prior to that, there's an e-mail saying that the SSO report has been certified in those homes.

MS. MACEDO: Yes. I hope this is not being charged against our time.

MS. JAHR: No, this is an objection. There is no time for the verbatim part.

MR. JEFFRIES: It's our time.

MS. MACEDO: It's absolutely your time.

Absolutely. When is the pizza getting here?

MR. JEFFRIES: We are going to --

MS. THORME: Well, this was -- this is inserted by the District for the issue of the private sewer lateral discharges which are in the reporting issues related to that.

MR. YOUNG: Folks, please hold on one second. Ms. Thorme is speaking.

MR. JEFFRIES: All right.

MR. YOUNG: Go ahead.

MS. THORME: So that was rebuttal to the private sewer lateral certification document, which is no longer an issue. So to the extent that that went towards the private sewer lateral discharge issue, that is no longer part of the case, I'm not sure it survives.

MS. JAHR: Well, the nondischarge violations may not be part of the case anymore. However, the allegations that there was discharge in the homes and either led to harm or there was more sewage discharge, is still part of the case.

MS. THORME: Right, but --

MS. MACEDO: There you go, Jessica. It's up. This is the photo of the previous page, and this is the text immediately after the photo.

MS. JAHR: Right.

MS. THORME: Right. So the question of where it went and what kind of harm it caused, there is not evidence of harm besides that it backed up and went back down the tub.

MS. MACEDO: Yes, but the people were exposed to it.

MS. THORME: That is argument.

MS. JAHR: I think at this point, in this -- at this, we're looking at the actual amount of discharge; is that correct? What we were looking at?

THE WITNESS: That is correct.

MS. JAHR: At this point --

THE WITNESS: That's what I'm talking about.

MS. JAHR: -- you're not arguing about harm.

THE WITNESS: Correct.

MS. MACEDO: True.

MS. JAHR: So I don't want to --

MS. MACEDO: True.

MS. JAHR: -- get the issues mixed up.

MS. MACEDO: That's correct.

MS. THORME: But it was not discharged if it went back into the sewer system. That is the point. So if it didn't -- if it went into the tub and never went out of the tub and went right back down the drain

and --

THE WITNESS: Well, before she starts giving testimony to you, I want to comment more about the photograph and the resident's testimony here, and the point I want to make about this.

MS. JAHR: That's fine, but we just need to determine the hearsay first.

I think it's -- at this point, it is hearsay testimony, but I will allow it, and we will --

MR. YOUNG: Are we referring to this exhibit here (indicating)?

MS. JAHR: The picture itself.

MR. YOUNG: The picture. So did this picture comes with this e-mail?

MS. MACEDO: Yes.

THE WITNESS: Yes.

MR. YOUNG: Is it related at all?

THE WITNESS: Yes, it is.

MS. MACEDO: Yes.

MR. YOUNG: See, that comes -- that counts as an admission.

MS. MACEDO: Yes.

MR. YOUNG: The e-mail is from the Wallace Group, who was an agent of the District, related to the District.

MS. THORME: Correct, but the objection is to the foundation of the photo --

MR. YOUNG: The photograph.

MS. THORME: -- so there is no one -- we can see it, and yes, we can look at it, but we can't ask any questions of the homeowner of what happened and didn't happen. So I mean, that is the -- as far as the relation to the volume issue.

MR. YOUNG: Yeah --

MS. JAHR: Right.

MR. YOUNG: -- I can't --

MS. MACEDO: Except to the fact that the statement contained in the e-mail seems contradicted by the photo submitted by the District in the exact same document on the page before.

MR. YOUNG: Well, the photo should come in with the e-mail. The whole thing about the foundation and authenticity is really to make sure that you have got a reliable document in front of you, reliable evidence. I think if the District submitted this photograph --

MS. MACEDO: If the District submitted the document --

MR. YOUNG: -- in the record --

MS. MACEDO: -- I don't have any objection as to its authenticity. It's in, as long -- at least it's

to the foundation. I understand that hearsay objection --

MR. YOUNG: Right.

MS. MACEDO: -- but he submitted the document.

MR. YOUNG: Right. I understand that.

MS. MACEDO: Okay.

MR. YOUNG: Yeah. Okay. So I was getting back to where we were concerned --

MS. MACEDO: Yeah.

MR. YOUNG: -- with the first slide.

MS. MACEDO: Yeah. So if we can return to our presentation, this is the photo that was a later slide to which Ms. Thorme objected --

MR. YOUNG: Right.

MS. MACEDO: -- in talking about the sewage.

So do you want to go in order or out of order?

THE WITNESS: I'm fine right here.

MS. MACEDO: Okay.

MR. YOUNG: Okay.

THE WITNESS: Because it's really -- the photo is attached to the e-mail, and particularly the testimony from the District, when you look at the e-mail, is contradicted by the testimony that was given by the residents at the time. That's what we can see

from the photo, and their understanding of why they feel that the discharge was all recovered, actually does not match how they calculated the volume discharges.

So basically earlier in this e-mail chain, the District said there was sewage coming out of the toilets in this particular case, in other residences and was discharged. And then the floodwater came into the house. And so that sewage and floodwaters mixed, and there was discharge from the floodwaters left.

So my point for these series of slides was that some of the sewage mixed with the floodwaters, and was not totally recovered within the system.

Later the District said there was confusion among the residents, and that they felt that there was no discharge from the bathtubs. And therefore, they didn't report these as discharge points, because the flow was fully recovered, in their opinion.

Okay. Moving on. Monday's spill.

So the District maintains that it was small. There is photos and residents that indicate the spill was much larger and longer than the District had indicated.

Now, the volume that we think really is underestimated is on Monday's spill. They underestimated it as 2,200 gallons, but it really also contradicts the District's model of what happened between Sunday and Monday. So that is the main reason I want to talk about Monday's spill.

So this photo was submitted by the District. It is once again, GB15, and this is Exhibit 4111. And it shows flow coming from around the manhole. This is the annular flow. And we go back to the table -- the CWEA table, it is about 15 gallons per --

THE REPORTER: I'm sorry, but could you repeat that?

THE WITNESS: It is 15 gallons per minute, GPM.

Now, the District thought the Monday spills was a very small volume. And they estimate a discharge for 72 minutes at only four gallons per minute, and they also estimate a discharge for six other locations at very low flow, and that is why they come out to the 2200.

Well, this photo that's shown, when it was taken, looks more like 50 gallons per minute. And then there was also a resident in their exhibit that explains that there was discharge coming in at 6:30 in

the morning.

So this is the effluent meter for Monday, and is also very telling. The next morning, you can see a big dip where the effluent with the -- for whatever reason, that went down to zero at 3:00 in the morning. And then there are two other dips here where they additionally looked like they had pump problems of some sort.

But in the District's notes, they then turn on the Pismo Beach pump again, and the effluent shoots back up. Now, there was some light rain early in the morning. It doesn't show it.

The light rain does not explain why there was discharge on Monday morning. If there was discharge from the manholes, that means that they weren't pumping down the right form (phonetic) and gaining capacity. So throughout the whole period, the system still has to have the -- be near capacity, if not overflowing still.

And so when the District -- when the system recovers and starts draining down all the water that is within all the pipes in the sewer system, actually, we believe that is when it starts to peak up here, about 10:00 when it's very high at 6 to 7, GPM million gallons per day. That is when the system

finally, we believe, drains down and then they process this stored water.

And so I bring this point up because the District had two consultants. So CH2M Hill, they agreed that the District misclassified the flow out of a couple of the manholes. And this is not even talking about the discharge of the headworks.

Now, CHT -- CH2M Hill claims that the duration on flow method is more reliable. However, the evidence that I showed you today about the discharge points, particularly at the headworks, how they underestimated the flow or the flow rate is suspect. The manhole survey is also very suspect. We believe that the durational flow method, as applied by the District, is unreliable.

The second main point that CH2M Hill made in their criticism of approach was the stored volume. And so CH2M Hill thought the stored volume was processed Sunday evening.

However, like I said before, if that stored volume was processed Sunday evening, there would be no Monday morning spills. And the peak in the effluent meter on Monday afternoon, that is when the store volume was processed. So we didn't miss the stored volume in our calculations.

Now, their other consultant, RMC, used the detailed hydraulic analysis that's based on the rainfall of I and I, and their estimate was 674,000 gallons.

Now, even though RMC does that detailed hydraulic analysis, we believe that it failed to account for the flooding and storm water in the I and I due to the flooding events. That is why you have flooding manholes that are covered with floodwaters. There is going to be more inflow and infiltration than what happened to occur on a normal rainfall event.

Furthermore, RMC did not analyze the rest of the District -- the information that was provided by the District.

So any mistakes that were made by the District, aren't necessarily incorporated into RMC's analysis and conclusions, and that applies the same to CH2M Hill's. Any errors that were made by the District, will be incorporated into CH2M Hill's analysis and their conclusions also.

So finally I want to show -- this was our confirmation slide for us. And so for this slide, we looked at the District flow rates and rainfall versus our spill volume.

So this is their duration on the flow.

And so for the first five hours from 11:00 to 4:00, the District estimated that there was only 1.2 GPM coming out and being discharged out of the manholes.

We don't believe that that is a credible estimate. We think that underestimated the spill. In fact, we still think our spill volume is relatively conservative considering the testimony that the flows at that point was closer to 10 MGD, instead of the maximum that we assumed was about less than 9 MGD.

And so this table is just a number between the two events. And it is basically that chart and the numbers out of that chart.

So the pump station method that we used -- the District actually used this method, too, but they disregard it in their submittals.

And this is our prosecution team. So from the two hours from 11:00 to 1:00, our spill levels were very close to that. RMC's volume drops off a little closer in their rainfall I and I analysis, so it is a little bit lower.

But if you look at the first two hours from the duration of the flow method used by the District, it's not even a hundred thousand gallons during this time period. We don't believe that is a credible estimate, and not an estimate that you can

base a finding on.

So final thoughts. I'm just basically repeating myself here. The District's estimate of 470,000 gallons, 298 is unreliable. There is missed locations, underestimates of the flow, it does not include storm water.

We used data from the effluent meter to come up with a reliant estimate, and the spill volume of 1.1 million gallons.

MS. MACEDO: He is my final witness for my direct.

Q I want to go over the evidentiary evidence you had. So I have taken a look -- Matt, you can stay there.

So I have taken a look at your September 4th and 5th rulings on hearsay. So Dr. Buffleben, for Exhibits 3 and 4, I'm going to pull up the prosecution's index submitted with its submission on July 27th.

And the calculations and spreadsheets for Exhibit 3 and 4, you assisted me with preparing those, correct?

A Correct.

Q In your regular course of business?

A Correct.

Q And you make -- you usually make those types of records at or near the time -- you actually made those types of records at or near the time that we created the exhibit, right?

A Correct.

Q All right. And 7, the violations for late reporting for sewer backups and the District certified report. I believe that was a CIWQS?

MS. THORME: Can we respond to these as she's going through these?

MR. YOUNG: Yeah, go ahead.

MS. THORME: What -- is the underlying data that you used, that input into the spreadsheet, in evidence?

THE WITNESS: Yes, the spreadsheets were in evidence, and then the underlying data came from the District, and the District submitted that as evidence, too.

MS. THORME: Where is that in evidence?

THE WITNESS: In the OM omissions, and also in the September submittal. I would have to look at the exhibit sheets.

MS. MACEDO: It would be NOV number 6.

THE WITNESS: And the supplemental information that was submitted by the District on Exhibit 48.

MS. THORME: So apparently there is a link in that spreadsheet that goes back to a file that is on Mr. Sarmiento's (phonetic) computer that is not in evidence. And so we were unable to link and get answers when we were looking at those spreadsheets to where all the data came from.

THE WITNESS: So that spreadsheet in particular that we're talking about is Exhibit 3, is actually a document that was originally gotten from the District. But in any case, it doesn't matter. We didn't end up using the effluent data for our estimate.

MR. YOUNG: So are Exhibits 3 and 4, simply exhibits you have produced for the hearing itself based on other information?

THE WITNESS: These are exhibits we produced for the ACL --

MR. YOUNG: For the hearing. So these are demonstrative of the work you did?

THE WITNESS: Correct.

MS. MACEDO: Yes.

MR. YOUNG: Okay. All right.

MS. MACEDO: Number 7, I believe it's about their reporting, so it is not relevant.

MS. JAHR: Okay. Before we move on --

MS. MACEDO: Sure.

MS. JAHR: -- I want to make sure we have final decisions --

MS. MACEDO: Oh, I'm sorry.

MS. JAHR: -- on them.

MR. YOUNG: Well, you know to the extent that what we're going to do is just go through the documents, and if they are demonstrative, then I'm just going to let them in because they are just trial exhibits, to demonstrate the testimony.

So that is how I interpret 3 and 4 right now.

MS. THORME: Okay. Then can we make a request that their presentation today as a demonstrative also go into the record, because of the fact if this does get appealed, that they were talking from slides that aren't in the record?

MS. MACEDO: I'm happy to make a presentation of separate exhibits.

MR. YOUNG: Okay. Let's move on.

BY MS. MACEDO:

Q Okay. Number 7, was it made in the regular course of your business?

A Yes.

MR. YOUNG: Can we take a look at that? Is there a way to split the screen?

MS. MACEDO: You want to see number 7 as well?

MR. YOUNG: Yes, I'd like to.

MS. MACEDO: Oh, sure, sure, sure.

MS. THORME: I'm sorry, but didn't you say that that was not needed any longer?

MS. MACEDO: It wasn't, but I'm giving him the opportunity to take a look at it.

MR. YOUNG: Well, if it's not needed, can it be withdrawn?

MS. MACEDO: Okay.

MR. YOUNG: Okay.

MS. MACEDO: Okay. Number 8 is similar to 103. It was --

MR. YOUNG: Let's look at 8.

MS. MACEDO: -- the first version of the prosecution team's investigation of homeowner interviews.

MS. THORME: So this says that it was updated by Exhibit 103. So I don't know if this exhibit is necessary any longer.

MS. MACEDO: It's still relevant.

MR. YOUNG: I want to see the exhibit.

MS. JAHR: Yeah.

MS. MACEDO: So this is Exhibit 8. So this is -- was the first version -- the earlier version of,

basically, Exhibit 103.

MR. YOUNG: We left this in.

MS. JAHR: We let the updated version --

MS. MACEDO: Right.

MS. JAHR: -- stay in.

MR. YOUNG: Okay.

MS. MACEDO: Yeah.

MR. YOUNG: So do you need this one?

MS. MACEDO: If you want 103 to be replaced as 8, that's fine. I just wanted to show it to you since you asked.

MR. YOUNG: Okay. Let's do it. Let's take 8 out then.

MS. MACEDO: That's fine.

MS. JAHR: Is all the information in 103 also contained in 8?

MS. MACEDO: Yes.

MR. YOUNG: So 8 is withdrawn. The next one.

MS. MACEDO: Yes.

Q And 17 is the staff billing rate.

Matt, is this something you use in your regular course of your business?

A Yes.

Q Okay. Is this document something that the Office of Enforcement uses to indicate how much

staff costs are billed at?

A Yes.

Q Okay. And for the ACLC's that you reviewed for creating the chart indicated in Exhibit 101, does this provide the basis for valuing staff costs at $150?

A Yes.

MS. MACEDO: Okay. So this is where this document comes from.

MR. YOUNG: Is it part of your job to know what these numbers are?

THE WITNESS: I have a general knowledge of these numbers, yes --

MR. YOUNG: And is --

THE WITNESS: -- and how much staff costs for Office of Enforcement, yes.

MR. YOUNG: And is that part of your job --

THE WITNESS: Yes.

MR. YOUNG: -- is to use that information?

THE WITNESS: Yes.

MR. YOUNG: And where does the information come from?

THE WITNESS: The information comes from here, and it is from --

MR. YOUNG: No, who is the source?

THE WITNESS: It's the --

MR. YOUNG: Is it the accounting office or something?

THE WITNESS: The Department of Personnel Administration, I believe.

MR. YOUNG: Okay.

THE WITNESS: Or I think they might be called Cal HR.

MS. MACEDO: Okay. And 18 was the cost-benefit analysis, and to the extent that it was ruled hearsay, it can stay hearsay, because it would be corroborated by Mr. Horner's testimony this morning.

MS. THORME: We also have an objection to the authentication in that document.

MR. YOUNG: Let's look at them.

MS. MACEDO: Okay.

MS. JAHR: On 18?

MS. THORME: I believe so, yes.

MS. JAHR: This morning, Dr. Horner --

MS. MACEDO: Authenticated it.

MS. JAHR: -- authenticated it.

MS. THORME: Okay. But she didn't ask him -- she didn't ask specifically for him to authenticate it.

MS. MACEDO: Okay, but he used it, and he said it was what he purported it to be.

MR. JAHR: She asked him questions regarding whether he prepared the document, and whether it was a true and accurate copy.

MS. THORME: Okay.

MR. YOUNG: I think he said enough to authenticate it.

MS. MACEDO: Yeah.

MS. THORME: Okay.

MS. JAHR: He actually authenticated 18, 109 and 113.

MR. YOUNG: Okay. The next one.

MS. MACEDO: Okay.

MR. YOUNG: The next one.

MS. MACEDO: Okay, 19 and 20 are the exhibits that -- e-mails from Mr. Appleton, who testified. So to the extent they want them to remain hearsay, they can, because Mr. Appleton testified to them.

MS. THORME: He didn't authenticate those e-mails.

MS. MACEDO: No, he did not because he testified.

MR. YOUNG: Well, they are hearsay. Hearsay is admissible.

MS. THORME: Well, they also weren't discussed, those e-mails. And there was -- he didn't lay any

foundation for them. They weren't discussed, so we would ask that those be excluded.

MS. MACEDO: He testified. I'm fine with -- I'm fine if they are excluded. He testified.

MR. YOUNG: Okay.

MS. MACEDO: I don't think -- I don't think -- I mean, this one is on District letterhead. To the extent that they are regularly received by water board personnel --

MR. YOUNG: I will --

MS. MACEDO: -- someone else can authenticate them. They are regularly received by people in region three.

MR. YOUNG: Okay. But here's the thing, hearsay can come in.

MS. MACEDO: It can.

MR. YOUNG: Hearsay can come in.

MS. MACEDO: This is an administrative proceeding.

MR. YOUNG: The only thing we're quibbling about is to what extent it can be used.

MS. MACEDO: Right.

MR. YOUNG: So that really is the issue, so --

MS. MACEDO: Yes. So moving on to 24.

MR. YOUNG: So let's deal with that.

Have you withdrawn --

MS. MACEDO: I'm sorry --

MR. YOUNG: -- his e-mail?

MS. MACEDO: I would prefer that 19 and 20 come in as hearsay, and they be corroborated --

MR. YOUNG: Okay.

MS. MACEDO: -- by Mr. Appleton's direct testimony.

MR. YOUNG: Okay. They can't come in because he did not authenticate them, and you had him as a witness.

MS. MACEDO: Okay. That's fine.

MR. YOUNG: Had you done that, they would come in.

MS. MACEDO: That's fine.

MR. YOUNG: So they have got to be -- they're out.

MS. MACEDO: That's totally fine.

So 24, is a CIWQS report.

Q Dr. Buffleben, is a CIWQS report something you conduct or run in the regular course of your business?

A Yes.

Q And is this a report that you prepared in making Exhibit 24?

A Yes.

Q Okay. This -- oh, it's not CIWQS. This is actually a CALIMA (phonetic) report that we submitted as Exhibit 24, indicating a nonchlorinated spill.

Do you recognize this?

A Yes.

Q Okay.

MS. THORME: We object to the spreadsheet part of 24.

MR. YOUNG: You object to which part?

MS. THORME: There are two different documents that are part of 24. One of them is the CIWQS document. The other document is a spreadsheet.

MS. MACEDO: Okay. There is the spreadsheet. This is the spreadsheet portion of a CIWQS report.

Q Dr. Buffleben, can you describe what this is?

A It is a report about the spills, I believe, in a CIWQS, and the violation --

MS. JAHR: If I can make a clarification. I don't believe you objected to 24 previously.

MS. WRIGHT: Number 24 was listed on the evidentiary ruling of the document that needed to be -- that needed foundation laid to be authenticated in

order to be admitted.

MS. MACEDO: And the rulings clarified that Exhibit A, my responses to the evidentiary objections --

MS. JAHR: Okay.

MS. MACEDO: -- allowed all three of my engineers to authenticate the documents.

MS. JAHR: Okay. I see it now. Sorry.

So the question is to what extent is this spreadsheet -- who made this and --

MS. MACEDO: Sure.

MS. JAHR: -- how is it created?

THE WITNESS: It was made in our regular business --

MS. MACEDO: It was a CIWQS report that was one --

MR. YOUNG: Let him testify as to --

MS. MACEDO: Okay.

THE WITNESS: It was a CIWQS report done by Jim Fischer looking at the District's sewer system and the treatment plant and violation --

MR. YOUNG: This --

THE REPORTER: Excuse me, you faded off at the end of your answer.

THE WITNESS: Oh, I'm sorry.

It's a violation report for the collection system and wastewater treatment plant from CIWQS, which is the State database for reporting violations.

MR. YOUNG: So this is a -- is this a report that you took from CIWQS data, and you generated this report? Is this what this is?

THE WITNESS: Yes.

MR. YOUNG: Okay.

MS. THORME: And we objected to this document, that it was inaccurate. And then this included things in there about the other Districts, besides this District.

MR. YOUNG: And I think the way to deal with that would be for Melissa to have a witness and ask him a question on cross or have a witness deal with that or --

MS. THORME: Okay.

MR. YOUNG: -- point that out to us in closing --

MS. THORME: Okay.

MR. YOUNG: -- if it's not accurate.

MS. THORME: Okay.

MR. YOUNG: Next one.

MS. MACEDO: Okay. Almost done.

Q Okay, 101 is the ACLC comparison chart. Did you prepare this?

A Yes, I did.

Q And in your regular course of business?

A Yes.

MS. MACEDO: Okay. Do you have any questions about this, either Ms. Thorme or the Board?

MR. YOUNG: Where did you get this information from?

THE WITNESS: This is from the websites and CIWQS reports, our original water board and our State Board Department of Enforcement actions. And so I downloaded the documents ACLC's or ACLO's to look at the penalties and the volumes and the factors regarding -- under the enforcement policy as comparisons to the ACLC here today.

MR. YOUNG: Did you make similar reports or exhibits like this before in your other cases?

THE WITNESS: This is my first case for this, but we have used this for other cases, yes. Actually this particular spreadsheet, particularly in North Tahoe.

MR. YOUNG: Is this an exhibit -- which one is it?

THE WITNESS: Yes.

MS. MACEDO: It's 101.

MS. JAHR: It's 101.

MR. YOUNG: All right.

MS. MACEDO: Okay, 103 we have already --

MR. YOUNG: Hold on. We're not off this one yet.

MS. JAHR: That's fine. That's fine.

MS. MACEDO: Okay.

MS. JAHR: You can go ahead.

MR. YOUNG: Okay.

MS. MACEDO: So 103 is already taken care of, and 105 is --

Q Dr. Buffleben, you prepared Exhibit 105, correct?

A Correct.

Q In your regular course of business?

A Correct.

Q Can you describe what it is?

A It is testimony about the District's spill and analysis.

MS. MACEDO: Okay. To the extent it corroborates his testimony, it is just a summary of what he testified to. As far as I'm concerned, it's argument. So it does not need to be evidence.

MR. YOUNG: Is this your document? You

produced this?

THE WITNESS: Yes. It's a prosecution team, but I was the primary author on this document.

MS. THORME: We would accept it as argument just like a brief --

MR. YOUNG: Okay.

MS. THORME: -- if that is what they're willing to put it up as.

MR. YOUNG: Okay.

MS. MACEDO: Okay, 107 is simply a full copy of a Wallace document. And this is something that I agreed to, without incident, for Exhibits 6 and 20. There were just pieces missing, and I supplied a full copy as Exhibit 107, and the District objected. That's all it is.

MR. YOUNG: Well, what is the objection based on?

MS. THORME: It was lack of authentication and foundation, I think.

MR. YOUNG: And did the District produce this to the original board?

MS. THORME: I --

MS. MACEDO: It was --

MS. THORME: It may have been part of the subpoenaed document.

THE WITNESS: No, actually it was part of the NOV response.

MS. THORME: Okay. I don't know where it came from.

THE WITNESS: It's --

MS. MACEDO: It was produced in Exhibit 6, incomplete.

MS. THORME: So it will be a hearsay document because he's not here to testify about the document, the author. And I don't believe they cited to it in their case.

MR. YOUNG: Well, if it came in with the NOV response, then it can come in as a business record or a --

MS. JAHR: Admission.

MR. YOUNG: I mean, Mr. Wallace is the chief engineer.

MS. THORME: Right. But the point is they never cited to this for any purpose so...

MR. YOUNG: Okay.

THE WITNESS: Yes, we did.

MS. THORME: You did?

MS. MACEDO: We were trying to provide a complete copy. I mean, to the extent that you did it several times, I'm shocked that you're --

MS. THORME: Okay.

MS. MACEDO: -- continuing to object to it, but --

MS. THORME: Okay. We will withdraw our objection to this document.

MS. MACEDO: All right. The last one. The 109 by Horner was his resume and comments on the BEN model, and he authenticated and offered testimony today, so that is it.

MR. YOUNG: So this exhibit explains and supplements his testimony?

MS. MACEDO: That's right.

MS. THORME: So there are two other documents that were hearsay documents. One is 99, and we used it so we will withdraw the objection to Number 99.

And the other one was the video that was 106, and that has not been authenticated, and they have not used it.

THE WITNESS: No, we have used it.

MS. MACEDO: We did.

MS. JAHR: They used a screen shot of it.

MS. THORME: Which was in evidence separately. The District had turned that screen shot in.

THE WITNESS: We used same screen shot.

MS. THORME: Okay. And then we have the same

objection.

MS. JAHR: Is the screen shot substantially different than that screen shot?

THE WITNESS: I can't -- they are very similar. They could be within a couple of grams of each other.

MS. MACEDO: I'm sorry, what is the argument?

So there are no objections to 99, and she's okay with the video and her screen shot of 106, but not our screen shot of 106? Is that what you are --

MS. THORME: No, I'm okay with the video. And I said you didn't use the video. And then Mr. Buffleben said you did in a screen shot, which I had assumed was the same screen shot that we had put in. But now you're saying that it is not.

So we still have the same objection. You can use our screen shot that is in evidence, but this has not been authenticated, the video.

BY MS. MACEDO:

Q Well, in terms of the screen shot from the video, Dr. Buffleben, the screen shot you used in your testimony, is that something that you acquired in the regular course of business?

A Yes.

Q And you put it in the presentation today

in the regular course of your business?

A Yes.

Q And is it an accurate representation of what you received from KSBY pursuant to subpoena?

A Yes.

MS. THORME: But the person who took the video is not here. We can't ask them what was happening over in that corner. What they're pointing to is some evil thing that was happening. So that is the problem is we can't ask what was happening over there.

MR. YOUNG: Yeah, I think with that exhibit, you just need to point that out to us because the photo shows what it shows. And that is their interpretation of what is going on with it.

MS. THORME: Okay. But they only used the screen shot. So I would say that is coming through their demonstrative --

MR. YOUNG: Okay.

MS. THORME: -- presentation. They did not run the video that was provided as an exhibit. So I would ask that the video itself be excluded, and they can have that screen shot in their presentation.

MR. YOUNG: That's fine.

MS. MACEDO: We're fine with that.

I have no further direct.

MR. YOUNG: Okay.

MS. THORME: Mr. Chair?

MR. YOUNG: Yes.

MS. THORME: I understand this is going to be complicated, but I have a person who has to leave to catch a flight. So I would ask if we can do him out of order and let me cross Mr. Buffleben -- or Dr. Buffleben after.

MR. YOUNG: That's fine.

MS. THORME: Okay. Thank you very much.

MR. YOUNG: That's fine.

MS. THORME: So I know this is a little complicated because they have not closed their case yet, but if we can bring on Paul Giguere (phonetic) from RMC.

MS. MACEDO: You're two or three --

DIRECT EXAMINATION

THE WITNESS: My name is Paul Giguere. I'm a principal with RMC Water and Environment. I am an expert in flow modeling sewer systems, in particular modeling of hydrology and hydraulics and filtration inflow. I have been doing this for 36 years.

And I was brought in to prepare this report, which is focused on reviewing of the Office of

Enforcement's of so-called pump station methodology of estimating the spill volumes. And I have presented this report, which I believe is Exhibit 32.

Okay. I'm from San Diego. I guess I needed to say that, and I was sworn in earlier -- much earlier today.

Okay. So what I did was to review the method that the Office of Enforcement has just presented, the pump station method, for calculating the spill volume, which led to their estimate of 1.1 or so million gallons.

This graphic is from their presentation -- and let me see if this works. Here we go.

Okay. As you recall, this is effluent as measured at the plant. And this line represents the flow that the Office of Enforcement estimated would have reached the plant if it had been able to be metered. Of course, we don't know that.

So they went through how they developed that. They basically took the normal dry-weather pattern and elevated it by about 4 MGD, and they said that represents the flow they would he have gotten there. And therefore the difference between these two curves is the volume of the spill, and with a few

adjustments, which I'm going to detail. They started a little later and so forth.

Okay. So what we did was to see if this is a correct assumption. If that line is the best that can be done to estimate what would have happened.

So we did this by modeling the system. We looked at 14 different rainfall events. We calibrated a hydrologic model. All of that information is in my report, but the bottom line has been shown here.

This red line represents what we modeled would have occurred. It starts with the 18th through the 19th and 20th. This part up through the peak here was actually recorded. And at the effluent meter and our data matches very closely. Our model matches very closely what actually happened on the 18th.

This is the rainfall that occurred represented down here. So you can see the bulk of rainfall occurred on the 18th through about this point on the 19th, which is about when the spill started.

What this shows also is in this blue line is the assumption that I showed on the previous slide, that the Office of Enforcement made. It is basically the dry-weather flow elevated by 4 MGD.

So you can see that there is our analysis

based on the modeling of the rainfall, and the response to the system to it. It showed that the peak flow actually occurred very near when the pumps failed, and that it went down rather rapidly after that and picks up in here, is where we start to have effluent data again.

What I'm showing in these dotted lines is simply the same information that the dry-weather flow subtracted. So we're just looking at the flow that has been assumed to be I and I, that came down from the watershed to reach the plant.

Again, this is the rainfall. Our analysis is shown here in the dotted line. And again, the peak was reached around the time the failure occurred and went down pretty precipitously, because as you can see, it was very little rainfall after the spill started and it had only peaked a little bit the following day.

The blue dash line is what the Office of Enforcement's assumption was for what the I and I was. And as I mentioned, it was basically a flat line at 4 MGD. So they're assuming that the infiltration inflow was well above the normal dry-weather flow that occurred at a rate of 4 MGD throughout the whole spill period. Whereas our modeling shows that it was

obviously considerably lower.

The difference between their dotted line and our dotted line is the major difference in the spill estimate that we made. So our spill estimate was about 400,000 gallons less than the Office of Enforcement's estimate.

Now, if you recall the previous testimony, the justification for using the constant I and I, was related to the flooding. Our hydrograph represents the flow that would have reached the plant in the absence of the flooding, because it is based on nonflooding events. We looked at 14 events. This was the only one event where there was actually flooding that occurred. So that is correct.

However, the reason that we believe this is still the correct curve is because the floodwaters that occurred during this event, were in the vicinity of the plant only.

They were in a downstream area. They were -- you know, we talked about 20 or so manholes that were inundated. What is pretty basic is that during the spill, those 20 manholes were spilling. Flow was coming out of those manholes during that period. So it didn't matter if they were inundated with floodwater. The pressure driving the flow out of

the system at that time.

So in other words, the hydraulic grade line would back up from the plant, was causing those manholes to spill, and so those floodwaters couldn't get in.

We looked very carefully at the observations over the whole time line of what the elevations of the backup of the plant were versus the elevation of the floodwater. And at no time was there floodwater over the rim of the manhole when those manholes weren't spilling.

BY MS. THORME:

Q Okay. So Mr. Giguere, is it your conclusion that the Office of Enforcement overestimated the spill volume?

A Yes, by 400,000, as I mentioned.

MS. THORME: Okay. That is the end of our direct testimony. I ran out of time.

MR. YOUNG: Okay. Cross?

MS. MACEDO: Yes.

CROSS-EXAMINATION

BY MS. MACEDO:

Q Does your model explain the --

MR. YOUNG: Microphone.

MS. MACEDO: Oh, sorry.

Q Does your model explain the peaks in the hydrograph on Monday after 10:00 a.m.?

A Yes. Could you show us figure 6, please?

This is a graphic that shows the observed effluent in blue, and our model flows in red. As I mentioned -- and that's the rainfall here.

So this is obviously the spill period in here. On the following day, your question is, does it explain this spike or --

Q No, I guess -- let me try it again.

Does your model explain the peaks on this slide? Do --

A Which peak?

Q The -- I guess I should say --

A This is due to the operational issues with the pumps.

Q After 10:00 on Monday?

A After 10:00.

Okay. Yeah, so what happened there was that you can see there were issues about pumps. I don't know the details, obviously. But at this point, the pumps come on and off. And then at this point, some extra pumping was brought on-line to draw the system down.

I think my previous graph showed that the model predicted during this period -- it will be helpful to go back.

What you can see is my model line is the red. So during this period in here, the flow is exceeding -- the predicted flow is exceeding what was being pumped, and I assume that was due to some issues getting the pump back on. You can see, it is -- dramatically came up here, and they pumped down the system at that point.

So most likely what was happening there is that there was backup in the system during this period of time. And then it was drained back during this period of time.

And I know there is some evidence of some overflows which were estimated by the District during this period, in which -- so the model actually does show very clearly that there was more flow coming in the system than was being pumped for a few hours there.

Q Okay. Do you know if there was flooding at GB13 -- or excuse me -- at GB15 on North Swing Avenue at 9:30 p.m. on December 19th?

A I believe that is one of the lowest lying manholes, and the flooding overflows occurred until about 10:00 p.m. So I would say that was toward the

very end of it, but yes.

MS. MACEDO: Okay. I have nothing further.

MR. YOUNG: Any redirect?

MS. THORME: No.

MR. YOUNG: Okay. Mr. Jeffries?

MR. JEFFRIES: Nothing.

MR. YOUNG: Mr. Harris?

MR. HARRIS: I wanted to go back to -- it's not this slide, but it was another one that the gentleman was using.

THE WITNESS: The bottom one there?

MR. HARRIS: Yeah, I'm just kind of curious, because it's more quality of a question.

So the sewer plant is right next to the ocean, so it is essentially the bottom of the watershed. And typically after heavy rains and the flooding event, it tends to take a while for a watershed to drain. So you're still going to have a considerable amount of flooding?

THE WITNESS: Well --

MR. HARRIS: And it seems like your prediction or your model is reacting very quickly. It's like it is almost mimicking, you turn the rain off and all of a sudden the flow is decreasing.

THE WITNESS: It is a little hard to tell on

this time scale. I imagine there is probably a lag of two hours or so. I'm not sure. I have not studied that.

What we did do is, like I said, we looked at 14 different events of varying sizes and on varying soil conditions, and the model reflects the rate of the increase of the flow and the rate of the recession of flow very accurately. And all of the calibrations information is presented in our report.

MR. HARRIS: Okay. Thank you.

MR. YOUNG: Dr. Wolf?

DR. WOLF: On a similar vein, you mentioned that you looked at 14 other --

THE WITNESS: Yes.

DR. WOLF: -- examples.

Now, if you looked at data, on what I will call drain ditches and streams, blue line streams nearby, and look at the effect of the watershed effect of drainage and the reduction of rainfall.

To put it in different terms, similarly, I look at your graph, and there is a -- what I would characterize as a direct correlation between the stop of rain and a very rapid response in drop also of the sewer.

Now, if you look at a hydrology model of

nearby streams and, you know, there is a similarity in hydrology, and are you comparing the contrasting of those, and if so, do you have that information available?

THE WITNESS: Well, you're correct that the hydrology of modeling infiltration inflow and sewer systems, is very analogous to the hydrology of runoff in creeks and from watersheds.

Actually, you know, my background was originally in drainage and I adapted those technologies into I and I modeling and I was the first one to do that. And the techniques I have developed has been ingrained in all of the major modeling software now that is being used.

So yes, what we did in this case was to calibrate the model based on specific response in the sewer systems. It is probably comparable to the response in some streams, but obviously each system has to be looked at and calibrated independently. We didn't -- we had no reason, obviously, to look at the stream flow.

DR. WOLF: One more question.

As part of your study that you were requested to perform, if you looked at gallon output on some of the data that was presented earlier -- I will

refer to the KSBY frame of the video -- which has a four-inch-diameter pipe that was showing outflow from that --

THE WITNESS: Right.

DR. WOLF: -- have you --

THE WITNESS: No, I did not review any of that. I was -- I presented what I was asked to do.

DR. WOLF: Okay. So likewise with the pump station opening where water was exiting that facility, that was not part of your scope of study?

THE WITNESS: It would be included in the analysis because if the flow didn't get pumped out of the system, it was assumed that it overflowed or was stored.

So again, there's -- one of the things that -- well, maybe I shouldn't be saying this. But my estimate was that, you know, that is the total volume under the hydrograph between those two hydrographs. There was an adjustment made for that for storage. We know the flow was pumped into slush lagoons.

We know that it backs up into the collection system and gets stored. The District did some calculation on that regard. They took my numbers and then subtracted those storage volumes to come up with the final number of the 670,000 gallons.

DR. WOLF: So did you have a chance to review the calculations that the District had done?

THE WITNESS: No, I did not independently review those calculations. I was aware that -- you know, how they did it. They used a model to calculate the volume system. It was all reasonable.

And as far as 180,000 gallons that was pumped to the sludge lagoon, I didn't -- you know, I didn't go out and measure that or anything, but that was -- that was being done by the District, and I didn't independently verify it.

DR. WOLF: Okay. Thank you very much.

MR. YOUNG: Mr. Jordan?

MR. JORDAN: Nothing.

MR. YOUNG: Mr. Johnston?

MR. JOHNSTON: I just have one question.

You mentioned that the difference between this event and the various rainfall events on which you based your modeling for the -- to essentially to replace the missing influent data, was that the earlier events had not involved flooding.

THE WITNESS: As far as I know, there wasn't flooding in --

MR. JOHNSTON: But that you didn't feel it needed to be taken into account --

THE WITNESS: Right.

MR. JOHNSTON: -- because essentially the -- there was no water coming in from those manholes so there was stuff coming out?

THE WITNESS: Right. The only area that was flooded, was the area that was spilling.

MR. JOHNSTON: Now, wasn't the plant itself also flooded? And I seem to recall testimony that all the sump pumps in the plant pumped into the system itself for treatment?

THE WITNESS: Uh-huh, for some period of time I believe.

MR. JOHNSTON: Did you take that volume of water into account in your calculations?

THE WITNESS: Well, it does not have to be because it's just being recirculated. Again, I'm only looking at what is leaving the plant.

MR. JOHNSTON: No, I understand. But what I'm getting at is -- because nobody disagrees on what was leaving the plant.

THE WITNESS: Okay.

MR. JOHNSTON: The question was, what was coming into that -- into the top of the plant --

THE WITNESS: Correct.

MR. JOHNSTON: -- or should have been coming

into it --

THE WITNESS: Right.

MR. JOHNSTON: -- and what are those projections.

And it strikes me that the floodwaters that are entering sumps and being pumped into the plant system, is part of that influent, part of that projected influent --

THE WITNESS: Yes, it is --

MR. JOHNSTON: -- and is it something that would not have existed in the nonflood situation, such as what you were using as a basis for your modeling; is that correct?

THE WITNESS: Well, we -- our models are calibrated based on-site drainage. The rainfall that falls on the plant site is included in the calibration, so we are factoring that in, okay.

The flooding on the plant, the -- again, there wouldn't be flooding into the -- the hydraulic grade line was always higher than the flood levels, so it's --

MR. JOHNSTON: So there wouldn't be -- there wouldn't be --

THE WITNESS: Any --

MR. JOHNSTON: -- as a result of the flood,

sump water being pumped into the system, that wouldn't happen in normal rainfall events, where there is not flooding in --

THE WITNESS: Well, in --

MR. JOHNSTON: -- in the plant?

THE WITNESS: -- normal rainfall events, there is some pump flowing into the system.

MR. JOHNSTON: Right, but there's not flooding?

THE WITNESS: It -- right.

MR. JOHNSTON: Okay. So do we have any sense of --

THE WITNESS: I don't have an estimate of that volume.

MR. JOHNSTON: Okay. Thank you.

THE WITNESS: I know that it was not pumped very long. I know they turned it off.

MR. JOHNSTON: How long was it pumped?

THE WITNESS: I think somebody else would have to testify to that.

MR. JOHNSTON: Thank you.

THE WITNESS: Okay.

MR. YOUNG: Mr. Harris?

MR. HARRIS: You testified earlier that you -- your estimate is that the prosecution's estimate was 400 --

THE WITNESS: 400,000 gallons.

MR. HARRIS: -- 400,000 gallons over?

THE WITNESS: Over.

MR. HARRIS: Did you do a detailed analysis of their calculation?

THE WITNESS: Yeah, we looked at their calculations and verified the way they did them and understood the assumptions that they made.

MR. HARRIS: And I apologize if you already stated this because it is getting late.

But in your opinion, what did they do that created the overestimate of 400,000 gallons?

THE WITNESS: That -- that they assumed that the infiltration inflow would be constant at 4 MGD for the entire spill period. In other words, that they didn't consider the rainfall pattern. We considered that it had stopped raining, and that the flow came down, therefore there would have been -- there was less flow reaching the plant than they assumed. That is really it in a nutshell.

MR. HARRIS: Okay. Thank you.

MR. YOUNG: Okay. Then let me ask you this -- did you ask him that?

MR. JEFFRIES: I don't know if you did bring up that question.

MR. YOUNG: Can we put up an exhibit, Exhibit 448? Do you have that?

MS. THORME: This is 44.

MR. YOUNG: Of what Mr. Buffleben had testified to.

MS. MACEDO: An exhibit or slide?

MS. JAHR: Are you talking about Exhibit 48 or 49 with the pictures?

MR. YOUNG: It had -- he had graphs, and he had 4 MGD at one point, was the last measurement and then there was a break.

THE WITNESS: I think that was the first slide that I showed.

MR. YOUNG: It might have been.

THE WITNESS: Yeah.

MR. YOUNG: I wrote down 44 and 48 on the bottom right-hand corner. And there is another --

MS. MACEDO: Is it that one?

THE WITNESS: There is one that shows --

MR. YOUNG: Right. So --

MS. MACEDO: Which one do you want?

THE WITNESS: Yeah.

MR. HARRIS: Go to the next one.

MS. MACEDO: This one?

MR. YOUNG: Okay. Well, we can go back. I

just --

MR. HARRIS: He had one where, I think he took the -- I think, they took the base flow, and added it to the --

MR. YOUNG: Yeah, he added something.

MS. MACEDO: Oh, you want --

THE WITNESS: It was the previous slide, right there.

MS. MACEDO: Oh, you want the green?

MR. YOUNG: Yeah.

MS. MACEDO: There you go.

MR. YOUNG: So why is it incorrect to make the assumption that the flow, the I and I into the plant is --

THE WITNESS: Constant.

MR. YOUNG: -- constant in just connecting up the 8.4 for at 10:30 like he did, and then, you know, when everything was up and running again, you still have got the same kind of treatment through the plant --

THE WITNESS: Well --

MR. YOUNG: -- and doesn't that seem to indicate that you have got the same amount of water coming into it?

THE WITNESS: No, it --

MR. YOUNG: What does it indicate then?

THE WITNESS: Well, what does what indicate?

MR. YOUNG: The fact that when they get everything up and running again, they come up to just about the same.

THE WITNESS: It could be nothing. It could be coincidence. Basically, if you look at -- can you go back to my Exhibit 6?

Okay. So what happens in a sewer system when it rains, is the flow goes up. It's just like it does in a creek. So when it stops raining, it goes down.

And so what this red line is showing is what our model says would have happened. It reaches a peak right about the time of the pump failure, which is represented by the blue line shooting down. And then it would have come down like this (indicating). They assume that it stayed up like this (indicating).

What this is, is emptying the drainage. The emptying is the stored water from the collection system. And also a draining back -- by this time, the spill had stopped and the ground was very saturated and it was -- they were drawing it back in.

Once the sewer system had caught up and then the levels in the pipes had gone down, then there

was a gradient with the groundwater, and that groundwater comes in. And so that is why this is as high as it is back here.

MR. YOUNG: Okay. Mr. Harris?

MR. HARRIS: Did you -- as part of your modeling efforts, did you calculate the storage volume of main trunk lines and the lateral stuff to the point where the spills occurred out of the manhole covers?

THE WITNESS: That was done by the District.

MR. HARRIS: And do you know what that number is --

THE WITNESS: It's --

MR. HARRIS: -- in terms of what the storage capacity was?

THE WITNESS: It was it was about 200,000 gallons.

MR. HARRIS: So up to the point where the manholes were popping --

THE WITNESS: Well --

MR. HARRIS: -- so to speak, it was -- the storage was 200,000 gallons?

THE WITNESS: Well, there was an initial number of 180,000 gallons that the District presented, I think, in some earlier submittals. That was the storage from when the spill started, the pipes were

about half full or so, up through the point where the spill would start. And that was used to estimate that it would take about a half an hour, and it was about 180,000 gallons.

Okay. Subsequent to that, in discussions with me, I said, well, the levels kept rising above that. There was additional storage in the system. Just because the spill started, you know -- they lost the head on top of that.

So they did another assessment. They added the manhole volumes, and that ended up, I think being a little closer to 200,000 or so.

MR. HARRIS: So if you took the maximum at the peak, right when the rain shut off, the maximum storage that could be calculated for the laterals and the trunk lines, would have been --

THE WITNESS: The storage above --

MR. HARRIS: -- 200,000?

THE WITNESS: -- yes, the storage above that.

MR. HARRIS: I mean when the sewer plant, all the way to the very last manhole that is popping in the system, the highest elevation, and if you look at all trunk lines and all the laterals, what would your storage be at that point?

THE WITNESS: Well, that is what they would --

MR. HARRIS: A couple hundred thousand?

THE WITNESS: A couple hundred thousand, yes.

MR. HARRIS: So on your graph though, you were talking about storage. But if you look at your blue lines -- the blue line, which was the F1. It's really low, right?

THE WITNESS: Yeah.

MR. HARRIS: And then all of a sudden, once the plant you said started to empty the storage, it goes from almost nothing, back up to almost --

THE WITNESS: This is still spilling --

MR. HARRIS: -- seven and a half.

THE WITNESS: -- this is still spilling during this whole period. As long as my red line, the flow coming in is greater than the flow going out, the spill is still occurring.

Okay. And then at this point, what it is saying is that the amount of flow coming into the plant is equal to what they are pumping.

Okay. Now, at this point though, the system is full, so they have to continue -- and actually at this point, for -- between 6:00 p.m. and 10:00 p.m., there was some small amount of overflow still occurring because the system was still elevated,

okay.

So by about 10:00 is when the spill stopped. And they had to keep pumping at a high level to draw down the stored volume, and as I mentioned, to -- they were essentially draining the soils in the vicinity. Even after the spill stopped, there was a lot of groundwater in the trenches and the sewer trenches and the ground around the sewers that's still near the ground level. And the hydraulic grade line is being dropped dramatically at this point, because it's caught up, and then that creates a gradient. And so the sewer comes to the drain, and so they have to keep pumping and pumping until they actually are draining the trenches, as well as the water in the sewer.

And they are draining the sewer down to a very low value. Whereas, when they started, it was at a high value, and the pipes were fuller. But they dropped it down actually, to the point where they are completely caught up in the middle of the night when flows are very low, and the depths in the sewers are very low at that point. So that is additional volume that had to be pumped down.

MR. HARRIS: Okay. Thank you.

THE WITNESS: Okay.

MR. YOUNG: Any other board questions?

Okay. Thank you.

MR. JEFFRIES: I do have one.

MR. YOUNG: Mr. Jeffries?

MR. JEFFRIES: How long do you think that the overflows from the manholes duration time were? Did you calculate that?

THE WITNESS: Well, we -- I mean, this is evidence that was from the 11:00 to 10:00 p.m. --

MR. JEFFRIES: Right.

THE WITNESS: -- and that is consistent with this, and what we show is --

MR. JEFFRIES: Well, let me just --

THE WITNESS: Yes, go ahead.

MR. JEFFRIES: -- go a little bit further, because there was evidence shown that the next day, there was still --

THE WITNESS: Okay.

MR. JEFFRIES: -- the manholes were still showing there was discharge from different manholes?

THE WITNESS: Yes.

MR. JEFFRIES: And so to me it looks -- and you said that you were trying to dispute there was a straight line of the numbers, because it had dropped. Well, if that was the case, then why were we still having discharge from those manholes?

THE WITNESS: Okay. If -- you're talking about the 20th?

MR. JEFFRIES: The following day.

THE WITNESS: The following day.

So here's the following day. What the model shows in the effluent, is that right around that point in time, that should be sometime after midnight maybe. I'm not sure of the exact time shown here, but they are about equal, okay. And they have caught up basically.

Now, here you can see rainfall -- the colors a little funny -- but it did rain on the next day, and the prosecution team mentioned that as well. And that is the rainfall there. So that causes us to -- that caused the flow to increase a little more than it would have.

You can see that -- well, you probably can't see, but this is the normal dry-weather flow line here. And so the flow didn't get back to the normal dry-flow line because of groundwater infiltration.

But then at this point, there is a little bit of rainfall and infiltration as well, and that is causing this to rise. And as I mentioned earlier, the reason that there were some overflows on that morning, is pretty evident here that the flows exceeded what was

being pumped.

And I can't testify to what was going on here, but it is pretty clear to me that there was some problems getting some pumping on-line because immediately it shot right up. So something happened at that point, and they got caught up and at that point they drained the system back down.

So I did not estimate the volume of the spill on the 20th, okay. That was not part of what I did. That was estimated by the District based on their observations of flows out of the manholes.

MR. JEFFRIES: Now, the information that you calculated was provided by the District?

THE WITNESS: Only the storage volumes. I calculated -- I did the modeling, and I calculated the amount of flow that would have overflowed if none of it had been stored, which was about 1.1 million gallons, okay?

And so you start with that. And then we know that 180,000 gallons was pumped out into the sludge. So you subtract that. We know there was some -- obviously, the filling of the collection system overflow. That later came back and got treated, and that is about 200,000.

So those are the two major factors that

go from the 1.1 million that I computed, to the approximately 700,000 gallons you have to subtract in that storage.

And the storage -- again, the storage volume estimates were done by the District. That is the only part of this analysis that I used District information for.

MR. JEFFRIES: I understand. But the prosecution team showed that the analysis done by the District probably -- or might be erroneous because of the graphs and the information of the manholes that shows the discharge.

THE WITNESS: Okay. Let's be clear on that. Now, the District did a completely separate calculation of overflows based on manhole-by-manhole estimates, okay.

MR. JEFFRIES: Right. Did you use --

THE WITNESS: I didn't use any of that.

MR. JEFFRIES: Okay.

THE WITNESS: -- except for a minor amount of it for -- well, for the spill on the 20th, okay. I did on -- you were just asking about the next day.

MR. JEFFRIES: Right.

THE WITNESS: And the spill between 6:00 p.m. and 10:00 p.m. when the hydraulic grade line was very

low. By then we had caught up, and so my lines had crossed. So it is a very small amount, okay. It doesn't affect the results that much.

What I did use from the District that is important here, is the volume pumped to the sludge drying beds, which have nothing to do with the -- anything that the prosecution team is commenting on. In fact, I don't think there is any dispute about this volume, and I have not really heard anything that question these volumes as well.

MR. JEFFRIES: I don't think the 180,000 is in dispute.

THE WITNESS: Right. And the storage in the system -- well, we have not heard any dispute on that. I think that was generally accepted.

What the prosecution team did was to allow for that by starting the calculations at noon instead of at 10:30, which is a very incorrect way to do -- we actually use pipe configurations and elevations to compute this volume.

MR. JEFFRIES: All right. Thank you.

THE WITNESS: Okay.

MR. YOUNG: Mr. Harris?

MR. HARRIS: Just a quick question.

The 674 is your model calculated spill

volume?

THE WITNESS: Okay. Mostly what I did was this number, okay (indicating)? These numbers --

MR. HARRIS: So estimate of the spill is one million --

THE WITNESS: No. No, that is not the estimate of the spill. That is the estimate of the difference between the influent and effluent between this period of time.

We know that there was some storage, and so these are subtractive values from that. There is also some additional values for the spill on the next day.

MR. HARRIS: So what is your total volume spill?

THE WITNESS: Right here, 600 --

MR. HARRIS: Oh, okay. You've answered my question.

THE WITNESS: -- and 74.

MR. HARRIS: All right. Thank you.

MR. YOUNG: Dr. Wolf?

DR. WOLF: It says -- to be clear, your 400,000-gallon difference, does include the spill of the following day or it does not?

THE WITNESS: Yes. I think the -- our estimate

is -- the District's estimate is spill on the following day, I believe is the same number that the prosecution team used for that. So I don't think that -- they mentioned that they thought it was higher, but I never saw any other numbers.

DR. WOLF: Okay. Thank you.

MR. YOUNG: Okay. So that completes this witness.

MS. THORME: Thank you, again. He has to run to catch a flight.

MR. YOUNG: Okay.

MS. THORME: So can we take a dinner break, possibly?

MS. MACEDO: No problem.

MR. JORDAN: No.

MS. THORME: Yes.

MS. MACEDO: I'm fine with it.

(Discussion held off the record.)

(Dinner break.)

MR. YOUNG: All right. Let's go back on the record.

We will begin with our public comment cards. Everyone will have three minutes to address the board.

Allen Mayer (phonetic), are you still

here?

Okay. He's not.

Okay. Greg Cobb?

MR. COBB: Yes.

MR. YOUNG: Okay. He will be followed by Karen White, and then I don't see Gordon Henley. Gordon Henley is not here, is he?

MR. JEFFRIES: He was here earlier.

MR. YOUNG: He's not here now. And then Joe Shackler. Okay. That will be the third speaker. Okay.

UNIDENTIFIED SPEAKER: There should be one up there for Barbara Mann, too.

MR. YOUNG: Pardon?

UNIDENTIFIED SPEAKER: Barbara Mann.

MR. YOUNG: Yeah, I'm just reading the next three in line, so people know when they're going to speak.

Okay. So folks, three minutes. Go ahead.

MR. COBB: I want to thank the board for --

MR. HARRIS: Is the microphone on?

MR. YOUNG: It is.

Okay. Sir, go ahead and state your name and address.

MR. COBB: My name is Greg Cobb. I live at 559 Honolulu Avenue in Oceano. And I'm about 300 feet from the front entrance of the Sanitation District Plant, so I have firsthand knowledge of what happened on the day of the 19th, obviously.

And the first thing I'd like to comment about is that plant is built on a very low-lying area that is surrounded by water. And in my understanding of when I toured the plant about six months ago, there is 40-foot-deep water well around the headworks area, because the water table in that area is very high. It's within three or four feet of grade on every time of the year anymore. So infiltration of water into that area is, I'm assuming, pretty common.

It's obvious from the testimony that the plant has major malfunctions. In my opinion, they were avoidable had certain maintenance things been done.

I don't believe that this rain event -- I have been there almost 20 years -- I don't see that this rain event was anything more than a seven- or a ten-year event. We have had rain like that numerous times in the past. It's never caused these kinds of problems before. And I was just sometimes flabbergasted to find out about the amount of problems and lack of pump operation and numerous things at the

plant in all of this testimony today.

I do want to thank all the operators at the plant, at the time of the spill. It sounds like they did a heck of a job trying to contain the spill in getting that plant up and running.

One of the things I do want to comment about is I didn't have a nice comment at the end of all the testimony today, but obviously it's getting late and a lot of us have families and we would like to go home.

One of the things I would like to comment about is on the RNC report, the person that testified -- I don't remember his name -- stated there was no floodwater over any of the manholes prior to the event of the plant failure when the pump shut down. And that is absolutely not true.

In our neighborhood of that area, there is probably at least five or six manholes. And there is one directly in front of my house. And those manholes are -- it only takes half an inch of rain to cover those manholes.

And at that period in time, those manholes were probably under water. I know on Security Court and in front of my house and out on Aloha, those manholes were probably underwater for hours, five or

six hours prior to the event at approximately 10:30 a.m. that morning. So there is substantial amount of I and I that probably entered the system.

The 8.4 MGD that was stated when the plant failed at 10:30. My witness account of that was that the water coming out of the manholes, even though the street had water over the top of it, was almost negligible. I couldn't even perceive it was a problem at that time.

The peak of the water coming out of the flow rate, seemed to happen about 2:00 -- 1:30 or 2:00. That is when the manholes were substantially overflowing. It was very obvious. It was up at -- to well over -- I think off the charts. It had shown it was like 275 gallons per minute, I believe. That manhole from my house was spilling more than that at 2:00 in the afternoon. So I --

MR. YOUNG: Mr. Cobb, your three minutes is up. Can you just conclude it?

MR. COBB: All right. I'd like to conclude that the peak of that outflow was more like 10 MGD, and their constant MGD was probably a more accurate representation. Thank you very much.

MR. YOUNG: Thank you for your comments.

Karen White?

MS. WHITE: Good evening. Karen White, 1566 (inaudible) Lane, Halcyon, H-a-l-c-y-o-n.

I am a member of the Community District Service, but I'm speaking only for myself tonight.

I heard nothing -- I have been here all day and I have heard nothing about what caused the flood. The flood wasn't caused by the sewer plant. The flood was not caused by the manholes overflowing. The flood was caused by the Oceano Lagoon at Meadow Creek, which runs in Grover Beach and Arroyo Grande and the back of Arroyo Grande. That was the water that came in and flooded the plant. You have not discussed that at all.

Now, there would not have been a flood had San Luis Obispo County Flood Control done their job. You're not looking at them. But they are the ones that failed to open up the floodgate, the weir -- it's really a weir -- between the Oceano Lagoon and the lower swamp area down there where the people live and where the plant is. It's all swamp, but -- and you wonder why the water started disappearing.

Well, at 3:00 a.m., approximately, on Monday morning when the tide went out, they got the weir open, and they drained the water into the creek channel right at the ocean. Nobody is looking at any

of that. And that is all a major contributing factor. There wouldn't have been a flood.

And the lady that I would object to talking today who said that there would have been a challenge with the sewer plant with the flood. No, there wouldn't have been, because even if the pump had shorted out, they would be able to open that valve that was not buried by sewer water, because it was not the rain. It was not the Arroyo Grande Creek. It was not the manholes. All that was superfluous, it was the lagoon. The lagoon just completely rose. Anyway -- and if you want to know more about that, go to 101A (phonetic).

And I think it's really sad that you're considering taking 1.3 plus million dollars from me, because that is my money. And it is my money that should go to correct the Oceano Lagoon and should correct the weir. And should correct the water coming from the San Luis Hills into Meadow Creek that runs into the lagoon that comes clear to Oceano.

And without that, we're going to have another flood, and I will guarantee the sewer plant will be flooded again, and they're going to be in trouble. But it is not their fault.

Anyway, that is my complaint and thank

you.

MR. YOUNG: Thank you for your comments, Ms. White.

Joe Sharker? And then is Brad Snook here?

MR. SNOOK: Here.

MR. YOUNG: Okay. And then is Jennifer Josack (phonetic) here?

UNIDENTIFIED SPEAKER: She was here.

MR. YOUNG: Okay. She's gone?

UNIDENTIFIED SPEAKER: Yeah.

MR. YOUNG: Okay.

MR. SHARKER: Joe Sharker (phonetic), 577 Security Court. I did take the oath.

It's not the District. It's the owners of the sanitation plant, Arroyo Grande, Grover Beach and UCSD, we are the owners, and you are attempting to fine us. We are the owners.

I respect all of you that are here. I respect all the work that you're doing. You're all on salary. We, as taxpayers, we pay you. We pay -- we're paying the prosecutor. We pay the defense. We pay our taxes.

I took a day off of work to attend here. It's a travesty the way you set us at 8:00. My family

is waiting for me. So what you're doing is, now you're saying that We're going to fine you for something else. That just does not make sense to me.

The 4 million or the 5 million dollars, that is our money. The ability to pay, does not make any difference. That is our money. The rates -- talking about the rates. That is our money.

I gave you a copy of what I wanted to read tonight. You each have it. I want to pick a couple of paragraphs out of it, and this is the main one.

Another concern is the loss of wildlife habitat for most of the Meadow Creek Lagoon. Not from the sewage spill, but from progressive siltation buildup.

Not long ago there was an abundance of egret herons (phonetic) and other rare birds. In addition to the birds, there was an abundance of turtles, snakes and other water creatures. The birds are no longer there. The water creatures, they are gone.

So if the State parks wants to protect the creatures in the lagoon, they failed. There has been no maintenance. We don't need more studies. We don't need consultants. How about taking the time and

go down to see -- as Karen White just said -- what the main problem of the flooding is -- the County, State parks.

Of course, the sanitation plant is no help, because they didn't do certain things right. But you're missing the boat. You've got your head in the sand. We need agencies to come together. I challenge you to get with all the agencies involved. You're concerned about water quality. Go down and look what it has done to the lagoon. It has driven all the habitat -- I used to have all water in front of my house. There is none there now. It is all reeds and silt build up.

As a result, water cannot flow out of the island. And if it even did make it to the lagoon, the water that goes into the Arroyo Grande Creek, it can't flow anymore. You guys are -- you're on the wrong track. You're taking an easy approach. But you're on the wrong track. Open up your eyes. Take off these blinders. My goodness, this is a big problem.

And as Karen said, it is going to flood again, unless something is done to the lagoon. Unless something is done to allow water to flow into the lagoon from the island. Thank you.

MR. YOUNG: Thank you for your comments,

Mr. Shackler.

Okay. Brad Snook? Is Shelly Hamilton here? No? Okay, Barbara Mann?

MS. MANN: Here.

MR. YOUNG: Okay. Jeff Pienak (phonetic)?

UNIDENTIFIED SPEAKER: He's gone.

MR. YOUNG: He's gone? Okay.

MR. SNOOK: My name is Brad Snook. I'm the chairman of our San Luis Obispo County Chapter of the Surf Rider Foundation.

I would say that the discharge permit that the Sanitation District that they hold, is a privilege. And when there is a violation that happens and sewage discharges into the ocean, that is an illegal act. So the District needs to be held to an illegal act.

This is the first opportunity for our chapter to speak to a government agency that is interested in quantifying and publicly disclosing the effects of mismanagement in the South San Luis County Sanitation District.

For over a year and a half, our chapter has been asking both the District board of directors and the stakeholder city councils to authorize an independent investigation of potential malfeasances of

our wastewater treatment plant.

Our request for an investigation would make good, logical sense following public disclosures by whistle-blowers and a thorough, transparent investigation of operational and financial actions that would benefit both the District and the public they serve.

Trust is important where environmental health is concerned. If beachgoers can't trust the way water quality is measured, how can we trust the actions of those responsible for managing it.

With the sanitation District ignoring three separate investigations by a private investigator, the San Luis Obispo County civil grand jury and by an internally appointed peer review committee, all recommending the change in leadership, are acknowledging the perception problem with multiple conflictive roles of the Wallace Group that South San Luis Obispo County Sanitation District board of directors has established that leadership is untouchable.

I believe the amount of time afforded the public, the many reports of Oceano homes being flooded by sewage, the critical reports of inadequate leadership and potential mismanagement at the District,

the many reports of comprised environmental standards and ethical deficiencies of District leadership, have given the public many opportunities to intervene and demand reform. However, the public's voice has been a whisper, and that has allowed the District leadership to continue the snowballing effect that will lead to this fine and potentially to many other claims, against the District and its repairs.

How can this happen? Surfrider Foundation has been asking for an investigation for one and a half years. And somebody needs to find out whether malfeasance played a role in the South San Luis Obispo County Sanitation District.

If you support reduced fines in this case, you compromise the legislature and management with sewage discharge in our county and in our state. If you support a reduced fine in this case, you prevent another opportunity for the District taxpayers to hold the sanitation District responsible.

Surfrider Foundation requests you uphold the fine set by the Water Board, not the prosecutors. We also ask for your assistance in establishing an SEP (phonetic), whereby one half of the fine can be passed to the County for our water quality testing.

After all, with the District ocean --

beachgoers in San Luis Bay from around the world, have suffered compromised environmental health and until the water quality can be measured on a more realtime basis, the County's program represents the well established standard.

MR. YOUNG: Can you please conclude?

MR. SNOOK: I will.

There is another more general point to be made regarding sewage plants that are built in flood plains, and/or within a tsunami zone.

MR. YOUNG: Well, conclusion --

MR. SNOOK: Oh, okay.

MR. YOUNG: -- mean, wrap it up in a sentence or two.

MR. SNOOK: Okay. Doesn't a plant that meets either of these criteria, lose its ability to claim a spill due to flooding was unavoidable? Thank you.

MR. YOUNG: All right. Thank you for your comments, Mr. Snook.

Barbara Mann? And then Linda Austin, are you here?

MS. AUSTIN: Yes.

MR. YOUNG: Okay. Then Marilee Highman (phonetic)? Okay. Those are our last speakers.

MS. MANN: My name is Barbara Mann. I live at

1630 Front Street in Oceano. I was a member of the Oceano Community Service District for 11 years. I have been gone now for two years, so I do know a little bit about a few things.

I just want to point out a couple of items to you folks, that I hope you will take into consideration when you're looking at the amount of the fine. I would hope that you would reduce it.

Number one: The San District, as we lovingly call it, is owned by Oceano, Grover Beach and Arroyo Grande.

Now, it's not owned by John Wallace. It's not owned by the Wallace Group. It's owned by the people that live in these three communities. It's ours. We -- you know, the statement was made here today that they are going to make an example of the San District. Well, that is real great, if the San District was one person. It isn't.

The person you're going to be hurting, are the little people who will be paying further rate increase, because I'm sure the way you know -- you have looked at their budget and things like that, they have major projects every year. Those are put on there and are the big things they hope to do this year.

But they also have 10- to

15-year-long-range plans, so you're trying to punish us now for saving our money to be able to take care of all these projects that we want to do.

So say, you fine us the big amount of money and we have to pay it, then what happens next year when some major budget items don't get done? We will be right back here again. And it is not right.

I really hope that you sit and think what you're doing. But to decide, oh, I am going to come down really hard. You know, we're going to set an example. Be a hero for the State of California. That is not right. You know it isn't right. And I just really hope that you stop and think about what you're doing.

I appreciate your time and I wish you the best.

MR. YOUNG: Thank you for your comments, Ms. Mann.

Linda Austin?

MS. AUSTIN: My name is Linda Austin, and I live at 636 Air Park in Oceano. I'm a lifelong Oceano resident. I have been a neighbor of the sewer plant since it was built. And I'm just here to speak about the sewer plant as our neighbor.

It has always been a good neighbor for

all these years and, you know, the first incident was because of this big flood. I was present during the flood. I had my business property. Some of our -- some rental properties we manage were affected by the flood. My friends and neighbors had their homes affected by the flood. I was in the floodwaters. They were in the floodwaters. We were all out there. No one got sick. I was never aware of anyone becoming ill.

And in all my 60 years there, I have never seen a flood like that happen. So I -- that is kind of what I want you to take into consideration, is the amount of water that came into the neighborhood that day. And we have heard some of the reasons here why that happened.

And I just don't think it's right to take this and put all the blame on this one entity, the Sanitation District, because what it's doing is what we've heard is it's affecting all of us, the residents who live in Oceano and Arroyo Grande and Grover Beach.

And there was a lot of contributing factors that -- you know, to the flood. And we heard here today one of the things is that the Sanitation District has five million in reserves, so there is an ability to pay. That's fine, but those reserves are --

like I said, it's our money to keep the plant going for upgrades and repairs and long-range plans, and we want to keep that money to keep the plant going because it's in our best interest. We live there, and so we want a plant that runs effectively and smoothly and is in good working shape.

So I'm just -- I would like to ask that you would really take into consideration all these things in this fine that I feel is extremely excessive.

Thank you very much.

MR. YOUNG: Thank you for your comments, Ms. Austin.

Marilee Hyman (phonetic)?

MS. HYMAN: I'm Marilee Hyman, Shoreline Drive, Pismo Beach.

Mr. Chairman and members of the board, you find a nicety (phonetic) for wastewater spills at the same time we were actually correcting the problem and struggling with the 18 million dollars cost to upgrade. So I'm sympathetic to how much your fines can hurt a community.

An open statement here said you have the power to do one of three things: Accept, reject or modify the penalty.

For accept, there has been enough doubt

cast on the accuracy of some of the calculations to not just accept the penalty as proposed. For example, are you really convinced that an analysis done with a two-year-old information is adequate? And the presenter projected to a certainty, he didn't approve it. I can project some figures, too. He started with 2009 with 6 million; 2010, 5 million. Keep going to 2011 for -- you know, in a couple of years, you're going to take the lion's share of that cash that they have. And two years can take you from a surplus to a deficit in today's economy.

Second, reject. It's hard to reject the staff's recommendation outright. Especially with the State's high priority of wanting to make a punitive point. The State wants the District to upgrade projects soon. I don't really see the direct nexus with the improvements that prevented the December event. And you don't really need to make a sacrificial lamb to make a point here. It's well known that you're a tough bunch, and that you keep water clean. It's important.

Third, modify. But you can modify the penalty through a consideration of justice and other factors. Take the cash. That cash came out of the pockets of the poor. A large fine hurts a poor

community. It takes away the very resources they need to address that punitive point that the State wants to make.

I'd like to tell you a short story about a judge in New York City traffic court. We were heading to the emergency room. My husband was rushing me, at eight-and-a-half months pregnant, to the hospital.

He rushed out of the car at the emergency room entrance to assist me inside. Short story: Our car was impounded and towed. We were fined. And there we are in that court. And we watched that judge -- guilty he gaveled. Guilty, one after another. Guilty. And so when my turn came, he looked at me and said, Well, obviously your facts are true. At that point, I was way overdue.

He slammed the gavel down and said guilty. And then he said, "fine waived." That was a lesson for me. Hard-line facts may say guilty. But what you can do about it, is a different story. You can decide the consequences. You decide the justice.

Thank you for your time.

MR. YOUNG: Thank you for your comments, Ms. Hyman.

That concludes our testimony of interested persons. So we will now resume back to, I think -- was Mr. Buffleben finished with his testimony?

MS. MACEDO: He, I believe, was ready for cross.

MR. YOUNG: For cross. Okay.

CROSS-EXAMINATION

BY MS. THORME:

Q Good evening, Dr. Buffleben. I'm sorry for the break in between your testimony.

So you had testified that you thought that the Office of Enforcement prosecution team's volume estimate was a reasonable estimate; is that correct.

A That's correct.

Q And no matter how you cut it, it's still just an estimate; isn't that correct?

A That's correct.

Q Okay. And I'm not an engineer, but why would you compare a dry weather -- normal dry-weather day, instead of using a normal wet-weather day?

A Well, we split it up, because dry-weather variations in the hydrograph going through the base flow of the sewer system, is very regular. So that is

our starting point.

When you look at the I and I for wet weather, you can do hydrographs, and you can generally, in most cases, get a good estimate of the extra water coming into the system to get a better estimate of the flow.

Q Okay. But are rain flows ever constant, as you assumed?

A Are rain flows ever constant?

Q For hours and hours on end?

A It was not in a shape of a hydrograph, and this was not a storm event -- a normal storm event either, so no, hydrograph is not constant forever.

Q Okay. So I think you testified that multiple spill method estimate methods can be used; is that correct?

A That's correct.

Q And didn't the District provide the Water Board initially right away, in their five-day report, with three different estimates?

A I would have to see the report. But the District did come up with three different estimates, yes.

Q Okay. And does the State Water Board, when you provide sanitary sewer overflow training, do

you teach people how to estimate during flood conditions?

A During flood conditions? Well, I -- first of all, I characterize the Water Board had a training session about how to do the different methods. So they didn't necessarily say, This is a method to which you apply in each situation. So that was really one of the points of the training method, is you really need to take the circumstances of the individual case to determine which is the better and best method.

Q Okay. But does the State mandate that a certain method be used by dischargers to estimate spills?

A No, it does not.

Q Okay. And do dischargers have to certify under penalty of perjury, that their spill estimates are accurate?

A Yes, they do.

Q And are they subject to criminal and civil penalties for falsification of estimates?

A Yes, I believe so.

Q So what would be the incentive to not accurately report?

A I'm not going to speculate on the incentives. I mean, there is clearly some incentives

to low ball your estimate so that you can get a lower fine.

Q Okay. So you said that normally wastewater treatment plants are required to treat storm water; is that correct?

A Say that again?

Q That wastewater treatment plants are normally required to treat storm water?

A It depends on what is in the permit.

Q Okay. And in the District's permit, doesn't it reference the industrial storm water permit?

A I'm not as familiar with the District's NPDES permit.

Q Okay. Did you make any allegations in the administrative civil liability claim complaint that the District failed to comply with the industrial storm water permit?

A We did say that the permit -- the NPDES permit requires them to treat storm water and that was a prohibition that they violated in this event.

Q But did you claim that they violated the industrial storm water permit?

A I do not know.

Q And isn't that requirement for industrial storm water treatment, that it's rain water falling

on-site?

A I'm not familiar with that.

Q Okay. Is there a difference between rainwater falling on the site, and floodwater coming in from outside?

A I don't know.

MS. THORME: Okay. So Exhibit 29, please. Can we have the -- do we have the screen on?

MS. MACEDO: It's C --

MS. THORME: Yeah.

MS. MACEDO: -- right?

BY MS. THORME:

Q Okay. So this -- there was an e-mail in here about the photo? Okay, at the bottom -- at the bottom there is an e-mail. Are you aware of this e-mail?

A Yes, I am.

Q Okay. Does the e-mail say that the -- "per the attached pictures, sewer flowed back up into his bathtub, but did not spill out"?

A I'm not reading the e-mail word-for-word, but --

MS. THORME: Can you highlight that, what I just read, please, for the "per the attached picture?"

Q Okay. Do you see that now, "per the"?

A Yes.

Q Okay. Do you have any evidence that it did spill out of the bathtub?

A No.

Q Okay. And then it says that, "apparently a small amount overflowed out of his toilet as well. He was able to clean the spill out, as it was just a few gallons."

Do you have any evidence that there was more that came out of the toilet or that it mixed with storm water coming in from outside?

A It mixed with the floodwaters that were inside his bathroom.

Q What evidence do you have of that?

A The photo evidence and his testimony.

Q Okay. His testimony is hearsay, so what evidence do you have?

A There is the photo evidence.

Q So the photo evidence was attached to this e-mail?

A That's correct.

MS. THORME: Okay. Can you bring up Exhibit 24, please?

Q So this document was a CIWQS report that you testified that you created?

A I did not create this report.

Q Okay. Who created it?

A Jim Fischer did.

Q Okay. Did he authenticate it?

A Yes.

Q Okay. And on here, there are several claims of sanitary sewer spills, and we had submitted with our evidence Exhibit 93, about the incorrect allegations that these were District spills.

Did you review that evidence?

A Exhibit 93, I don't remember the particulars of it.

MS. THORME: Okay. Could you bring up 93, please?

Q Were you aware that none of those four spills that were in Exhibit 24, were District spills?

A If that is what you're contending.

Q Okay. Well, we will walk through them.

MS. THORME: So this was -- if you can, down at the bottom -- so is -- no, can you blow up just like the middle. Maybe it's the second page. Sorry. The second page.

Q Okay. So who does it say the discharger is at the top?

A It says, "Oceano Community Service

District. "

Q And is that a separate entity from the Sanitation District?

A Correct. That is a satellite system.

Q Okay. So that would not be a District spill; is that correct?

A That's correct.

Q So there, who is that discharger?

A That says City of Arroyo Grande.

Q So that is not the Sanitation District; is that correct?

A That's correct.

MS. THORME Okay. The next one, please.

Q Who is the discharger on this one?

A The City of Arroyo Grande.

Q And that is not the Sanitation District; is that correct?

A Correct.

Q Next, please.

And is this a plugged private sewer lateral, belonging to a private entity?

A What was the question?

Q Is this a plugged private lateral sewer spill by a private entity?

A It says the discharger is TRW Enterprise.

Q And then does it say "private lateral"?

A Let me see where you're looking at -- yes.

Q Okay. So were any of those four spills that were in Exhibit 24, that were claimed to be the District spills, District spills?

A It does not look so.

Q Okay. Thank you.

And did the District extensively investigate possible spill locations?

A Extensively? I don't think I would characterize it in that method.

Q Okay. Did they provide ample photographic evidence of their efforts?

A They did provide photographs. I wouldn't necessarily characterize that as ample.

Q Do you have any evidence that additional spills occurred that were not reported?

A We have testimony today, yes.

Q By whom?

A Mr. Appleton.

Q Where did that happen?

A That happened at the plant. I'm speaking of the day of the event.

Q Okay. And what evidence do you have that

that left the wastewater treatment plant site?

A That left the wastewater treatment? Well, it exited the headworks, so it was discharging onto the site.

Q That wasn't my question. My question was, what evidence do you have that it left the treatment plant site?

A There was substantial discharge, likely out of that point. And the District concluded that most of the floodwaters that were coming out of the manholes, exited the plant with the floodwaters, and therefore, it seems logical to conclude that that was a similar discharge point mixed with the rest of the sewage and storm water was being discharged out of the plant site.

Q Okay. That was not my question. My question was, what evidence do you have? Not what would be the likely conclusion or a reasonable conclusion, what evidence do you have?

MS. MACEDO: You've asked and he's answered it. If you don't like his answer, that's fine.

MR. YOUNG: Hang on. He hasn't really answered it. Go ahead.

THE WITNESS: I have the evidence of the testimony of the -- of Jeff Appleton.

BY MS. THORME:

Q And did he testify that it left the treatment plant site?

A He testified that it left the headworks.

Q And you testified that there is no flow meter on manholes; is that correct?

A That wasn't what I testified. I said that the District wasn't measuring flow out of individual manholes during the event.

Q Are there flow meters on manholes?

A There could be.

Q Normally, are there flow meters on manholes?

A No.

Q Okay. And would the flow meter, in this case, have to go in and out in order to get a completely accurate estimate, as you would desire, for both water coming to the treatment plant and going out of those manholes?

A I'm not sure I understand the question.

Q Okay. So you want to know how much water came out of the manholes. You would need a flow meter that went out, correct?

A Sure.

Q And then if you're saying that the

floodwaters also came in, you would need a flow meter that went into the manholes, correct?

A If you want the most accurate estimate, yes.

Q Okay. So you said that you had a conservative start and stop time to account for uncertainty in I and I; is that correct?

A That is part of the reason, yes.

Q Okay. So you essentially started the spill at a different time than the District said the spills occurred?

A That's correct.

Q So how reasonable is that for you to just chop an hour off to account for uncertainty?

A How reasonable?

Q Yes.

A I stated it is reasonable.

Q And is there any engineering guidelines that you used when you made that decision?

A I just used my best professional judgment.

Q Okay. And you are the only civil engineer that signed off to the technical report and Exhibit 1; is that correct?

A That's correct.

Q And you signed off as a reviewer, not a preparer; is that correct?

A That is incorrect.

MS. THORME: Can we bring up Exhibit 1, please? The first page.

Q So I see in the middle it says, "prepared by Leo Sarmiento, PE," who is a chemical engineer, "and Jim Fischer," who is a mechanical engineer. And then it says, "reviewed by Dr. Matthew Buffleben, PE, civil engineer" so --

A That's right.

Q It says you reviewed it, not prepared it?

A Well, originally Jim Fischer started the first couple of drafts, and I made substantial alterations to it, so that is slightly inaccurate. It was also prepared and reviewed by me.

Q And also there were several other instances of inaccuracies that were found in this technical report; is that correct?

A There were some misstatements, yes.

MS. THORME: Okay. I have no further questions.

MR. YOUNG: Redirect?

MS. MACEDO: No. Thank you.

MR. YOUNG: Okay. Any board questions?

Mr. Johnston?

MR. JOHNSTON: I have no questions.

MR. YOUNG: Mr. Jordan?

MR. JORDAN: Thank you, Mr. Chair.

I'm not even going to try your last name.

THE WITNESS: It's okay.

MR. JORDAN: How many of these have you done, generally, this kind of process where you go through and estimate a spill?

THE WITNESS: Well, this is my first enforcement case as part of a supervisory position, so normally I haven't estimated a spill site before.

MR. JORDAN: You have not?

THE WITNESS: No, I have not.

MR. JORDAN: Okay. So the particular question over -- that was raised up before from the last witness on the drop-off in the rates, your use of the straight line and the other witness's contention with that drop-off, can you tell me some more about that protocol and rather than the assumptions, is that used widely by the Department -- the Department of Enforcement group, or does it verify it or is it crediblized by other studies that you have done or other enforcement cases?

THE WITNESS: Well, I have done -- I have extensive knowledge of hydrology, and so I do take that

experience into what we calculated for the sewer overflow. And what we really are talking about is hydrology when we're talking about the inflow into the sewer system. And so I draw on that experience and my other work, to estimate what is reasonable in this case.

And so in this case, I would still expect a hydrograph of going up and down. But for the reasons I stated during my presentation, is that, A, at the start point, I feel very strongly that was not the peak. So we underestimated there.

And the second point was that the area was flooded. Now, the model that he was talking about before, it a very good technical model. But I don't believe it applies in this event. And I can get more technical in my review, if you want to.

I mean, this basic model is a percentage of the rainfall. It's called the R factor. And so basically this R factor for this event, was about 3.3 percent and that is how much percent of rain got into the system.

Well, during a flood event, like I alluded -- or stated in my presentation, there is a lot more pathways for water to get into the system. And I know the District is claiming that the pressure in the

pipe system was always greater than the floodwaters. But I think there is evidence in the case that shows that that claim has some doubt.

And so I do believe that there was time that floodwaters entered into the system, and that the floodwaters weren't always held back by the pressure within the sewer system.

MR. JORDAN: Okay. And I just want to give you one more chance to confidently state that, although you drew an average line across there at the four million gallons per day level until the system caught back up, you still feel that that is a very credible under-estimation of what was actually going on during that period of time, right?

THE WITNESS: Yes. In particular because the spill event was on Monday, too. So there might have been some storage that was passed through the system late Sunday evening. But the spill event on Monday, really confirms in my mind that the system was at full capacity probably right around 10:00 or so. And then the next day, that is when the storage -- after they turned on the additional pump at 10:00 a.m. Monday morning, that is when the storage system was brought down.

MR. JORDAN: Okay. Thank you, very much.

MR. YOUNG: Dr. Wolf?

DR. WOLF: Yes.

Dr. Buffleben, I have a couple of questions.

The first one, when the sewer pipeline is near capacity, let's say full, and you do have surface flooded water pooling, do you have the venturi (phonetic) effect of basically drawing some of that surface water into the manhole?

THE WITNESS: It is possible, but I have not really thought about that though.

DR. WOLF: Okay. Earlier on in your presentation, you showed the slide of a four-inch pipeline, this was the KSBY slide --

THE WITNESS: Yeah.

DR. WOLF: -- and it was showing discharge that was on the right side of the slide?

THE WITNESS: That's correct.

DR. WOLF: And you did not give a quantitative value, in terms of what the contribution was. You made the argument that this discharge through a vent, had not been accounted for by the District.

Do you have any estimation of gallons per minute and duration of that event?

THE WITNESS: I did not do the calculations for

that particular manhole. So if you're using the table like the District did, it's assuming that the pick hole size is seven-eighths diameter and a four-inch diameter pipe is much larger than that. So I'm very confident to say that it's much larger than they estimated. And they also included that pick hole value into their calculations.

But I would have to sit down and find the proper equations to do that calculation for you, and I have not done that.

DR. WOLF: Okay. And then my last question is you also mentioned the pump station opening where you had -- there was testimony of -- from Mr. Appleton of the spillover, and I think there was a numeric value of about six inches of water that was spilling out?

THE WITNESS: Yes.

DR. WOLF: Again, any -- and this was just brought up, you know, just a little while ago with some other questions -- any estimation of what that contribution would be?

THE WITNESS: Well, he didn't give a duration of how long, so that would be the first question. And I would also need to know the width of the door. And so that is the weir calculation, like you said.

And so there are equations to develop,

and if I had more accurate width dimensions and how long it was going, I could very easily, with the right equation, figure out an amount.

Now, if you're trying to get a ballpark, you know, that flow would be greater than the manhole. They removed one of the covers on one of the manholes, and they used the table value estimate that was 800 GPM of one inch coming out of that manhole, a 24-inch-diameter manhole. I can confidently say that that door would have been -- that level GPM six inches, would have been higher than that.

DR. WOLF: So that is about 400,800 GPM?

THE WITNESS: No --

DR. WOLF: I'm using my calculator. I'm cheating.

THE WITNESS: No, I would not do the calculation that way. But it is essentially a weir, you can come up with an answer. I have not -- since he was testifying that today, I have not had time to do that.

DR. WOLF: Okay. But you would characterize it as being significant?

THE WITNESS: Very significant, yes.

DR. WOLF: Thank you very much.

THE WITNESS: Okay.

MR. YOUNG: Mr. Harris?

MR. HARRIS: It's getting late, so I'm getting a little punchy so if I sound a little incoherent, I apologize.

The plant and the trunk lines, are they all covered by the NPDES permit?

THE WITNESS: Yes.

MR. HARRIS: Does the District hold a permit for a collection system?

THE WITNESS: Yes.

MR. HARRIS: What does that cover? Does that cover just the trunk lines?

THE WITNESS: I'm not the expert on the permits, but the SSOWDR, so I don't know. Jim Fischer would be able to answer that question in details.

MR. HARRIS: Okay. So I think there has been a discussion trying to draw a line between what the District was responsible for and what other collections systems might be responsible for, and I'm a little unclear.

So if the backup occurs all the way into other districts' collection systems and comes out the manhole covers, who is responsible for that spill?

THE WITNESS: That entity that caused -- that had caused the spill so in this case, South San Luis

Obispo District.

MR. HARRIS: Okay. Thank you.

MR. YOUNG: Okay. So no questions, Mr. Jeffries?

MR. JEFFRIES: No.

MR. YOUNG: None for myself. Thank you very much.

THE WITNESS: Thank you.

MS. MACEDO: With that, the prosecution team rests, and we reserve the rest of it for cross.

MR. YOUNG: Okay. How much time does the prosecution team have?

MR. LODGE: Twelve minutes.

MR. YOUNG: Twelve minutes. Okay. So now how much --

MS. THORME: Can we know how much time we have?

MR. YOUNG: How much time does the District have, an hour?

MS. THORME: The same?

MR. LODGE: 46 minutes.

MR. YOUNG: 46 minutes.

Okay. So how many witnesses do you have?

MS. THORME: We have two.

MR. YOUNG: Two.

MS. THORME: So it would be Mary Vorissis, who

is our next witness.

MR. YOUNG: Okay.

DIRECT EXAMINATION

THE WITNESS: I'm Mary Vorissis, and I'm from Thousand Oaks, California. I'm representing CH2M Hill, and we did a peer review, a third-party review, on the flow estimates that were made.

MR. YOUNG: And can you spell your last name?

THE WITNESS: V-o-r-i-s-s-i-s.

MR. YOUNG: All right. Thank you.

THE WITNESS: And I wanted to talk about the result of our peer review so I'm going to make this kind of quick, because I know we have gone through a lot of this stuff just in our last -- the last things here.

So what we were asked to do was look at the two different methodologies that were used to determine the spill and render our professional judgment on that.

One methodology, the District's methodology, and the other methodology, what the State did.

The first thing we did is we looked at both methodologies. We had spreadsheets from the

District, as well as from the State. We went through all the math on the spreadsheets just to make sure there wasn't a bust, because we saw there was a big discrepancy between the gallons that the State, Office of Enforcement said, and what the District said.

We then looked at the methodologies themselves, and started looking at, okay, what was a reasonable methodology to use.

And if I can have you go to 47-25. Okay. If you can pull up the second thing -- now, this is from -- again, we showed this earlier this morning, but there was a training that was done for operators on determining sewer system overflows, and there were several methods that were identified that could be used.

Looking at those different methods and looking at what was happening in the system, the District chose to use the duration and flow method, as a method to use for that. The Office of Enforcement used the pump station method, which is method number 4. Those were two of the methods -- or they used a version of method 4.

So let's go back to the District's method. And in our conclusion is that the District's method was a good method, in that it was trying to

capture what was happening in the city.

When you use the duration of flow, you have to understand where the manholes are that are producing flow and try to estimate what the amount of flow is that is coming from the manholes or any other spot in the system that flow could be coming out.

And so the District used reconnaissance. After the fact, they went back. They looked at the manholes, and they documented field reports as to what the condition of the manholes were. Did they see open pick holes? Did they see that the manhole lid showed that it had been lifted somewhat? And they did the best they could to come up with an estimate.

I heard reference about the tables, you know, used in that method. They actually used -- had to use a hydraulic grade line, because unlike most of these methods -- because this was an abnormal circumstance, everything was flooded. So these tables and the things that you're using are based on if you had a spill on the day when there is no water on the street.

So they did use an approved method -- they used the hydraulic applications method that has been used for that type of determination to determine the flow coming from those manholes. And then for the

ones where they were looking at annular space, they did use the photographs that were part of that method.

Okay. Going to the State's method. When we looked at that, we found that there were -- okay -- and I want to preface by saying, our conclusion said look it, these are estimates. So no method is perfect.

And we did identify that, yes, we agree, that there are things that could have been missed in the system with the District's method, but given the circumstances, they did the best they could.

When we looked at the State's method, we ran into some issues with the fact that -- if you will go to -- I'm going to have you look at -- let's see here.

We will go into method 4, and that is on 433 -- 47-33. If you will look at that method, the very last point says you compare a normal-day effluent flow, and then you can determine the effluent flow for that spill event.

Now, this was not a normal day. What happened on that day was there was a rainstorm. You had flooding. This was in no way a normal day. So to take a normal dry-weather hydrograph and translate that to try and turn that into a wet-weather hydrograph, doesn't make sense. It doesn't follow any

kind of engineering logic.

And if you go back -- and I will have you pull up just page 47-19 of my report. If you look at that figure, the bottom line shows a normal dry-day hydrograph. That is the red line. The top line is showing during a flood event, what the hydrograph looked like. And this was actually the day before. This green line is what happened when their meter was running on the 18th of December, when there was also rain in the system.

And you can see the rain bars there, and you can see the steep decline. Once the rain stops, that hydrograph drops off very rapidly. And this is from December 18th. This was the day before the storm. So that is more indicative of what a hydrograph looks like.

So the bottom line is, you know, you cannot compare apples to oranges. You can't take a dry-weather hydrograph and try to make it a wet-weather hydrograph.

And I guess I'm kind of running out of time here. So I will kind of leave it at that, and open it up for questions. But our conclusion was that the District's method probably had more merit than what was used by the State, and that it was an approved

method, and it is something that is justifiable and a little more reliable, and it tried to visualize what actually happened.

MS. THORME: Thank you.

MR. YOUNG: Cross?

MS. MACEDO: I'm sorry. You didn't have anything?

MS. THORME: No.

MS. MACEDO: Okay. I just have a couple of questions for you.

CROSS-EXAMINATION

BY MS. MACEDO:

Q Do you -- to make sure I understand what a peer review is. You did not create your own or do your own analysis of the spill water?

A That is correct.

Q Okay.

A We just looked at the two different spills.

Q Do you acknowledge that the District missed particular discharge points?

A Yes, and I pointed that out in the report. That they could have missed.

Q Yes. After hearing today's testimony, do

you acknowledge the District missed a discharge point in terms of the headworks?

A I can't say that, because I don't know enough detail about that situation to know what happened to that part of it. Did it recede back into the plant? Was it pumped -- I don't know that.

Q But it is possible that the headworks may have been the discharge point itself?

A I say it's possible. But again, what happened to the water right after it discharged, is what the issue is here, where it ended up.

Q Okay. Based on the method that the District used and that you ultimately find reliable, you essentially ignore the pump data; is that correct?

A Because the influent pump was out. So yes --

Q But the --

A -- so you're looking at what is actually happening in the system at the time.

Q But --

A So you're trying to find that, and that is a proved methodology, yes.

Q But the effluent pump worked throughout the spill?

A Yes, it did.

Q And the pump data that was available, you do not use at all in your method?

A No. It doesn't come into play in that methodology, no.

Q Okay. Do you acknowledge that the District always chose the lower volume when deciding between the picture (phonetic) method and the tables produced by CWEA?

A No, because the District did not use tables. Their calculations -- they actually had to define the hydrology grade line, so they actually had the calculations imbedded in their spreadsheet to calculate out what those pick holes were and stuff.

They couldn't use the tables. The tables are based on -- nothing over the top of the sewer. So those are based on a non-sewer. When the sewer is flooded, you have to use the hydraulic grade line. You can't use that method. You can't use the table.

Q Right. It's my understanding the tables are based on equations?

A They're based on equations, but they are not based on a head of water on top of a manhole. They are based on the manhole being in the street, and there is no head of water. There is a head of water on it when it's flooded.

Q Right. Correct me if I'm wrong. It's based on a visual observation of how high -- a visual observation indicates that the spray is above the manhole, correct?

A Right.

Q Okay. And the District consistently chose the lower of the two, between either the picture and their reference when they chose that or the equation?

A No.

Q No?

A That is not the way I -- when I looked at their spreadsheet, that is not the way I saw they had done that.

MS. MACEDO: Okay. Nothing further.

MR. YOUNG: Any redirect?

MS. THORME: No.

MR. YOUNG: Okay. Mr. Jeffries?

MR. JEFFRIES: No.

MR. YOUNG: Mr. Harris?

MR. HARRIS: You did a peer review on two methods. You did one with the State and with the District, and you were not asked to look at the RMC method?

THE WITNESS: No. I never even saw the report

till yesterday.

MR. HARRIS: Okay. So you weren't aware that that even existed?

THE WITNESS: I wasn't aware that it even existed.

MR. HARRIS: Okay. When you talk about head on manhole covers, do you have any idea how deep the water was, when it flooded out?

THE WITNESS: It's my understanding that it was somewhere around a foot. I don't know. It was -- at different places it was different.

MR. HARRIS: Okay. So about a foot of head. That's not a lot, if you consider what the gradient might have been, especially on the lower manholes. I don't know what the topography is in the general area but, you know, it's 10 feet, 20, 30, 40, 50. You can end up with one foot of head on those lower manholes and one foot of water wouldn't amount to much with resistance with water flowing above; is that not correct?

THE WITNESS: I guess you can say that, yeah.

MR. HARRIS: Okay. Thank you.

MR. YOUNG: Dr. Wolf?

DR. WOLF: Could we go back to the slide called Volume Estimating Methods? This was a slide that shows

six different methodologies. That was the very first slide that you showed us.

THE WITNESS: That is 47-26 -- 25.

DR. WOLF: There we go. Can we zoom in? Yeah, thank you.

Now, there are six methods presented there. Are every one of these methods -- are every one of these methods, an applicable method in this particular scenario that we had?

THE WITNESS: No, they're not, no. You can't use every one of these methods in this scenario.

DR. WOLF: Correct. So which ones are not technically feasible to use?

THE WITNESS: You know, you can't really measure the volume of the area --

DR. WOLF: Okay.

THE WITNESS: -- because that doesn't really apply. We weren't spilling flow into an open channel where we could, you know, document how much was going in. That is Method Number three.

Method Number five, upstream connections. There, everybody's upstream laterals are coming into the sewer, so that method couldn't be used. And then the volume captured -- you know, we're talking about a volume that was in the street eventually and washed out

to the ocean. So you couldn't use Method Six, as well. So two and four were the two methodologies that you could have pulled, unless there was some other methodology, you know, that was not on that table.

DR. WOLF: So with your professional experience, you would say that out of the six, there were really two methods to choose from?

THE WITNESS: Uh-huh.

DR. WOLF: And have you done other similar studies?

THE WITNESS: I have not done a similar study to this. I have done a lot of infiltration and inflow analysis and SSTS studies and wastewater studies. Also a lot of wastewater calculations with hydrographs and studies of hydrographs going into wastewater plants.

DR. WOLF: So you have not had an opportunity to compare and contrast the two methods with other prior cases?

THE WITNESS: No, I never had a case where I had to do this.

DR. WOLF: All right. Thank you very much.

THE WITNESS: You're welcome.

MR. YOUNG: Mr. Jordan?

MR. JORDAN: Nothing.

MR. YOUNG: Mr. Johnston?

MR. JOHNSON: Nothing.

MR. YOUNG: Okay. So this concludes this witness.

MS. THORME: Can we possibly take a break before our next witness --

MR. YOUNG: Sure.

MS. THORME: -- just for five minutes?

MR. YOUNG: Who is our next witness after the break?

MS. THORME: Mr. Aaron Yonker, who is the person most knowledgeable designated for the District and our last witness.

MR. YOUNG: And the last witness.

(Break taken.)

MR. YOUNG: Okay. Folks, let's return to our places and return to our hearing.

Okay. Ms. Thorme, you have your last witness.

MS. THORME: Yes.

THE WITNESS: Good evening, members of the board and chairman. My name is Aaron Yonker. I am representing the District, and I'm the person most knowledgeable. I'm from --

THE REPORTER: Excuse me, you're from where? I couldn't hear you.

THE WITNESS: I'm from Templeton.

MR. YOUNG: Is the microphone on?

MS. THORME: Is the mike on?

THE WITNESS: Yes.

DIRECT EXAMINATION

BY MS. THORME:

Q Okay. And did you take the oath earlier today?

A I did take the oath.

Q Okay. And you inserted a declaration into the evidence in this case, and is this a copy of Exhibit 98, that was your declaration?

A Yes, it is.

Q And do you attest that the information in that declaration and attached to that declaration, are true and correct to that?

A I do.

Q Okay. Thank you.

If we can jump right in. Let's jump to the date of December 18th, 2010. There was a great deal of rain that day, wasn't there?

A Yes, there was. As you can see on the exhibit posted -- can you zoom in?

Q It's Exhibit 45.

A This is Exhibit 45. This exhibit shows rain gauges over a period of time. Looking at December 18th, you can see on the three closest rain gauges to the treatment plant, you can see that the rain on that date averaged between 2.8, 2.9 and 3.6 on that day. This was a date preceding the event.

Q Okay. And it rained quite a bit on the 19th, too; is that correct?

A Yes, it did. As you can see on the 19th, there was rain. Not quite as much, but it was between 1.7 and 2.2.

Q So it didn't -- there was no spills on December 18th, even though there was more rain; is that right?

A No, there was not.

Q Okay. So what made December 19th different?

A December 19th was different in that when you look at these rain totals that I just showed you, those were actually hourly -- I'm sorry, daily averages. When you look at the duration of that rain event, you will see that that was actually a two-day duration storm that began on the 18th and continued on throughout the hours of the 18th and into the 19th.

What happened is that rain fell onto a

very large watershed -- actually, two watersheds about a 157 square-mile area. One of those watersheds comes down into the Meadow Creek area, which is the Oceano Lagoon, which is the source of the flooding. The other one lands onto the watershed of the Arroyo Grande Creek.

On Saturday the rain fell on that upper watershed above those areas and migrated its way down. By the time it reached that lower portion of the watershed, it was the 19th. That rain duration was constant. That rain happened on the 19th, falling on an already saturated watershed.

What happened is you had elevated levels within the Arroyo Grande Creek. In fact, San Luis Obispo County Public Works reported that the levy came within eight inches of topping that day. So the creek was very high.

As it turns out, the Arroyo Grande Creek comes to confluence with the Oceano Lagoon. That is where with the Sand Canyon flap gates are that you heard about. The elevated creek kept those flat gates from opening, and caused that lagoon to surcharge over the banks and up into the adjacent neighborhoods and eventually into the District's treatment plant.

A unique instance here is -- what you're

looking at here is a picture of an upper flap gate on the Arroyo Grande Creek. This is on the south side of the treatment plant.

So the water coming from the lagoon was coming from the north side, that has been attested to today -- tonight, encroaching on the front side of the treatment plant. This is on the back side of the treatment plant.

What you see here, is actually tree debris, sticks and branches that were stuck within that flat gate. That flap gate is intended to take water from the watershed around the Oceano airport to dispose in the Arroyo Grande Creek down to the ocean. As a result of the high flows in the Arroyo Grande Creek, the water was flowing backwards around the treatment plant and depositing itself, both on the airport property, as well as the treatment plant area, around the headworks, causing significant flooding around the headworks. And causing significant flooding around the headworks structure, and on to the plant. And so we're actually being -- it's encroaching from two different locations.

Q Mr. Yonker, was it essentially then, that the Oceano area near the treatment plant became somewhat of a bathtub because the water didn't have

anywhere to go?

A Essentially, yes.

MS. THORME: Okay. Can we have Exhibit 41, please?

Q And can you explain these photos?

A Well, what you see here is a photo to the same location. This is the treatment plant's entrance. I think you have seen this picture today, perhaps not.

This is -- the close-up here is at the driveway at the treatment plant looking down across Aloha and down towards Honolulu. This is during the peak of the storm. As you can see, this is a news exhibit from KSBY.

What you're seeing there at the bottom is a same -- it's comparative of the same location taken at a different date. I believe this was in May or so, of 2011, a few months later. But you can see the conditions of that manhole and the dry conditions, the street conditions, and of course, that water that was encroaching into the treatment plant itself, is fairly significant.

Q And so the District did an analysis of each of the manholes that it believes spilled; is that correct?

A That is true.

MS. THORME: Okay. Can we move to the next day, please? The next slide. The next slide, please? No, the next page, please. Thank you.

Q And this was more evidence of the investigation that you all did after the spill?

A That's true. We -- one of the aspects we did -- this is later on into our investigation. But what we needed to do is identify each of the manholes, because the manholes at the time, as we mentioned, were covered by the lagoon water that had encroached up. There was spilling. There was no doubt that spilling was occurring. The question was, where did it occur.

So what we needed to do was analyze each one of those manholes and make a determination of what type of flow would be coming from the manholes relative to that surcharge within the collection system, and how that might have happened and where it would have happened. So we needed to investigate all the facilities, take a look at those facilities, and really do an engineering assessment to determine how that flow really happened.

Q Okay. So each manhole, you tried to make an analysis of the amount of flow that had came out of it?

A If you can picture a surcharge in the

sewer line -- that sewer line, the thing to remember is -- it's come up a few times tonight -- our sewer lines are about ten feet below the ground, twelve feet below the ground.

So when we talk about a surcharge sewer line pumping down some of the -- we talked about that earlier today -- that sewer line is way down below the ground. It's full of water down there. It eventually rises and surcharges its way up. The pipe is slanted to allow flow to the treatment plant. The water is at sea level. It is going to slowly work its way up till it finds a facility it can discharge from.

Q Okay. Mr. Yonker, this slide was a screen shot of the flood that the prosecution team used at the top, are essentially the same view; is that correct?

A This was taken from the same video. This is a video that we encouraged them to look at to support our evidence.

Q Okay. So we also have a dry-weather day in that. And so the area that they were claiming was bubbling up, is not the area where the cleanup is; is that correct?

A They were mistaken in their location, and they actually identified that as what they called

bubbling up of a clean-up. It actually referred to a location down by the RV structure. There is no clean-out there. What you see there is a clean-out structure. Meaning that is the terminus point of a collection system. It's not a manhole. It is the very end of a pipe that allows the operators to get in there and clean out if they need to clean out that system.

So there can be no further down connection down beyond that point. The homes can't connect in there. If you have a home, it has got to be on the upstream of that to allow the flow. So that was an erroneous statement made by the State.

Q Okay. So how did the sewer spill happen on the 19th and 20th happen --

A The sewer spill on the 19th and the 20th happened for a number of reasons; three reasons specifically.

I have already addressed the fact that the Oceano Lagoon, as well as the Arroyo Grande Creek had come up and encroached onto the treatment plant in a very significant fashion.

So that water combined with the -- that water combined with the incident that we had at the electrical pull box that we have referenced, allowing that water to migrate down into -- again, this is a

picture of the headworks that we have showed many times.

For clarity, this is the top of the headworks. This is grade level. As I mentioned, the sewer pipes are about ten feet down. This right here is about ten, twelve feet deep right here. I believe that Mr. Appleton said that is about forty feet deep or so. It is not quite that deep, but it is a subgrade structure.

The shunt trip itself was located up here (indicating) in the valve room. What you see down here is the pump room. As the water enters in here, it enters down into this location, and it pumps up into this header and then crosses itself -- crosses the wastewater up.

The electrical pull box would be on the outside area here. You can see pictures of that. That was the box that was raised to avoid this inner pump ponding.

And it actually traveled down in through there, traveling down through the shunt trip itself and shorting it out. So there's significant water, is the first case.

The electrical conduits, the ponding that caused that to travel down to the shunt trip was number

two.

The third case was the discharge valve. We did mention -- in prior testimony, we heard that this is the backup diesel pump.

This is a pump that the District had the foresight to install. Not a requirement, but the District functions off of these pumps here, and can do so accordingly up to about nine or ten MGD. This is an equivalent pump, nine or ten MGD.

Should there be an incident that they need to do maintenance on these pumps, take it out of service, they can close this slide gate. And they can institute the bypass pump, and they can do their maintenance while they are bypassing into the header structure and into the plant and entirely bypassing this.

In the case of the December 19th case, we actually saw water come through here and entering the headworks. The shunt trip failed. The pump stops so this level started to rise up. It started to rise into the collection system. And the significance of that third event, is the fact that this discharge valve had inadvertently been closed during prior maintenance.

So when this pump was started up, this discharge pipe that you see here, caused some suction

through the pump into the discharge, traveling into the header. It cannot get there because the valve was closed.

So it was a really -- what -- I guess, what you could call a perfect storm of events. Three significant events came together. Ones that you could not have foreseen in advance. And that was -- typically, I guess in a nutshell, baseline cause of the spill that day.

Q Okay. So had any of these problems ever occurred individually at the plant previously?

A Sure. Yes.

Q No. I mean, the flooding or the valve being closed or the --

A Individually?

Q Yes.

A Oh, well, individually, we have had high rains and stuff like that. We have had -- not had -- no. Significant flooding, no. We have had significant flooding that has come on. You have heard testimony from residence flooding events not happening like that. So the valve being closed, no.

Q All right. So was there any way to know all of these things would happen together on December 19th?

A Well, as I just mentioned, short of hindsight, I would say not. It's been in this operation for many years with many people seeing this through design and constant operation. Of course, that doesn't mean I would not see it.

Q So the plant has been able to weather very high flow swell conditions in the past without a spill; is that correct?

A The plant is capable of handling nine to ten MGD, wet weather flow. We have seen flows in the past that are that high, and they have handled them perfectly well in the past.

Q Okay. And would the electrical shunt trip problem alone have caused this spill?

A The electrical shunt trip alone? No, because we have a bypass pump, as I mentioned. The bypass pump could bypass the headworks if it failed.

As you see here in this exhibit, we actually had a repeat event happen after the December event, and that happened in October. You can see the date. It's hard to see from here. It was October 4th of 2009. We had a very similar event happen. This was very enlightening to us because it actually helped us.

But essentially what happened, in August of 2011, we reconductored that influent wiring. We

created an air gap. You heard testimony from Mr. Thoma this morning about creating an air gap over that wall.

Regardless of that, we still had an event happen where they shut down again. And that is what really clued us in to the fact that this was a shunt trip issue. We initially thought it was a motor issue, a breaker issue. We conducted the breaker study. We tried to resolve this issue. We created pipes, and this is really what keyed us in to the fact that it truly was a shunt trip issue.

Q Okay. And the final thing is on the bypass valve. Was the fact that that valve was closed in itself, cause a spill?

A No, the -- well, the valve had been closed prior to the spill for -- I'm not sure how long, but it worked perfectly. The only time you needed that to be opened is when you needed to bypass a pump itself.

Q Okay. And what about the allegation that the District had in 2004 had budgeted for a rewiring project that was supposed to have prevented this issue?

MS. THORME: Could you put up Exhibit 51, please?

THE WITNESS: What you see here is an exhibit that shows reconductoring. It's kind of hard to see.

I guess if you could zoom on the lower box down there.

Bill Thoma testified a little bit about this earlier. But what you see here is the '86 originally installation, the '86 upgrades to the plant. It was installed with fireproof wiring, so that is the wiring. That is the W (phonetic) designation that Bill talked about. And so it was also, according to his testimony, supposed to have seals at that time. So --

BY MS. THORME:

Q Okay. And the District included three different spill volumes in it's initial estimates; is that right?

A Yes, it is.

Q Okay. And why did the District select the estimate that it selected?

A Well, it selected -- initially we submitted all three because we wanted to be transparent, and we wanted to provide the Water Board with everything we had, but we wanted them to see everything.

We selected the one we selected because it was the most defensible. Everything we had been learning from the State and the Regional Water Board is that we needed to have great defensible evidence. We needed to support our claim. We needed to bring an

estimate that stands up. And to us, that evidence was speaking to the people on the streets, taking pictures, referencing news footage, performing calculations and taking a look at it from as many different angles as we can. As Matthew Buffleben had mentioned, as engineers, we tried to look at that from all different sides and what is most viable.

Specifically, as you can see here, we needed to report that at the spill location. We can't just come up with a big giant spill volume and then try to report that in CIWQS.

So our understanding at the time, was that CIWQS was maturing. And one of requirements of CIWQS, at the time, is that it needs to specifically identify the location, the latitude, the longitude.

Q And did the District get word from the Water Board to report based on manholes, at least initially?

A Yes. Yes, we did.

Q And how did you get that word?

A Through many forms. You can see here, my understanding -- well, I spoke with Jim Fischer this morning. My understanding from Jim is that South County needs to report the SS --

THE REPORTER: I'm sorry, but are you reading

something?

THE WITNESS: Yeah.

THE REPORTER: Could you slow down then.

THE WITNESS: Sorry.

My understanding from Jim is that South County needs to report the SSO's from each of the 21 manholes separately.

BY MS. THORME:

Q And were those manhole spills reported as category one spills?

A Yes, they were.

Q And were they certified within the time frame required by the sewer system permit?

A Yes, they were.

Q Okay. And was the -- did the Water Board ask the District to provide an analysis of the advantages and disadvantages of the -- each of the spill volumes?

A Yes. That was a report that I authored myself.

Q And did you provide that analysis to them?

A I did.

Q Okay. And did the District undertake remedial activity after the spill?

A Yes, we did.

Q And did you provide the Water Board with a list of those remedial activities on January 3rd of 2011 -- Exhibit 9, please, at page 9?

A These are the various corrective actions that we came up with after the spill event. Of course, one of our intentions was to make sure that spill never happened again.

And so these are the remedial actions that we developed to institute so -- to make sure it never happens. Yes, this is a copy of those documents, and yes, I did.

Q Okay. And did the District provide any evidence about mitigating factors to harm?

A Yes, we did.

Q And did any of those have to do with the beaches and the beach closures?

A We provided evidence to the State, talking about the various components of the beach and that the beach would be closed for an extended period of time. We supplied information relating to the closure of the beach prior to the storm, through the duration of the storm and beyond for several days, due to safety and harm related to that storm event itself, as well as additional monitoring and reporting

requirements that were performed by the county.

Q So it was closed before the spill happened?

A I believe it was closed on the 18th.

Q And did the District provide how much floodwater was spilled, in addition to the event from the District?

A How much floodwater was spilled?

Q How much floodwater there was in relation to the --

A Oh, yes. We provided the State with information on floodwater that had passed through the Oceano -- Oceano Lagoon. This was a private study that was commissioned by the county to determine that, and I think they came up with 69 million gallons of water sitting on top of the Oceano Lagoon that had passed through the headworks -- I'm sorry, the flap gates.

Q Okay. So this is Exhibit 63-2. So this is the County's estimate --

A Yeah --

Q -- of the floodwaters?

A -- what you see here is the 69 million gallons that they came up with. It's an area at 4.9 feet depth over standard depth. On a previous e-mail within this packet, it states that that is equivalent

to the 12-foot flood elevation.

Q So even if you used the prosecution teams' estimate, by the time that the floodwaters receded out to the ocean, there would have been a 69 to 1 dilution?

A Yeah. Using their numbers, that would be correct.

Q Okay. And was there also evidence about the unlikelihood of harm to fish?

A We -- as part of the State's investigative order, we responded with a technical report explaining what methods we would try to take to look at health and the ecological impact.

And one of the steps that we did initially, was contact environmental scientists and -- is it okay to say his name or -- State Parks provided a letter to us stating that they have been conducting studies in the Oceano Lagoon for a period of eight years to monitor the fish and the impacts of the off-road vehicles they have on the beach crossing as it crosses over to that area. And it came back noting that there was no observed impact or pollution to the fish population or health. And they --

Q And did you also submit evidence about the E-coli and bacteria levels in the lagoon without

regard to the spill, just what natural levels of E-coli would be?

A Yes. As part of the technical response to the State's investigation, we did supply information. There were investigated test sites here. These bigger locations show those tests performed by the County. These smaller locations show the tested locations that were performed by the District.

Q And what does this show?

A This is our -- I guess -- what we did is we monitored for a period of one year. And what you see here is -- we see, what I will consider to be highly elevated, in this case, with E-coli, within those locations.

And so this is each one of those locations. It's kind of hard to see for the audience, and I apologize.

This location is one through location ten. These trend on a monthly basis up and down, and you can see the variance. But at all times they're highly elevated. This is the -- what is considered a warm classification from what we were assessed. And our assessment was that the beneficial use is already highly polluted.

Q Okay. And do we -- does the District

have any evidence of anyone being ill due to this sewer spill?

A We have not received, to this day, any information to the District that indicated anybody did get sick or --

Q Did you do any outreach to people?

A We did a bunch of outreach. We did door-to-door. We handed out flyers. We went to a number of agencies, community meetings. Two of which were televised. We participated with the County. They held a community outreach for the flood event on April 30th of 2011.

We prepared and manned a booth with a whole bunch of spill information we had with overflowing manholes. We had literature. We had a PowerPoint presentation going of the spills that we had on record. The flood that we had. We had questions -- if you knew anything, please contact us. We had a sign-in sheet. Just trying to get the word out there. And again, just trying to do the right thing. We just wanted to do this right and fair, and get a good assessment of what was happening.

Q And did any residents file claims for damages in their homes with the District?

A No.

Q Okay. And just to do some housekeeping before I get into another issue -- are there drains inside the electrical pull boxes?

A The pull boxes on-site, do have drains.

Q And where do those drains go?

A It's my understanding the drains go to the storm drain system. The drains are directly next to the headworks, go to the headworks structure. That's --

Q Okay. And can you talk a little bit about the pump shutting off? The issue of the pump shutting off?

A You mean the diesel bypass pump?

Q Yes.

A The diesel bypass pump was initiated after the spill at the slide gate. You heard testimony about that today.

And what the operators found out, after that pump was started and once operations were going and processing wastewater into the plant, the pool would intermittently shut down for about every hour or so. And the operators would have to scramble and try to get the pump started.

That was just about the time that FRM showed up on-site, as Jeff Appleton testified to

today -- if I'm not mistaken, they opened up the board. They were able to get in there and find out that it was a programming issue -- the pump had been set by the manufacturer to shut down for a one-hour period. They didn't know if it was something they had going on or what. But it was something when the District received the pump, that is the condition it came in.

So they had a little bit of training on-site that day. They got the pump working. I think by noon or so, they understood how to work it, but they had to be there and available every hour. So that is why you had the blips occurring.

Q So it was not a mechanical issue?

A Mechanical, no.

Q Okay. And you included -- the District included in their estimates that were given to the Water Boards, Mr. Appleton's estimate?

A Initially, yes, we included three estimates, and within that was Jeff Appleton's estimate as well.

MS. THORME: Okay. Could you bring up Exhibit 9, and I don't know exactly what the page is.

MS. COLLIER: Okay.

/ / /

BY MS. THORME:

Q And did the District do some calculations to correct Mr. Appleton's estimates?

A Yes, they did.

Q And those were provided to the Water Board?

A This is -- as far as I can tell, this appears to be the copy of that that went to the board. You can see --

UNIDENTIFIED SPEAKER: Here you go.

THE WITNESS: You can see some of these changes here. Mr. Appleton today testified that -- you know, he gave a timeline of events. That was kind of a stumbling block for us as we begin our initial investigation because we were initially going off of his timeline. We found it to be a faulty timeline. It didn't actually match up with power records, alarm indications that we had on-site, and so you can see the evidence.

At 10 a.m., which changed to 10:30, and that resulted in a different value of flow. The 4 MGD was changed to 4.2, because it was checked with the meter, and so there some slight variations there.

This is the copy we submitted to the Water Board (indicating).

MS. THORME: Okay. Can you put up Exhibit 55,

please? Okay.

Q Okay. And does this show where the storage was?

A Yes, it does. This shows -- just for the record, this is a treatment plant, obviously. These are the sludge lagoon drying beds. This is the headworks structure, and then this is the sludge beds -- the lagoon beds.

Q And where are the storm water sumps that were pumping water back to the headworks?

A They are located in various locations. What we have is a -- we do have a site draining facility. This exhibit -- that would work better for you.

Q No, I want to show where the flooding is in relation to those sumps?

A Okay. So what we have here is there is a sump over here. You can see it at this location (indicating). This actually drains. It's actually an elevated pad over here that -- it has a force main that pumps over here back to gravity.

There is another one right here. And I believe there is one right here. So there is three on-site.

The site is -- it consistently has site

drains like any parking lot or parking structure normally would. The majority of it is on gravity, but then runs to the force mains. Those force mains pump and redirect through a network of pipes, and eventually work through the headworks and coming in the headworks right here.

Q Okay. So the sumps that were over there in the floodwaters, were just continuing to pump that floodwater into the treatment plant, is that the way that I understand it?

A It was -- yeah, this is the water -- this is the water that had encroached on-site, so these sumps over here were overwhelmed. But you can also see in another picture that we don't have here, there was a bunch of water back here that was overwhelming this sump pump as well. So, yes, if you turn it back to the headworks, and now it's going --

Q So those sumps were pulling in water that was not necessarily rainwater falling on the industrial part of the treatment plant?

A For the most part, I would say that is valid especially in this area --

Q Okay. And --

THE REPORTER: Excuse me --

MR. YOUNG: Could you speak up a little bit?

I'm sorry, I'm just --

MS. THORME: Could you move -- maybe move that microphone higher?

THE WITNESS: Sure.

MS. THORME: There you go. That should be better.

MR. YOUNG: Just for the record, he's referring to Exhibit 55 dash --

MS. THORME: Yeah. Exhibit 55 dash, 1, yes.

MR. YOUNG: Okay.

MS. THORME: Yes.

Q And the water that was stored in the lagoons and the drying beds, was that eventually pumped back and treated?

A To the best of my knowledge, what we have in the headworks structure is a manifold -- the manifold valve that has one valve for each of the drying beds. Those drying beds have sand filters on them. The water percolates down in there and travels back to a pipe in the headworks and circulates through the treatment. Those just happened to be opened, and it is my understanding those were opened the next day and drained in the next day or two.

This location here, this is lined with a red rock. It's designed to be somewhat impermeable.

There is a manhole structure in here.

The reference that Jeff made about it being about 30 days. That was a new statement about that. I have never heard of -- to the best of my own knowledge, I can only say that it would have been pumped back. I can't say for sure and --

Q Okay. Speaking of things that Mr. Appleton said, he testified today that he had told the District numerous times about the lack of the conduit seals. Can you address that, please?

A I'm not sure if I'm too familiar with what you're asking, but as far as the yearly visits that he made and --

Q Well, he testified that he told the District numerous times that the seals were missing and they needed to be replaced?

A Yeah, I have never heard that story before until this day. And I have not heard that from Appleton or anybody.

Q And did you review his deposition testimony?

A I did.

Q And did he mention that in his deposition testimony?

A In his written deposition testimony?

Q It was the date that his deposition was taken by the Water Board?

A Oh, oh, I did review it. I reviewed the majority of it, and I'm sorry, I don't recall.

MS. THORME: Okay. Yeah, put up Exhibit 44, please.

Q Can you explain what this is?

A Yeah. This is -- what you're seeing here are two things. This is an upper map. I think you have seen this earlier today. This is the treatment plant here (indicating). This is the Security Court area here -- what I refer to as the Security Court area. It is actually made up of many roads.

This is the lagoon. This is the lagoon that encroached into the homes, working their way on to the treatment plant. And it was encroaching up to about a 12-foot elevation before it finally reached a peak, which came across these banks here, and back to the few homes in this area, and a few homes in this area, and all of these homes here (indicating).

The significance of this picture is that what we did is we took this span shot of this overhead map. And what we really wanted to express was that this area is in a bowl. Even though it's upstream from the treatment plant -- upstream location, it dips down

before it goes upstream.

This is where the flooding occurred. It is also where our spill occurred. When the pump stops we start to surcharge our lines, we discharge through these low-line manholes.

What you can see here is -- you can see the floodwater in blue. This is the swollen lagoon as it is at various locations. It's difficult to see that these lines extend to each manhole. So that manhole right there, goes to that manhole. This one here, comes to that (indicating). So this is whole area was surrounded in water.

This area here by the G15 was surrounded in water. What you see is that along here, we get elevations that are, I believe to be in the 15, 16, 17-foot range where this manhole is here about 10-and-a-half feet.

So these manholes, in our best opinion and strong understanding, that these manholes were excluded from this spill. These manholes were excluded. What you see these two lines being, the blue being the surface elevation of the water, and the red being the calculated hydraulic gradeline that existed in the sewer line.

Anything that has this manhole below that

red line is discharging sewage. Anything that has a manhole above that red line, is not discharging sewage. So you can see the number of facilities included, and these are the 21 homes that were reported to the State as part of the sewage spill.

Q Okay. So some of the letters that came in where people that had lived on Juanita Street --

A Yes.

Q -- can you tell me if that was near any of the manholes that spilled?

A Juanita Street was not near any manholes that spilled. And the reason it was excluded is because there is a location here -- you cannot see it, but this is along the ocean. It's called the Strand. These home are on an isolated collection system, which pumps over to a forced main lift station. That forced main lift station deposits itself into the District current up here at GBA, meaning it has a check valve that flows in a one-way direction.

Okay. So even though we surcharged and we would have gone down and probably impacted that portion of the pipe, we wouldn't have pushed into that system, because we would have been restricted from that valve.

Q So I don't believe this had been shown

today. This is Exhibit 44. And just -- can you tell us what this is -- 49, I'm sorry?

A What you're seeing here is basically a variation of the map that you just saw. This is the same map. This shows the treatment plant. This shows the Security Court home locations.

In addition -- well, just for clarification, the black solid line is the District's trump line as it extends out into the satellite agency to collect sewage from them. The dash lines represent the satellite collection system.

The significance of the picture here is the blue. This is the water. This is a combination of our assessment and study that we performed and where that water went to. It was very important for us to know where that water was, what elevation it was at, so that we could therefore determine that discharge rate for each of those manholes.

Coincidently, our calculations that we came up with were within two or three inches to what the county did, and it -- and with that study, again, studying that and quantifying that with the volume of water that passed through the lagoon.

The significant point I would like to make here is that a board member had asked -- Mary or

the last technical witness -- you know, is it possible that that gradient could possibly affect that water at the line or the manhole and produce a different discharge.

The important characteristics to remember is that this is a constant elevation. Water sea level, this is the bottom of the bowl. This elevation is 12 feet. That means every manhole that is at only 12 feet elevation is covered with water.

Manholes above 12 feet in elevation are not covered in water. So that means that the same pressure is present at each one of those manholes relative to the hydraulic gradeline of the sewer system.

Q Okay. Can you point out what part of the entire sewer shed that this flooding occurred in?

A This is the boundary of the District's service -- service boundary, in which all of the number of agencies are encapsulated. It's the City of Arroyo Grande, the City of Grover Beach, and Oceano Community Services District. Down here is the wastewater treatment plant, and the flooding occurred right here (indicating).

Q Okay. Thank you.

MS. THORME: Can we have Exhibit 52, please?

MS. COLLIER: Okay.

BY MS. THORME:

Q Did the District propose different harm factors than the prosecution team?

A Yes, it did.

Q And did these penalty factors come from the 2010 enforcement policy?

A This is a copy of the 2010. Not a copy, but it's a copy that I created of the 2010.

Q Okay. And -- so the District believes that the harm factor should be two instead of five, and why do you believe that?

A Julie -- I'm sorry. The State --

MS. MACEDO: That's okay. We're on a first name basis. Don't worry about it.

THE WITNESS: I'm sorry, Ms. Macedo. I'm sorry about that -- did a great job of going through the methodology that -- walked each of you through the process, and let you see the steps that go into it. Albeit, what she failed to do is really show you some of the definitions that are required. She did kind of talk about them. It is much easier to see them.

You can see here. This is factor one. This is the very first factor that she worked on. This is a harm for potential harm and beneficial uses.

These are the water ways, the streams, the creeks, the oceans which are established within the general basin plan, as either a warm water, fishery, a place to wade, a place to drink or swim.

What you see here is the range on this particular potential to harm is zero to five. If you remember this, the State feels this spill in and of itself should be a five in major.

Now, I would just like to kind of highlight some of that. What that means, there is an extremely high threat to beneficial uses. There is significant impacts to aquatic life and human health.

There was high potential for threats in the water to human health. We just don't feel that is the case. It was a tragic event. It was an unfortunate event.

But as you can see from the bacteriological testing that we did in the Oceano Lagoon, the Oceano Lagoon water itself was highly contaminated with raised levels of bacteria.

BY MS. THORME:

Q Excuse me, Mr. Yonker, but we're going to have to move on.

A Sorry.

Q So the -- I have an exhibit. This is in

rebuttal to the ability to pay stuff that was done this morning. So this is Exhibit 117. I will pass it out. If my time can stop while I'm passing.

MR. YOUNG: You have about two minutes left. I'm just wondering, was that going to be sufficient for you to finish with this witness?

MS. THORME: No.

MR. YOUNG: How much more time would you need to --

MS. THORME: Pass these down.

MR. YOUNG: -- to complete with this witness?

MS. THORME: I have just one -- we were going through the penalty factors, and so that is what I have remaining. I wanted to go through him and then we still have closing argument.

MR. YOUNG: Okay.

MS. MACEDO: Closing is not counted in your time.

MS. JAHR: Yes, it's separate.

MS. THORME: Okay.

MR. YOUNG: Would an extra ten minutes be enough?

MS. THORME: It would help. Yes, thank you.

MR. YOUNG: Would that be sufficient for you to finish?

MS. THORME: We will do our darndest.

MR. YOUNG: Okay.

BY MS. THORME:

Q Okay. So can you explain what this document is, Mr. Yonker?

A This document appears to be a District staff report to the board of director in the San Luis Obispo Sanitation District. Subject: Monthly final review. This looks like an overview of the summary statement and is describing the current funds as they exist for the various funds relating to those service fees from the various member agencies, as well as other funds --

Q Okay. Mr. Yonker, if you can look at the second page for me --

A Okay.

Q -- and it has different operating different funds. Can you tell me the three different funds that are there?

A Fund 19 is the operating fund. Fund 20 is --

THE REPORTER: I'm sorry, but could you speak up a little bit?

THE WITNESS: Yes. Fund 19 is the operating level -- I'm sorry, the operating fund. And fund 20

is the expansion fund, and fund 26 is the replacement fund.

BY MS. THORME:

Q Okay. So if you look at the cash with the LAIF, and you add that row, there are some that are negative -- well, some that are positive, and it comes up with what the District wide amount for that cash with LAIF?

A Yes. For -- let me just see -- yeah, cash with LAIF, looking at the District wide, I see $3,400,504.

Q Okay. And what is the amount in the expansion fund?

A The expansion fund would be -- within the LAIF?

Q Yes.

A That is $5,733, -- I'm sorry $5,733,546.

Q And isn't the fund 20, the expansion, the fund that -- the fund that is funded through connections -- the fees that cannot be touched? That is the reserve fund?

A That is correct. As far as I know, that is the fund that cannot be touched.

Q Okay. And so if we can look at the -- this is the document that Dr. Horner had this morning

when he was getting information -- is that the right --

So he was using the 5 million dollars that included costs that were in that LAIF fund, and he was assuming that that was all money that could be touched, and that is not the case?

A That was my understanding of his statement today. And if it relates to these numbers here, I would say that would not be correct.

Q Okay. So this is the most current cash flow document that we have for the District; is that correct?

A It's dated August 15th, and it talks about a financial summary for July 31st, 2012.

Q Okay. And what is the net income year to date? Is it a negative number?

A The net income year to date is shown as a loss.

Q Okay. All right. If we could go back to --

MS. MACEDO: I actually have something for the record, and I don't care if it's on my time or not.

But is this the first time the prosecution team is being provided with this documents?

MS. THORME: Yes, because we just got it today for rebuttal to the -- Dr. Horner's testimony.

MS. MACEDO: So presumably this document existed as of August 15th, 2010, correct?

MS. THORME: 2012.

MS. MACEDO: 2012 -- I'm sorry. Correct?

MS. THORME: I would believe so, that is the date of it.

MS. MACEDO: And so when I asked you if Dr. Horner could leave, and you said yes, and then this document comes up at 10:00 at night, you knew Dr. Horner would not be able to respond to this document. I just wanted that on the record.

You can continue.

MS. THORME: Okay. So if we can go to Exhibit 52-8?

Q Okay. So the Office of Enforcement is proposing 1.1 for culpability; is that your understanding?

A That's correct.

Q And the District believes that lower number would be a better number; is that correct?

A We had assessed it and determined it should be a lower number, so somewhere around 0.5 and -- point 9.

Q And quickly, can you say why?

A Sure. The testimony is what a reasonable

and prudent person would have done or not done under similar circumstances.

This is a circumstance relating to the December 19th spill, and in our opinion, everybody on that site was doing everything they could to return that plant back into a normal operating plant.

They -- and again, this was an act of God event. The bypass event, the diesel pipe was in place prior to the spill --

Q And it was an emergency situation?

A And this was an emergency situation.

Q Okay. So then the other factor is the cleanup and cooperation. And so the Office of Enforcement is proposing a one, is that your understanding?

A That's correct.

Q And the District is proposing a lower number, and what is the main reason for that?

A Well, the District has gone to great lengths. We have provided numerous documents. We have basically laid everything we have on the table. We have been cooperative with the State.

We have attended numerous meetings up in Sacramento just to make sure that they understand it and accept it and see where we're coming from. It's

obvious tonight, they don't. They still think we're referencing tables that weren't mathematically and inherent based equations. But we have gone, in our opinion, above and beyond what we could do to try to help and support and come to an even agreement and do what is fair and --

Q Okay. And did the District provide evidence of a large loan commitment that it has for its cogeneration plant?

A Yes.

Q And just for reference, for the board members, that was in Exhibit 94.

And did the District also do a sensitivity analysis to see how the penalty would change if the penalty factors were modified?

A It did.

Q And now we would have you look at Exhibit 61.

Okay. I am going to reserve the rest of my time for redirect.

MS. MACEDO: Okay.

CROSS-EXAMINATION

BY MS. MACEDO:

Q So Mr. Yonker, it's your position that

the State Board required you to report every spill location; isn't that right?

A To report every spill location?

Q Right.

A Yes, correct.

Q Why didn't you report then, the headworks as a discharge point?

A The headworks had -- from my understanding, headworks was discharging up and over the top of the headworks structure back at headworks itself, and there was some stuff that was coming out and adjacent to the plant.

That was all part of that ponding that you saw in that picture, which was headed to a drain works, which is headed right back in the headwork structure itself.

So at the time, the draining system at the plant was returning that wastewater to the headworks structure back to the structure to my -- to the best of my knowledge, that was the situation reported.

Q So you disagree with Mr. Appleton's testimony that it represents -- and I guess, Dr. Buffleben's testimony, that it was actually a rather significant discharge at that point?

A I do. I did not hear testimony from either of them about the elevation of that grade or that --

THE REPORTER: Excuse me --

THE WITNESS: -- that grade relative to the hydraulic gradeline on that system, so I disagree with them, yes.

BY MS. MACEDO:

Q I believe the District showed a slide show that was a presentation of sort of acceptable methods for calculating SSO's, and one of them was the duration of the flow method. And you heard testimony today, that it acceptable in certain instances and in some instances, we should consider it unreliable.

What is your understanding of the duration and flow method?

A Well, the duration and flow method, as was indicated in the State's response, is a method which -- which they still support in this particular case. They felt it would have been appropriate for a single manhole. So to that I would say that individually, these were single manholes. We took -- we looked at each one individually and got responses from each one of those hydraulically based upon the principals and back to the flow equations.

Q Yeah.

A And what I did see, is I saw several manholes that were discharging pick hole locations. You saw testimony of those today in photographs that showed pick hole locations coming out of that water way that are in line with the pick hole height, which are spreadsheet calculations determined as they should be.

Q Yeah. I don't mean to interrupt you, but in terms of my question, I meant, you know, how is it applied? Is it something that you have to be there contemporaneously to observe the flow at the time it is occurring?

A The way the State Board understood it to mean, is they --

Q I'm sorry. I'm asking for your understanding.

A My understanding is, no. You do not need to be there to make those kinds of assessments with the hydraulic relationship to the discharge --

Q Okay. So let me ask you two questions.

One, did you attend the State Board, either training or -- you know, program that was put on that you submitted --

A I did not attend.

Q Okay. And secondly, when you or the

District used the duration of the flow method, is -- was all your methodology conducted after the fact, in that you were not present during the spill?

A It was conducted after the fact --

MS. THORME: Judge, I want to object, because he's not testifying personally. He is the mouthpiece of the District, because the District as an entity, cannot testify. So she keeps asking, "you," "did you, so I just want it to be clear that he is not testifying as Mr. Yonker. He's testifying as a person most knowledgeable for the District.

MR. YOUNG: Okay.

DR. WOLF: May I ask a question?

THE WITNESS: Sure.

DR. WOLF: Could you be a little more specific than most knowledgeable --

MS. THORME: Okay --

DR. WOLF: -- I mean, his business card must say something else.

MS. THORME: An entity cannot testify. So you can't put the District in the witness seat, because the District does not -- is not a person. It cannot talk. So on behalf of the District -- and this is normal in legal cases when an entity has to speak -- you designate a person most knowledgeable. And they are

put -- they have to be up to speed on all the issues, so they can testify accurately. So we have designated Mr. Yonker as the person most knowledgeable. So when she's saying "you," I want to make it clear, it's the District.

MS. MACEDO: But I believe I'm allowed to ask Mr. Yonker questions as an individual, correct?

MS. THORME: We did not put him on as an individual.

MS. MACEDO: So you're only allowed to testify as a District, not as an individual?

THE WITNESS: I would say that is a legal question to be decided.

MR. YOUNG: You know --

MS. MACEDO: Okay.

MR. YOUNG: -- let me just think about this.

He still has to have knowledge of all of these things he's testifying to --

MS. THORME: Right. And he does --

MR. YOUNG: -- as an individual.

MS. THORME: Right. He does have knowledge because he's gotten up to speed on all of the topics. So he can testify to all the topics, but he may not have personal knowledge of each thing.

MR. YOUNG: Okay. So he's been given

information, because he's testified as to the funds, right --

MS. THORME: Right.

MR. YOUNG: -- and things of that nature.

But are you a civil engineer?

THE WITNESS: I'm a civil engineer, yes.

MR. YOUNG: Okay. Do you have a background in accounting?

THE WITNESS: I do not, but I have been actively involved with numerous special Districts. I do --

MR. YOUNG: But with this District, are you typically involved?

THE WITNESS: I have not been as involved. I have helped out a little bit with creating budgetary estimates for the fiscal year budgets. With other Districts, I have actually created fiscal year budgets.

MR. YOUNG: And on an ongoing basis, what is your relationship with this District?

THE WITNESS: I have been providing engineering services now for several years for this --

THE REPORTER: Excuse me, but did you say "seven" or "several"?

THE WITNESS: I said several years, perhaps for four years or so of many different types of work.

Primarily in design specifications for rehabilitation repair of their capital improvement budget within the collections systems, as well as the treatment plants. So I have become quite familiar with that facility regarding the collection system, regarding the treatment plant.

And the facility, specific to this particular case, I have attended board meetings. I have made recommendations for staff reports. I do a coordination study for the District, coordinate with the satellite agencies and train them on sewers response collectively.

So I have been involved with this District to the point where I'm comfortable. I'm knowledgeable. I'm not an administrator or the District engineer, but I do serve functions of those tasks.

MR. YOUNG: And who do you report to, Mr. Wallace?

THE WITNESS: I am employed by the Wallace Group.

MR. YOUNG: And do you report to Mr. Wallace?

THE WITNESS: I report to my direct manager.

MR. YOUNG: And who is that?

THE WITNESS: Mr. Zehnder.

MR. YOUNG: Mr. --

THE WITNESS: Mr. Tom Zehnder. He works -- he's the principal of the Wallace Group.

MR. YOUNG: Yeah. And so the information that you're testifying to, is it coming collectively from different people within the District?

THE WITNESS: It is coming collectively. It has come from speaking with various operator people that were there the day of the event. I received a call the day of the event to get information about the collection system where it may be spilling.

I have been involved extensively with the State Operations Enforcement. I have been involved in nearly, if not all, correspondence back and forth between the District. I spent time there for about seven or eight meetings as we tried to work out the situation. So I'm basically aware of this particular incident -- so --

DR. WOLF: Could you speak a little louder?

MS. THORME: Yeah, you've got to keep that microphone up.

DR. WOLF: I'm really having a hard time hearing you.

THE WITNESS: I'm sorry. I'm not used to speaking in a microphone. Should I repeat anything?

DR. WOLF: Yeah. The last one minute.

THE WITNESS: Okay. Sorry.

DR. WOLF: Sorry, but I couldn't hear you.

THE WITNESS: I -- I have been -- assuming you heard everything else that I do for the District and my services, I have been very active in this spill since the very beginning. I was not there the day of the spill. I did receive a call that night with questions about what may be happening in the collection system, based upon my knowledge of the collection system. I have done a lot of work with the collection system.

And from that point on, I began being very involved with it. I helped author and perform the initial five-day report that was due January 3rd of 2011.

I helped prepare the May 31st technical response to the State's investigative report of 2011. I have also attended numerous -- approximately seven or eight meetings. I was there March 18th when Mr. Sarmiento and Mr. Fischer came down and did the initial investigations.

So I have been fairly active in this particular incident. In areas where I've been called upon to be the most competent for the District, I have gotten up to speed. I have read various --

MR. YOUNG: Well, the term is actually "most knowledgeable," not "most competent," to testify.

THE WITNESS: Most knowledgeable. My apologies.

MR. YOUNG: So --

DR. WOLF: I was quite impressed.

THE WITNESS: Most knowledgeable, for this particular hearing.

MR. YOUNG: Okay.

BY MS. MACEDO:

Q Well, I will ask my questions, and if there is any clarification about whether you can't answer it or whether you're answering it individually, I'm happy to have the distinction. I didn't realize that you could not testify as an individual.

You had a slide up where you had made notes that Mr. Appleton had provided, and you claimed that there was some faulty time line, and that you were correcting it, and yet you just testified that you were not on the site the day of the spill, and yet, Mr. Appleton was. And so I'm wondering what gave you the authority to change the time line?

A Well, one of the differences I saw on the time line was the time line that Mr. Fischer put up there during his testimony -- it varied drastically

from what Mr. Appleton was saying as well.

The District actually had a difficult time with Mr. Appleton's investigations and timeline initially, because we tried to piece that together to create what had happened on-site. And we were finding that was not the case on the site that day. We did an investigation on the power consumption records to see when and where the pumps actually failed.

We investigated the alarm call outs. We spoke with people who were at that site and knew what time they arrived and it differed from what Mr. Appleton had said what had happened. Initially, he had reported to the State that the spill began at 9:30 or 10:00. It was initially -- it had to be resolved by the State, and there was some confusion there.

So I understood there was some concern may be that the spill started earlier, but this was stuff that we pieced together slowly. And I still disagree with Mr. Appleton's time frame.

BY MS. MACEDO:

Q So that is clearly a response as a person most knowledgeable, since you weren't there on the day of --

A It is a response of the person most knowledgeable --

THE REPORTER: Excuse me --

THE WITNESS: -- and by others. And as far as pulling the power consumption, once power consumption was reported, I can then analyze it and make that decision. It's something I can believe in and I can trust.

BY MS. MACEDO:

Q Okay. In terms of the rain event, I would point you to your Exhibit 45. And this is an exhibit that you provided. And on December 19th -- I think we actually are not that far off. We submitted these rain totals, and I think they are very much in line with yours. And yet when we got to the penalty calculator, you claim -- well, I will take it from another angle.

Do you know what the permit requirements requires the storm level to be protected against?

A I believe it's a hundred years --

THE REPORTER: I'm sorry, you need to repeat --

THE WITNESS: It's a one-hundred-year-storm event.

BY MS. MACEDO:

Q Okay. And do you know what -- based on these rainfall totals, do you have an approximation of what this worked out to be?

A I have heard various statements. I can't look at those numbers and say there are tables, which -- but they're both durational based, as well as volume based. So a 24-hour duration in terms of that 2.7, you know, that 2.7 might have peaked at 2:00 in the afternoon, and then been excessive until 3:00. That would be a 24-hour period that would need to be considered for that analysis, and I can't talk about these numbers here.

Q Okay. Do you agree that the five or so inches does not rise to the level of one-hundred-year flood?

A As far as I know, over that duration, I do not think that is a one-hundred-year flood.

Q Okay. And yet on your penalty calculation factor slides, you described this as an act of God event. Do you know where you got that terminology?

A Well, act of God -- in many ways. The tree getting stuck in the flap gate. Washing its way down to the headworks. Intruding the headworks and shorting out of the pumps. The flood event that came up, I would probably say a lot of these community members would call this potentially an act of God event. This was a significant event is maybe

mischaracterizing that term.

Q Okay. So you're describing it similar to any rainfall being an act of God, the way you're using the term?

A I would not say so because this was a very unique situation. As I mentioned previously in my testimony, this was a large watershed. It rained the day prior. It just made its way down to the lagoon while the new rain fell on top of it, and increased the situation -- the confluence there with the two together, it did not work right. There was substantial flooding. That was a situation more than a normal rainy Saturday.

Q Is it your understanding that the District ever intentionally bypassed treatments during December 19th or 20th?

A Intentionally bypass treatment, yes. We pumped --

MR. JOHNSTON: Can you speak up, please?

THE WITNESS: I'm sorry.

I guess, if you refer to the pumping -- or the -- the temporary pumping from the headwork structures to the -- beds --

BY MS. MACEDO:

Q Okay.

A -- that temporarily bypasses them.

Q Okay. Do you account for energy loss in your methods?

A Can you define "energy"?

Q I'm not an engineer, so you are.

Tell him what it is like, Matt.

(Brief pause in proceedings.)

BY MS. MACEDO:

Q How much head was in the system?

A We accounted for head in the system by establishing hydraulic grade line.

Q Okay. Where are your observations of the grade?

A We observed the grade in numerous locations, primarily on the plant itself.

Q Okay.

A At two locations.

Q Where were those locations?

A We saw that occurring at the manhole, which we monitored throughout the duration of the spill.

Q I'm sorry, did you say the manhole?

A There is a manhole which we use. I believe it was GB2. It is where the physical pump was actually installed. And that is where we at one point

pulled off the manhole cover, and we could see the sewage within there. And we could see the grade, which we were trying to catch up, because we were pumping at a higher capacity that the sewer water was dropping down.

MR. YOUNG: Ms. Macedo, your time is up.

MS. MACEDO: Okay. That's fine.

MR. YOUNG: Okay. Any redirect?

MS. THORME: Just one question.

REDIRECT EXAMINATION

BY MS. THORME:

Q How much rain would it have taken to have one to two feet of flooding the way it was in the Oceano area, if the flap gates hadn't been opened at one end and closed at the other?

A How much rain that is over that same location?

Q Yes.

A I don't know -- I don't have my calculator. I don't know. I don't know.

Q Okay. And has there been any similar rain events that haven't caused this flooding in the past?

A Yes, we have had many -- well, the

rainfall totals -- you can see we have had those rainfall totals before, and we have not had that flooding issue in the past.

MS. THORME: Okay. No further questions.

MR. YOUNG: Okay. Mr. Johnston?

MR. JOHNSTON: I have a couple of questions for you.

You contradicted some of Mr. Appleton's testimony regarding his assertion that there had been multiple discussions with the District regarding seals, and the lack of seals in that vault.

And your statement was that you believe that to be incorrect; is that right? Did I correctly characterize that?

THE WITNESS: I am not sure if that is correct.

MR. JOHNSTON: Okay. And so -- and let me just ask you, since you're -- and I understand you're testifying as -- for the District, not as an individual.

Do you have any way of knowing as to whether Mr. Appleton's testimony was correct or not?

THE WITNESS: Regarding his annual meetings with the Board of -- I'm sorry, with the Board of Directors on-site --

MR. JOHNSTON: He stated that in the period

between 2004 and 2010, that he had brought up multiple times, the question of the seals. Yes, in those meetings.

THE WITNESS: I cannot specifically state that that is the case, no.

MR. JOHNSTON: That you can't speak to the truth of the matter, one way or the other?

THE WITNESS: I guess it would be speculation.

MR. JOHNSTON: Thank you.

The -- can I look at 49-2, for just a minute?

MS. THORME: Which exhibit?

MR. JOHNSTON: 49-2.

MS. JAHR: 49-2.

MR. JOHNSTON: Thank you.

Can you show me in the sewer treatment plant where the headworks is?

THE WITNESS: Sure. What you have right here is the border of the treatment plant shown on this red line here (indicating).

And you can just barely make out these various facilities. These are the secondary treatment portions.

The headwork itself is right where this black line extends down, and this dash line comes

across. Those are two sewer lines that connect in the headwork structure right there. So this is the flap gate water valve that I was talking about where the stick that had entered in and allowed that Arroyo Grande Creek to flow backwards into the lagoon, cross the headworks structure and impact the structure right there. So it was more than just standard day ponding. This is actually floodwater at a great depth.

MR. JOHNSTON: Okay. So -- the reason I'm asking is because there was another -- I believe it was 45-1, I'm not sure. There was another graphic that showed water ponding around the headworks -- maybe it's a different -- no, that's not it. It's the one before that.

Water ponded around the headworks, and -- okay. Well, I don't know the number.

MS. JAHR: Is it the two pictures?

MR. JOHNSTON: It showed -- it showed in different colors, a small pool of water around the headworks --

THE WITNESS: That's it.

MR. JOHNSTON: Thank you.

When I look at that -- and the reason I'm asking this is because of the question that Mr. Appleton raised about the sewage coming out of the

gate of the headworks --

THE WITNESS: Yes.

MR. JOHNSTON: -- and there have been numerous questions on the part of the District's counsel, as to whether anybody established whether that sewage actually left the premises.

THE WITNESS: Okay.

MR. JOHNSTON: And when I look at this diagram, it seems to indicate that there is a pool around the headworks, that is not connected to the light and dark blue pools on the left that is storm water flooding.

THE WITNESS: That's correct.

MR. JOHNSTON: Now, when we look at the 49.2 -- can we have 42.2 again?

MR. COLLIER: Yes.

MR. JOHNSTON: That seems to indicate that the headworks are in a flooded area, that is actually physically connected to the whole rest of the flooded area. Can you explain that discrepancy?

THE WITNESS: Sure. Is there a way to possibly pull both of those pictures up at the same time?

MS. THORME: No, sorry.

MS. MACEDO: You're asking for a lot now.

MR. HARRIS: She's good.

THE WITNESS: Perhaps I can just -- as she's

working on that, I will start explaining it to save time.

Again, this is -- oh, thank you.

This is the headworks structure here (indicating). This is the blue portion, which Mr. Johnston is referring to. And also this is the flooded location around the headworks, which he is saying, how can those two things exist solely and not put together and not cause an issue.

What you see here is a site drain. So this is a bermed up section. We are required to treat under our NPDES permit, to treat all storm water collection that comes on. So we do collect that storm water. Not to say, it's not -- that it is going to get breached. It's clearly getting breached over here, and it is getting breached over here.

But I guess my assumption would be that this water here is entering a drain system here. There's several drain systems throughout the system. And again, as I mentioned earlier, that is returned back to the headworks. So that is one possible scenario.

I'm not saying that I can fully attest to that, but that is what I would imagine would likely to have happened.

MR. JOHNSTON: Okay. So can you show me the location of the berm?

THE WITNESS: Yes, if it's in this drawing.

MR. YOUNG: He would need to --

MS. THORME: Bigger.

THE WITNESS: I'm not sure if there is topography on this map or not. Some of them have it and I could show that. I'm still having a hard time seeing it. I do see lines here, and it's showing various topography on the map on the system. But there is a curve here, and I'm sure there is an elevation line, which I can't read from here, which would extend down here.

MR. JOHNSTON: Okay. But the headworks was basically connected by surface floodwater to the rest of the flood, and your assumption is that even though there was water flowing out of headworks, that it was being pumped along with all the rest of the water, back in the headworks?

THE WITNESS: I would not make a statement that there was no wastewater that exited. I can't do that. I can say that there is a storm drain there that does accumulate that water back to the headworks. That is what it is showing in this picture.

But you are correct, there is water

clearly passing from the Arroyo Grande Creek down to that location and exasperating the flooding. So obviously it came from onsite -- offsite. I'm not sure if it is spilling on the plant or off the plant, or how it's happening, but it very likely.

MR. JOHNSTON: Okay. And finally I'd like to ask you a little bit about the financial statement that we received, as part of your testimony.

Now, can you explain the -- fund 20 is labeled "expansion"?

THE WITNESS: Yes.

MR. JOHNSTON: Are you familiar with the funding and budgeting mechanisms of this particular District?

THE WITNESS: I am probably not as experienced as I need to be, but I can certainly try to answer your question. If you have a question specific about that, I do know some.

MR. JOHNSTON: Okay. Well, my question is, is all of the money in fund 20, the result of collection fees or is that intermingled with any other money?

THE WITNESS: There's --

MR. JOHNSTON: Is there discretionary money that the Board has put in at one point or another for an expansion fund?

THE WITNESS: Well, what you see here, is you see fund 19 operating on fund 20 expansion and fund 26 replacement. That fund 19 operating fund is established and funded primarily from rates. Those are the collection -- the sewer rates, that occur on a monthly basis.

Fund 20 is funded primarily from hook-ups. So in other words, if a new home hooks up to that and pays the connection fee, that is what funds that fund.

MR. JOHNSTON: What are the other sources of funding for fund 20?

THE WITNESS: As far as I know, that is a hook-up fund only.

MR. JOHNSTON: Can you state that with certainty?

THE WITNESS: I can state that that is what I believe with certainty. I can't say that is correct, but I believe that is the case. But I guess with ultimate certainty, then I would say, no. That is what I'm led to believe about fund 20, it's hook up for --

MR. JOHNSTON: You've asked the question -- in other words, of other people in the District, as to whether or not fund 20 is composed exclusively of hook-up fees?

THE WITNESS: I have asked it a different way. I have asked where the funds come from to operate the fund. I was told fund 19 is pure rates. And fund 20 is funded through hook ups, and fund 26 is a transfer from 19.

MR. JOHNSTON: Okay. And were you told fund 20 is funded primarily through the hook up --

THE WITNESS: I did not ask it with that specific terminology. But I assume that is the case, but I can't --

MR. JOHNSTON: Thank you.

THE WITNESS: I didn't ask so.

MR. JOHNSTON: I'm done.

MR. YOUNG: Mr. Jordan.

MR. JORDAN: Thank you, Mr. Chair.

So staying on that same form between the time that counsel is handing it out and panicking about her time, I've got even less than that probably.

So where on this form does it show monthly revenues from your customers?

THE WITNESS: This form is not showing -- what you're seeing here is -- if you go back to page one -- if you're looking at page two, go back to page one, please.

You will see an overall monthly summary,

and what you're seeing there is during the month of July, the District received payments for June's sewer services that would be fund 19, in a total amount of -- there is a dollar amount there from each of the various member agencies, the City of Arroyo Grande, the City of Grover Beach, and the -- CSD.

There was a $2,475 fund 20 connection fee in Arroyo Grande for the month of June. For the month of July, $1,877 that was earned for the --

THE REPORTER: Excuse me, could you speak up more?

THE WITNESS: So -- but that paragraph right there, you can see, it states where their incomes are coming from on a monthly --

MR. JORDAN: So is this $276,000 represented in multiple numbers in that fund 19?

THE WITNESS: Um, as I understand it, this is a cash balance statement at the time, and these funds are put into that to represent that current balance.

MR. JORDAN: Okay. And in fund 20, what is that money used for?

THE WITNESS: Fund 20 is expansion. For instance, a lot of the long-range planning that we heard earlier today, that was recommended by Mr. Thoma (phonetic) --

MR. JORDAN: The capital projects?

THE WITNESS: Exactly.

MR. JORDAN: Okay.

THE WITNESS: So that would be secondary treatment processes, the new centrifuge, that was just recently purchased. The chlorine contact tank, which we built a few years ago.

MR. JORDAN: And you're not in any position to provide a list with an itemized budget of what those projects would be?

THE WITNESS: I'm sorry --

MS. THORME: That was an exhibit, and the budget is in an exhibit.

MR. JORDAN: For what years?

MS. THORME: For 2012.

MR. JORDAN: Okay. You better help me with that exhibit number, if you can.

MS. THORME: It's Exhibit 36, is the adopted 2012-2013 budget.

MR. JORDAN: Okay. Thank you.

And do you know then, if that designation of those use of funds, either in the next years' budget or in any future years projected in the capital projects, can be modified or changed by the District directors?

THE WITNESS: As I understand it, projects that have carry-over budgets or have had carried budgets over in the following year, if not extended, I think they can be changed. But it can only --

MR. JORDAN: And it's if they have a specific list of items, then you designated specific items for a specific price that are going to be accomplished in the next year, or the prior year after --

THE WITNESS: Yeah.

MR. JORDAN: -- and then represented by this 4 million some dollars there, can those actions be changed by your District Board?

THE WITNESS: Well, I understand that they can. We do a five year look out on the projects, and we assign that money over a five-year period. And if things change in that period, I'm sure they can be allocated.

MR. JORDAN: Okay.

THE WITNESS: I believe we have all the money allocated towards projects.

MR. JORDAN: And then in your role with the District, or as the District, were those your actions that changed the SOP, in regards to the gate being closed and after the event?

THE WITNESS: It's not the actual gate, but

it's a valve --

MR. JORDAN: It's a valve.

THE WITNESS: -- and no, I did not do that.

MR. JORDAN: Okay. But was it somebody in the Wallace Group that did it?

THE WITNESS: If I remember correctly, it looked like it was written by Bob --

THE REPORTER: I'm sorry --

THE WITNESS: He's --

THE REPORTER: -- excuse me, what was the name you said?

THE WITNESS: Bob.

MS. MACEDO: Bob.

THE WITNESS: Bob Barlogio. I think it's B-a-r-l-o-g-i-o. He is the chief operator.

I think he -- maybe I'm getting the order wrong, but it's prepared by and reviewed by or approved by, so it was done by the operator.

MR. JORDAN: And then the same type of question on the pumps. On the purchase of the pump that -- for a period of time it is either unknown or unrealized, that it's only going to run for an hour, and then it terminates. Who does that, and how does that happen?

THE WITNESS: Well, we're restricted -- I will go into a little detail to kind of help you with

this -- we're restricted from operating that pump for an extended period of time probably by our APCD permit. But it restricts us from putting particulates (phonetic) in the air.

But primarily more so from running that pump that low, because we just can't produce those types of flow. We would have to shut down the wastewater treatment plant to produce those surcharge flows. We just can't get 10 MGD's so that is not a pump that we have run for an extended period of time.

When we turn it on, it pulls water so the one hour duration, I think, we just have never exceeded it. It's never been in a situation where we need to for temporary projects where we bypass temporarily. But I don't think we have ever been in a situation where we shut down like that.

MR. JORDAN: Was that your assertion of one of the goals or the rewards of the District going out and purchasing that pump is that you had a backup pump in place that would handle an emergency?

THE WITNESS: That's correct, and it does.

MR. JORDAN: Except for this one?

THE WITNESS: No -- well, I believe this pump would have handled it if it had not been for the other incidents that occurred at the same time.

MR. JORDAN: Are the air quality control issues, are those in place in an emergency like this or just in normal times?

THE WITNESS: We're restricted -- each permit in the facility is restricted to different lengths of time. There are different requirements for each of the diesel powered engines for back up or generators or whatever it may be and --

MR. JORDAN: Regardless of what is going on in the ground?

THE WITNESS: It --

MR. JORDAN: I mean, if all your other pumps have failed --

THE WITNESS: I would --

MR. JORDAN: -- at your facility?

THE WITNESS: I would imagine that they may offer some kind of variance to that, if you are experiencing an emergency. They do -- well, for this instance, we did run it for pretty good amount of time.

The permit is renewed annually. You must maintain meter readings for hourly usage times. Charts available for them to inspect.

I would assume -- I would only assume that it would have to be regulatory -- for them to understand there would be times of emergency.

MR. JORDAN: Okay. Thank you.

THE WITNESS: Sure.

MR. YOUNG: Dr. Wolf?

DR. WOLF: I will kind of continue on this question that was made about this particular pump.

Isn't it true that this APCD does provide provisions for testing standby generators and that the provisions for a water treatment plant are the same for health care facilities for legal report standby systems?

THE WITNESS: As far as I know, this permit does have an hourly usage on an annual basis, which you can test and make sure that it starts, it operates and is ready to go when it is called upon.

DR. WOLF: And isn't it true that the calculation from APCD for the county are 30 minutes per month of operation?

THE WITNESS: I believe that is the case with this 30 minutes -- no, I don't think that is the case with this permit.

DR. WOLF: But let me rephrase that.

The accumulative usage is six hours per year. So you can -- that is your budget, so you can run it one hour every two months, 30 minutes?

THE WITNESS: Um, that --

DR. WOLF: And if you're not sure, you can always --

THE WITNESS: That may very well be. Speaking from experience, knowing that from different wastewater treatment plants, I have seen different durations of time for different generators.

DR. WOLF: You --

THE WITNESS: I'm not sure. It falls within that, but that seems to be logical.

DR. WOLF: I think that is the industry saying.

Since you have been quite a bit involved in helping the District in their compliance, both in terms of permitting and help you bring from your introduction, the best management practices to the facility, have you had in your last four years of experience, any observation, in terms of some enhancements to prevent maintenance program that could be performed, both mechanical and electrical, or everything was satisfactory to your observation?

THE WITNESS: Preventative maintenance?

DR. WOLF: Yes.

THE WITNESS: We just recently updated the operation for maintenance for the plant, which I participated in in rewriting some of those portions of the treatment plant processes. The District maintains

a hock (phonetic) plus system for preventative maintenance. And it's very good system, in my opinion, which both cards remind you via e-mail. And I did write specifically about those portions about that, but I was not involved in establishing that. It was probably done by the chief operator out there.

DR. WOLF: And how long ago was this program established?

THE WITNESS: They have been running that program for several years now, as far as I know. The manual was updated, I think, two years ago.

DR. WOLF: All right. So that was back in -- around 2010?

THE WITNESS: I would say that is probably right.

DR. WOLF: Okay. In the testimony done by the electrical expert for the District this morning, Mr. Thoma, Thoma Electric --

THE WITNESS: Uh-huh.

DR. WOLF: -- there seems to be a contradiction between his statement, that it was a miscoordination problem with certain breakers, and we had a little technical exchange on that topic.

THE WITNESS: I heard that.

MR. JORDAN: And you know, you mentioned that

the shunt trip was the issue. Yet based on the coordination study that was performed, the results had indicated the fact that there were some miscoordination between the breakers. Do you have any comment about this?

THE WITNESS: As far as I know -- as far as I know, you're correct. There is still, I believe -- there remain some issues with the coordination between the breakers, particularly that of the upper 400 Amp (phonetic). I can't remember.

But what we have done, is this was determined to be a shunt trip issue -- and I will come back to the breaker -- and that was determined in October of 2011 when a similar event happened, even though we created that air gap that Mr. Thoma testified about, and the water still migrated down and the hit shunt tripped it, and they were able to institute the emergency backup pump.

And what we did there is we created actually two shunt trips so to not actually cut off all breakers and cut off two motors at a time. So if one were to trip, you still have two motors. This does not require four motors to run. Of course, the motors are equipped to run independently.

The breakers, yes, I did hear Mr. Thoma

state that there were some issues. I heard him speak out of my knowledge range, but it sounded like you understood that there was some hard fuse issues, and I thought he referred to you understanding the complexity of trying to work out those issues.

DR. WOLF: Okay.

THE WITNESS: And I was not sure if it was something that needed to be done, or if it was something that was more difficult to do than necessary. I was not sure from that conversation.

DR. WOLF: When the District required the diesel powered emergency pump, it was mentioned, I think by you, that this was a -- I don't want to put the words in your mouth -- but if I recall -- and it's getting late, so you know, my brain cells are slowing down a little bit -- but I think -- and perhaps, you know, correct my interpretation, but you mentioned that this was most like an unusual or a really -- what is the term that was --

THE WITNESS: Are you talking about the flooding?

DR. WOLF: Pardon me?

THE WITNESS: The flooding?

DR. WOLF: No. The diesel emergency bypass pump.

THE WITNESS: Okay.

DR. WOLF: And that it was a piece of equipment that was purchased basically, that really was not necessary, but you had the foresight -- that is the term, I think that I was --

THE WITNESS: The foresight.

DR. WOLF: The foresight.

THE WITNESS: Yes.

DR. WOLF: Now, from your extensive experience, isn't it correct that these types of backup pumps are actually pretty common in the industry, considering that the City of Pismo, your neighbor, had that same identical piece of equipment?

THE WITNESS: Well, it is a very good statement, and to that, I would have to say the City of Pismo did not provide us with the same piece of equipment. The City of Pismo provided us with a backup pump. But not necessarily a backup pump, which would accommodate the headworks structure, and accommodate those flows that which we experience and in that range.

It -- the reason I said that the industry has the foresight to purchase that is because I'm not familiar with too many treatment plants that have that.

Treatment plants do have auxiliary pumps for various reasons. Pumping down, as I understand,

clarifiers to elevated structures, the tanks, many portions of the wastewater treatment plant are tanks that can be drained out with wet pumps (phonetic). The kind of drain that goes out with trap pumps that do all those different operations. A backup pump is certainly a good thing to have. It comes in handy.

The reference I was making is that the District had the foresight to purchase one that would actually accommodate and replace the headworks structure should it need to be replaced.

DR. WOLF: Okay. Thank you. The last question is, how many acres is the facility?

THE WITNESS: The facility resides on 7.6 acres or so.

DR. WOLF: Okay. So 7.6, so we're looking at about 19 acre feet of precipitation over your facility. And kind of tying it a little bit back to the first question that my colleague asked here, you gave a hypothesis of the possibility that the headworks drain would actually -- the overflow would be pumped back into the plant.

So if we consider 19 acre feet of water -- surface water on the plant, plus the water discharged from the sewage -- you know, I don't want to us to go through the math tonight, but it doesn't --

THE WITNESS: I'm more of a cubic feet person or gallon person.

DR. WOLF: Well, I can do it in cubic feet, too. That is not a problem.

THE WITNESS: To that I guess I would say that there are sumps. As far as I know, it is sized to accommodate the precipitation levels. It is not sized to accommodate inflow from various water structures. You do also have to remember this is a wastewater treatment facility.

A good portion of that 7.6 acres is comprised of large diameter tanks. Those tanks are intended to treat that facility -- to treat that water. Some of it is this large. Slow moving water that is designed to settle out the solids. Transfer them to the solid digestion location to treat the actual plant water.

So some of that would be fine within the treatment system already. What that is, these are large 70-diameter tanks, 40-diameter tanks.

DR. WOLF: Correct. But those tanks -- those tanks were not empty?

THE WITNESS: They were not.

DR. WOLF: They were not empty?

THE WITNESS: No.

DR. WOLF: You know when the event occurred, so you can't -- you cannot make the assumption that these tanks were able to capture, you know, this volume of water?

THE WITNESS: Sure. Sure. I guess -- I never performed an analysis of the drainage system on-site. I do know that it's there. It works. There's never been a flooding issue on-site, so it accommodates the rain. How it does that, I'm not quite sure. It did not accommodate this incident.

DR. WOLF: So you will agree that there is a question mark?

THE WITNESS: Well, I have never seen proof in the past that shows me that we flood frequently and flooded to the point that we can't accommodate.

I've never seen or heard of the pumps being overrun and not accommodating. So this isn't just a gravity system. So you may be landing water on the ground and putting it in a pumping system which is pumping upwards, a combined pumping close to ten MGD in the treatment works.

DR. WOLF: Yeah, so --

THE WITNESS: That could process a lot of water.

DR. WOLF: I guess it was a statement from the

District that it was about 38,000 gallons of water and that is how much was backing up. And I know I'm talking gallons earlier and I was talking acre feet, but -- and I don't want to belabor this because I know it's getting late -- but it seems that there is -- that we're looking at very large inconsistencies, and quantities, and I recognize it's not an exact science, but --

THE WITNESS: Well, I guess, understanding the seriousness of your inconsistencies, perhaps if you can elaborate. Where are those inconsistencies?

DR. WOLF: The inconsistencies, in terms of the assumption that all the drain water is basically recycled back in the plant --

THE WITNESS: Oh, sure.

DR. WOLF: -- and also, there does not seem to be an easy way of calculating how much sewage water was coming out of the headwork.

THE WITNESS: Oh, out of headwork. I apologize. I didn't understand that you were talking about the 19th. I thought you were talking about the site and the ability to handle water.

A couple comments there. We -- if you can pull back up the map so I can show you. There are several manholes on-site. We discharged from one of

the manholes, which we know put off-site, because the site does not have water on it typically. So that water came on-site.

We spilled from a manhole. That manhole commingled with water -- if you can refer to the picture here.

This is not addressing your headworks, but we can get there in a second. This is -- this blue water represents the Oceano Lagoon water, and it was probably at a further extent than this. We drew a pictorial for you to help your understanding of what happened. The water came this way on the site, and it encroached on to the site. At that particular topographical grade line, in which we know water rose --

THE REPORTER: Excuse me, could you slow down?

THE WITNESS: -- we did discharge from this manhole right here. And that entire time we were discharging, that water was there, we were spilling into this part, which is interconnected with the Meadow Creek.

And what we did in this particular instance, is we needed to evaluate this from a hydraulic study. We spilled in. We carried this dirty water that now becomes sewage. Now, the analysis that

we did here, is that we said that water at one time was not there.

It encroached up the site over a great ridge on the edge of the property and the elevation break. It encroached on the site, hung out on the site for a while, and then the floodwaters eventually receded. And when that water receded, if you have a wall, for instance, and that water goes above that wall line and it's on a slope, that water, the last inch or so is going to skim off-site and the rest is going to stay on-site, and it will be collected.

So what we did is we did a sewer assessment of that wastewater that came out of here. Analyzed across this dimensional water space, and skimmed off that top surface, which would typically be the elevation of the known elevation.

The county determines a 12-foot water elevation, minus that grade break elevation. So that is the water that went away --

THE REPORTER: Excuse me --

THE WITNESS: -- and that is what we report -- the one that contradicts the statement that was made by the State in their rebuttal saying that we did not account for on-site storm water.

So that is how we accounted for the

floodwater collecting the wastewater on-site, and the fact that it did recede. We obviously knew, taking a fair stab at this, and trying to do what is right, that water came on and it commingled. And there has to be some kind of account for that.

The practice was that it came up, breached a grade break, eventually settled back down again on the normal water level. It's going to hit that pitch point where it can't go one way or the other, and half of it stays and half of it leaves. Where that break is and the elevation is, that skim off of water is considered to be sewage water.

DR. WOLF: Thank you.

How much nonpermeable surface do you have out of the seven-and-a-half acres?

THE WITNESS: Nonpermeable?

DR. WOLF: Yes.

THE WITNESS: I don't know if we have a good exhibit that will show that. I can do my best at trying to -- I don't have a quantity for you, but essentially this structure here, if you follow this red line, this is all roadway that comes over here. This is all asphalt.

What I'm going to do now is draw in the areas of grass. There's grass between these fire

fighters here. There's grass right here. And this is a -- I'm sorry, this is a dirt portion of the -- this is a section that has sumps.

But this is all asphalt leading to an entire asphalt section back in here. These are the -- this is all asphalt here. So I would guess -- I mean, taking away the facility, you're maybe looking at 45 percent, maybe.

DR. WOLF: Okay. So about -- your infiltration covers about 50 percent of the facility, more or less?

THE WITNESS: Well, keep in mind, this was a significant rain event. The conditions were highly saturated. Those were the elevated flows we saw in the sewer system. So I don't -- I wouldn't consider the infiltration rate occurring at this event. I would consider run off probably back on to that, that structure itself. In my opinion, in my professional opinion.

DR. WOLF: Thank you very much. I have used enough of your patience --

THE WITNESS: Sure.

DR. WOLF: -- and your time.

THE REPORTER: Excuse me, could we take a break, please? It's been two hours.

MR. YOUNG: Sure.

(Break taken.)

MR. YOUNG: All right. So where were we?

MR. HARRIS: Me.

MR. YOUNG: Okay. Mr. Harris.

THE WITNESS: If I could, for the record real quickly -- I'm sorry to interject here. I'd like to make a clarification on a question asked of me just moments ago regarding the financial funds for the budget.

I stated before that fund 20 primarily came from rate and hook ups respectively. I would like to conclude that those do come from rates and interest -- hook ups and interest only. So it's a clarification I made by speaking with the Board of Director. I just wanted to clarify that.

MR. YOUNG: Okay. Mr. Harris.

MR. HARRIS: My first question -- the District's great expense and trouble hiring RMC to do an analysis of the State's estimates of how much was spilled and to offer an alternative.

And -- so I assume that the District felt pretty comfortable with RMC with their ability to predict the size of the spill. But the District's estimate differs substantially from what RMC came up with. Can you answer why the District did not adopt or

use RMC's estimate?

THE WITNESS: Well, that is a very good question. Getting back to some testimony earlier about myself, the District initially did a five-day report. And in that five-day report, we considered three different storm methodologies. We considered the duration of the flow, as well as the pump curve methodology, as well as that of Mr. Appleton.

We submitted all three reports for review. We indicated that we thought the most defensible, and the one that fit most in their reporting requirements, which we testified to before, was the duration and flow method.

But we did do a flow-curve analysis. We performed that on our own. We basically took a look at the flow. We spoke with the operators. We asked for storms that were most significant or related to the December 19th event.

They provided two storms in general. One being in January 2006, I believe. And we took a look at the rain events and the flows that were responsible -- the flow that occurred as responsive, and we created our own hygrograph, and we kind of tweaked at it and tweaked at it. And we did an analysis where we kind of extended it and made it match

where we thought it should match.

And based upon the flow that occurred at the time of the failure, the flow data that we received in the two significant rain events, and we ended up with a value of 600 and -- let's see, which one is ours?

MS. THORME: The bottom.

THE WITNESS: The bottom one. So this is January 5th, 2011, five-day report to the State Water Board. We calculated 654,000 gallons --

MS. THORME: And that is Exhibit 9.

THE WITNESS: This is compared to the RMC value, which are, in my mind, the true experts. They have the modeling expertise, the knowledge. We came up within 20,000 gallons of their final number.

Now, the reason we didn't go with this number, as I mentioned, we just couldn't justify it. And you have to think back. This is not the current day. This is not under the spotlight of the Water Board.

We did a ton of information. We gathered a ton of information and did a ton of work and did our due diligence as professionals to try to acquire what we felt to be the best fit and most appropriate methodology, and the most defensible methodology.

This methodology, while it was a great number in the end, it matches what we feel -- well, matches RMC almost exactly. It matches corrections, which we try to apply to the State's methodology through prior meetings and 674 (phonetic) after we corrected some issues we had with theirs. And we were very happy with that. We were very pleased it ended up that way. We submitted it all.

But in the end, as I mentioned, there is a CIWQS requirement that is part of the current MRP that requires you report allocation. It requires that you report manhole-by-manhole basis. This only indicates what is happening at the headworks.

This is not the spill that occurred. It occurred in the entire community. We don't know how to distribute that volume right there, around manholes, around many locations. Do we do it equally? So we went with something that was the most defensible. That was with speaking with the community. That was receiving photographs. That was applying engineering analysis that we could rely on. And for that reason we submitted that report.

However, we held back nothing. We submitted all of our evidence to them. All of our -- we submitted binders, probably four binders. We felt

like we overwhelmed them, and we asked if we could come up to Sacramento and visit with them. We said, we gave you so much. We want to make sure you understand it. We want to sit down at the table with you and go over this and see what you think. And we had three or four meetings up there, at least, talking about methodology.

So you know, again, it was a level of transparency. But maybe at the end of the day, we're engineers, we have to be able to stand behind what we do and make our judgments in the best interest of our pursuit. So we went with number one, methodology.

MR. HARRIS: Okay. The October 2011 event, the shunt trip, you mentioned that the wiring, prior to that, had been rerouted to a wall and a new conduit to provide an air gap, but you still had problems on October 2011. What was that caused by?

THE WITNESS: That's correct. What happened there was an attempt to fix what we thought was -- if you remember my testimony -- when this first happened, the water, we knew had migrated into the conduits. It traveled down to the pumps. It shorted the number 4 pump, and we found the interior portion of the motor moist upon inspection.

We pulled them all out. We sent them to a repair shop. We had them coated. I believe some of

the bearings got replaced. We put the pump back in place. We thought it was a pump issue. We thought that we could inject that water right in the heart of the pump. Low and behold, we injected it into the shunt trip, that is what caused the primary breaker issue that we had.

So we thought by creating that air gap, as Mr. Thoma testified to today, that that would resolve the issue of the water migrating up in the pumps. That was performed in August 2011.

Then on October 4th of 2011, we had a very similar incident where water migrated in, into that pull box, traveling down the conduit. This time it was not the conduits. The conduit was still in place. The shunt trip, if you remember, was down in an elevated structure. So it had passed through into that. That is where we truly determined that it was the shunt trip itself and not the motors.

MR. HARRIS: Earlier, you showed an exhibit that had some corrective actions listed on it. I don't recall if it was a table that showed --

MS. THORME: Exhibit 9?

MR. HARRIS: -- and I'm wondering, were those ones that you proposed to do or were they ones that you had done in response to the events --

THE WITNESS: What we did -- you know our efforts were multifaceted after the event. We were in the midst of the spill. We were trying to figure out what happened, where it happened, how it happened. Who was effected. What we needed to do. And part of that was the recovery process of what we needed to do to make sure this doesn't happen again.

So we created a number of issues. For instance, we noted a high amount of I and I in the system. So we hadn't in the past done an I and I study. So we did that I and I study.

We monitored for four weeks. We took a look at the inflow of the system. The portion of this rewiring over the -- over the wall. We did a breaker study, that we spoke about --

MR. HARRIS: I will just cut to the chase. So of those that were suggested, how many of those were completed?

THE WITNESS: I believe all of them had been completed.

MR. HARRIS: Okay. The report that was recently -- the monthly financial report that was recently provided, Mr. Horner testified earlier in the day that, I believe, had tried to get the 2012, 2011 annual financial report, and that the District had not

provided it. And I'm assuming it had not been completed.

Why didn't the District -- when that request came in, why didn't the District provide the most recent monthly report to Mr. Horner, because clearly, it looks like you're producing a monthly financial statement?

THE WITNESS: That's a good question. I'm trying to think back.

We provided the 2008, 2009, 2010 financial statements, as well as the District budgets. In my opinion, the District budgets are an accurate representation. Mr. Horner testified to that today, but --

MR. HARRIS: That is not my question. The question is, this is a monthly financial statement, it's not a budget. So if he was asking for the most recent information so he can do an accurate ability to pay analysis --

MS. THORME: Can I just jump in there, because Mr. Horner never asked us for that and --

MR. HARRIS: But you're not testifying, right?

MS. THORME: I understand, but you're -- you said that Mr. Horner had asked us for that, and that is not a correct statement.

MR. HARRIS: No, I said he asked for the annual financial report, right, the 2011 is what he had asked for?

MS. THORME: Right.

MR. HARRIS: And it was not forthcoming. And I assume that it was because it had not been completed.

MS. THORME: Right.

MR. HARRIS: Would it not have been to your advantage and would it not have been the most forthright thing to do is to say, Mr. Horner, but we do have monthly financial statements that we do, and we can provide you the most recent one, which would have taken him up to date to whatever month that was.

MS. THORME: Well, legally we received a subpoena from the prosecution team. We responded to the request that they had, and they asked for specific things, including the actual term that he used, which the District does not have because they don't have documents by that term. So we produced documents in response to the subpoena, which were produced on August 13th, and that document came after that date.

MR. HARRIS: This document came after, but you had one for June, May, April.

MS. THORME: But they didn't request those documents.

MR. HARRIS: Okay. You had mentioned earlier -- you had used the term earlier when we were talking about what you do when floodwaters -- when it was bypassed and over to the sludge pumps?

THE WITNESS: Yes.

MR. HARRIS: Based on your understanding of the Federal regs (phonetic), what is the definition of "bypass"? Does that action meet the definition of bypass?

THE WITNESS: That was just bypassed on-site for temporary storage. Bypass did not occur. It did not bypass --

MR. HARRIS: So it does not meet the definition of Federal law as bypass as you --

THE WITNESS: My understanding is that portion of what I consider to be a bypass, did not bypass the definition --

MR. HARRIS: Okay. So it's a misuse of the term?

THE WITNESS: Correct.

MR. HARRIS: Okay. Earlier you stated that you did not believe that the precipitation that occurred on or around the event was one-hundred-year flood; is that correct?

THE WITNESS: That I did not believe that, yes.

MR. HARRIS: Correct. But the permit contains language that says I believe that wastewater treatment plant must be built, maintained to withstand a hundred year, 24-hour event, correct?

MS. THORME: No, that is not correct?

THE WITNESS: That's not correct.

MR. HARRIS: Will you correct me, please?

THE WITNESS: I believe it says one-hundred-year storm.

MR. HARRIS: Okay. One-hundred-year storm, but we determined this was not one-hundred-year storm?

THE WITNESS: Well, there's -- there's a number of requirements to classify a one-hundred-year storm. It's duration and time and quantity and volume.

MR. HARRIS: So do you think that this -- so let's focus on the permits. So the permit has requirements in there that you -- they must be built, maintained to hold up to a one-hundred-year event storm, whatever you want to call it.

Would you agree with that general statement? We can go to the regs (phonetic) and look at it, but --

THE WITNESS: Sure.

MR. HARRIS: Okay. Do you think this storm was of such a size or duration, that it met that threshold

of a hundred-year event?

THE WITNESS: I do not think the intensity that I saw of that two-day period meets that, that event. There was significant flooding, which would be characteristics of a potential 85-year or 80-year flood, 100-year flood. I don't know.

MR. HARRIS: Okay. So that would mean that you did not meet that permit requirement then, in your NPDES permit?

THE WITNESS: Not according to my knowledge of the event.

MR. HARRIS: Okay. Thank you very much.

MS. MACEDO: I have -- I'm sorry to interrupt, but just to respond to Ms. Thorme's interaction with Mr. Harris, I just wanted to -- switch me to D, please.

She mentioned the subpoena, and since I'm the one that issued it, i just wanted to point out request number 13, which gave the District an opportunity to provide any documentation that they wanted the Board to consider, related to the District's ability to pay. That's it.

MR. YOUNG: Did you ask for any monthly financial statements?

MS. MACEDO: We asked for -- Mr. Horner reviews comprehensive annual financial reports. They provided

three -- the previous three fiscal years of audit financial reports, and then 13 was designed to be a catch-all that they were given the opportunity to provide anything else, because we knew that we had public budgets. They had given us documents and settlement discussions.

So 13 was designed to -- anything else you want the Board or us to look at, because at this point, the burden has shifted to them to prove it as an affirmative defense.

MR. YOUNG: Okay.

MS. MACEDO: Sorry to interrupt.

MR. YOUNG: Mr. Yonker, you had testified that no customers of the District submitted any claims; is that correct?

THE WITNESS: That's correct.

MR. YOUNG: Did the District inform its customers that they could file claims?

THE WITNESS: Not that I'm aware of.

MR. YOUNG: Do you know if the District informed or offered to pay for any damage within their customers' homes or property that may have been affected by the spill?

THE WITNESS: I do not think we did. I know this was a significant wet-day storm, as opposed to a

standard-dry day, you know, somewhat different in the past. The significant impact that I saw was quite a bit of flood damage.

MR. YOUNG: My question is, did the District offer to compensate or reimburse any of its customers who may have been affected by the spill within their homes or property?

THE WITNESS: I do not believe so.

MR. YOUNG: Okay. Mr. Jeffries?

MR. JEFFRIES: Let me ask you the question a little bit differently than Mr. Young did.

Were there any insurance companies on behalf of their clients, ask for payment for reimbursement?

THE WITNESS: No.

MR. JEFFRIES: That you know of?

THE WITNESS: None that I know of.

MR. JEFFRIES: Okay. I'm a little concerned about the restricted funds, because I serve as a chair of a special district, and we have restricted funds. We show that on a different line, so it shows restricted funds. And we do not commingle our funds in LAIF accounts or any other type of accounts. But I noticed in this particular financial statement, which I think should have been submitted earlier today instead

waiting till late tonight -- it's poor judgment on your representatives to do that. Not only that, but if you add up the cash of life across, it's off by a dollar.

It should read $3,400,505, instead of 504 dollars. What's a dollar when you're talking about millions.

But I'm assuming that that $3,400,504, as you show, is restricted funds and cash flow, as well? Is that -- I know you're not an accountant, but do you --

THE WITNESS: Well, I'm not an attorney, and I don't claim to be. To the best of my knowledge, this fund cannot be touched. It must be utilized for the purposes for which it is collected.

MR. JEFFRIES: Okay. And then it goes back here, it says life transfers. It says here on Rabobank funds as of July 31st, a reconciled cash balance of Rabobank, a total of $23,587.

This is an account that processes LAIF transfers for the issuance of payroll checks through the District. Now, if that is the case that those are all restricted funds, why are you using them for payroll?

THE WITNESS: Well, I'm going to have to catch up with where you are. Could you point that out to me?

MR. JEFFRIES: The bottom of the page.

MR. YOUNG: On the bottom of page one.

MR. JEFFRIES: And it ends up on the back side of page one. And it says, "because its contracted payroll services, funds are transferred periodically to the LAIF, in order to cover these expenses."

THE WITNESS: Well, my answer to that would be that funds 20 is a protected fund, potentially funds --

THE REPORTER: I'm sorry, but could you please speak louder and slow down? You are trailing off at the end.

MS. JAHR: Could you just restate that for us?

THE WITNESS: Oh, sure.

Fund 20 is a statement that I made saying it's protective fund. As far as I know, fund 20 can't be touched, so it is possible that is a fund 19 transfer. I'm not sure.

MR. JEFFRIES: Well, then how would you know when you're transferring funds, you're not transferring funds that are restricted when they are commingled?

THE WITNESS: That is a very good question. We do have an ability to pay slides that we prepared, which we talked about. The legalities are restricted funds, if you would like to say that.

MR. JEFFRIES: No. I think you've pretty well

answered my question, and I know you're not an accountant so -- but I just wanted to point that out that it might be better if you had it separated. It would be easier to understand.

My next question is, the information the RMC used to come up with the calculations of the amount of the spill, most of those numbers were submitted by your agency; is that right?

THE WITNESS: I would not say most of them, but I would say a portion of them, yes.

MR. JEFFRIES: Okay. And is that why you think that your calculations and their calculations were pretty close to the same, because you supplied some of your numbers to them?

THE WITNESS: No. We can pull up a sheet that shows where the calculations came from and where they were performed by a professional stamped engineer as the RMC expert testified, he did not fully review them, but he did give them --

MR. JEFFRIES: Yeah, his testimony said he did not go back and review all of the numbers because he received them from the agency.

THE WITNESS: We gave him a cursory review, and they were performed by a professional and felt they were appropriate.

MR. JEFFRIES: Now, you didn't have anybody that just took it as -- to audit yours or RMC's analogy and didn't receive any calculated numbers from your agency to calculate the spill?

THE WITNESS: I'm sorry, but can you repeat that question?

MR. JEFFRIES: Well, what I'm trying to get at is, I just asked you that RMC reused some of your numbers that you supplied?

THE WITNESS: Uh-huh.

MR. JEFFRIES: And you said you had documents that showed that, but was there any review of those calculations by another independent company that started from scratch?

THE WITNESS: There was not. The reason that there needs to be --

MR. JEFFRIES: That's fine. You answered my question.

THE WITNESS: Okay.

MR. JEFFRIES: The next question I have is that photograph that showed some flooding that was taken by the T.V. station --

THE WITNESS: Yes.

MR. JEFFRIES: -- and you said that it -- and you showed another slide. The one slide by the

television station showed some bubbling coming up, and it was stated by the prosecution team that that was from the clean-out location?

THE WITNESS: That's correct.

MR. JEFFRIES: Your testimony, if I understood you correctly, said by showing another photograph, that that location was not the same. It was a different location?

THE WITNESS: That's correct.

MR. JEFFRIES: Okay.

THE WITNESS: It's the same location, but they misplaced where the actual clean-out was.

MR. JEFFRIES: Well, if I remember correctly, looking at those two photographs, yours was shown several feet away from where the photograph showed the bubbling.

THE WITNESS: It was about 20 feet away.

MR. JEFFRIES: Okay. So how do you attribute the bubbling coming up in that particular location, than the location where you pointed it out?

THE WITNESS: I don't --

MR. JEFFRIES: Is there another -- is there another clean-out there, or is there another manhole?

THE WITNESS: There is no other clean-out. There is no other manhole. That is --

MR. JEFFRIES: Was there any investigation?

THE WITNESS: Yes.

MR. JEFFRIES: Okay. And can you explain what you found?

THE WITNESS: I can explain the investigation. I can explain the investigation from our end, and I can explain the lack of the investigation from the State's end.

When the State contests hearsay, that the homeowner states it was bubbling, the State was there to speak to the homeowner, but yet never took pictures to show where it actually existed relative to the picture.

My picture shows a driveway in the picture. I have a picture showing the dry weather and wet weather and where that location is, as well as where it isn't in the bubbling and the lack of bubbling in the water.

I also -- I'm pretty familiar with that system. That is a satellite collections system. And if you are familiar with sewer systems -- I'm sorry if you are. I don't mean to belabor the point.

But sewer systems run in segments, typically 300 feet before there is a manhole for access purposes. At the turn of that collection system, there

is not a manhole. There simply is a clean-out. That clean-out is nothing more than a pipe that goes to a 45 and entered out to a clean-out.

That clean-out is a four-inch structure that was referenced in their calculation that was underestimated, that allows the municipal crews to get in there and clean that line because --

MR. JEFFRIES: All right. To clean it out.

THE WITNESS: So in this particular instance -- if you can zoom in there on that picture on the bottom.

Okay. At the end of that arrow -- is it possible to get it any bigger?

Okay. At the very end of that arrow, spray painted green, is that clean-out. That clean-out spray painted green by the satellite operations facility, we coordinated with them to go down after the spill and locate all of their clean-outs and the facilities.

Some of those clean-outs were buried under the grass and debris, and so we actually had to have them locate them and spray paint them green. So that facility was actually located by their operation's department and spray painted green and clearly identified.

The picture that you see presented by the

State, which I'm sure we can pull up, is actually more in line with that RV on the right and much closer to the windshield. There are no facilities down there. There are no homes down there. This is the last home here. So this home has to connect upstream into the picture from where we are. If it doesn't, it can't affect that line, and therefore cannot travel to the treatment plant.

And if you look at that picture there on the very back right -- what I'm seeing is a wind sheer coming up from the RV. So in the very back, you have a marsh back there. It's open ocean, and you can see the surface disturbance in the linear fashion in the back of the picture. That is the wind going across there. You can see it better in the video that I witnessed, but that is the wind sheer.

It's my opinion, that possibly that wind sheer is coming down the side of that 20-by-10 foot trailer, or something along those lines. The actual location of the clean-out is much closer to that saw horse that you see in the middle. It is to the right. There is a grass berm where the road begins and the clean-out is down there.

MR. JEFFRIES: So your theory --

THE WITNESS: Right by --

MR. JEFFRIES: -- is that little disturbance in that right-hand corner of that photo, is wind sheer off of that motorhome that is sitting there?

THE WITNESS: I don't see that as being a strong argument being made by the State. There is no photograph of a dry condition. They're down there speaking to the residents. You would think they would have the resident pointing to it and the photograph saying -- I'm sorry --

MR. JEFFRIES: Why would he be wading out there in that water with sewage bubbling out?

THE WITNESS: The State went down and spoke with these residents just last week in prior weeks -- in August trying to get additional information about the spills. Spoke to this particular incident -- individual. His evidence was submitted as hearsay. It was recognized as hearsay.

And it lacks the photographic evidence, in my opinion, to support that as a spill. I do not see that as a spill. It is not any kind of spill I have seen in the past. It is a surface disturbance, but certainly not caused --

MR. JEFFRIES: So your theory is strictly it's a wind sheer --

THE WITNESS: I would --

MR. JEFFRIES: -- and you have no technical data to back that up?

THE WITNESS: The technical data would be my field visits down there to verify it was nothing. We also have -- just to follow through -- we have the -- we have surveyed grade geographical information system from our collection systems.

That means we have it spacially and data-wise that we can position them spatially across the aerial map relative to the facility on the grounds, so we know in terms of inverts so we know exactly where they are. This collection system is tied into that map, and we know where it exists. There is no facility down there that I'm aware of.

MR. JEFFRIES: You stated that -- and I think others from your group have stated -- that they never had an event like this at that facility; is that correct?

THE WITNESS: That's correct.

MR. JEFFRIES: And have you done any background, as far as the miracle of 1997 floods that we had in this area, where we had cars floating down Higuera Street? The creek along 101 down the Pismo Beach was overflowing onto the 101.

THE WITNESS: The background I have done has

been community outreach through the county's program where we attended a flood meeting. And the intent of the flooding meeting was to educate the people on the event. How it happened. Why it happened, and what they are going to do. That they have a series of events they are looking to put in place so make sure this doesn't happen again.

And at that time, I did hear stories like that. But I also heard stories, at that time, there has never been an issue. We have heard testimony from the public comments today that there have been storms that have been severe without flooding, and that is because the flap gates were operating or because people manually manipulated the flap gates.

MR. JEFFRIES: But part of your testimony is it's an act of God and that is the reason we had the flooding and that is the reason the plant failed. That was part of your testimony that you gave; is that correct?

THE WITNESS: That was correct, in terms of the penalty factor that was presented by the State in my dispute to that.

MR. JEFFRIES: You were not present the day of the 19th of December; is that correct?

THE WITNESS: I was not on-site, no.

MR. JEFFRIES: And what day did you get on-site?

THE WITNESS: I got on-site in the following few days. Perhaps on the -- let's see, Sunday would have been the 19th. So perhaps by Tuesday or Wednesday of that week.

MR. JEFFRIES: Well, since you're the most responsible engineer for that particular plant, wouldn't you think it would be important for you to be there?

THE WITNESS: I'm most knowledgeable. I was -- I was at home that day with my family. I received a phone call about 7:00. I was informed of the events. I was asked to provide information on the collection system because the operator wanted to get out and provide information.

I'm knowledgeable about the systems and I knew where the manholes were and where it was spilling from at the time. So they went out -- as I understand it, they were intending to go out and try to post the locations.

So I missed the flood event. That is true. I have gathered more information than I ever have wanted to gather and studied it. I have reviewed lots of it. And so I have not touched it, but I have

seen it.

MR. JEFFRIES: Well, I asked a question -- I know that -- I can't remember the gentleman's name, but he was an electrical contractor, said they reengineered the conduits, so they have an air gap; is that correct?

THE WITNESS: The air gap that I believe you're referring to is the conduits that run over the headwork structural wall. I can show you the exhibit and where it's actually --

MR. JEFFRIES: No, my question is, are those now sealed?

THE WITNESS: Yes.

MR. JEFFRIES: Okay. Thank you.

MR. YOUNG: Mr. Harris, then Mr. Johnston.

MR. HARRIS: Can you tell me why the District, when they hired CH2M Hill, did not have the RMC methodology peer review linked to the State's, as they did yours?

THE WITNESS: I'm sorry, when we hired CHM2 Hill, they did not have the RMC --

MR. HARRIS: No, why they did not look at the RMC methodology for calculating the spill volume?

THE WITNESS: We hired two third parties. It was not a cheap thing for us to do. It was a very extensive process. It was part of our due diligence.

We wanted to do this right. We wanted to be fair. And we disagreed with the penalty of volume that came up with the State that came up where the overall fine is associated with that.

And we wanted to do a third party analysis, because we wanted this to be fair and correct. We hired two independent third party mutually exclusive engineer professionals, both very, very reputable, and we assigned them the task that we assigned them to take a look at, so there was no reason.

MR. HARRIS: So RMC was one of them, right?

THE WITNESS: RMC, yes.

MR. HARRIS: Thank you.

MR. YOUNG: Mr. Johnston?

MR. JOHNSTON: Yes, just a couple of quick questions.

I'm still trying to get my head around the different ability to pay arguments made by the District and the prosecution team.

You testified that fund 20 cannot legally be used for any purpose other than plant expansion; is that correct?

THE WITNESS: As I understand it, it can't be used for any purpose other than the purposes that it is

collected for.

MR. JOHNSTON: Can it be -- can the District borrow against it for other purposes? In other words, can they loan money to themselves for operating expenses or other purposes out of that fund?

THE WITNESS: I -- let's see. Loan -- so borrow against it for what purposes?

MR. JOHNSTON: For -- let's say for general unrestricted operating purposes, whether it would be paying payroll, paying a fine, whatever it is, nonexpansion purposes?

THE WITNESS: I would say no.

MR. JOHNSTON: Okay. I'm looking at the exhibit you guys gave us, the financial report for August 15th, 2012. And I'm looking at the balance sheet portion of it, the last page, and if you look cross the top at the cash balance, it shows that the operating fund has a $698,000 negative cash balance. The fund 26 replacement fund, has $286,000 positive balance. And the fund 20 expansion has a $4,300,000 -- I'm rounding -- positive balance.

It looks to me, looking at this, as though the only way you can have an almost $700,000 cash negative cash balance in the operating fund, is if you're borrowing from one of the other funds.

And I -- and there is not enough money in the replacement fund to borrow from. There's only $286,000. You can't borrow $700,000 from $286,000.

So it looks to me like the District is borrowing that $700,000 deficit in the operating fund from the expansion fund.

Can you give me an alternate explanation?

THE WITNESS: I don't have an answer for that.

MR. JOHNSTON: Okay. The second question is, there was testimony that the rates -- the current rates were $16 approximately?

THE WITNESS: Yes. I do remember that, yes.

MR. JOHNSTON: And is that approximately, correct?

THE WITNESS: It looks like it's about $14.83 or something.

MR. JOHNSTON: Okay. And can you just explain a little bit about the rates structure to me? If I'm in Oceano, do I pay a sewage fee to Oceano, and also to the South San Luis Obispo County District, or do I pay a sewage fee to Oceano that pays a portion to the South County District?

THE WITNESS: Pretty much the former. They do it each their own way. But they collect wholly for both services from the residents of those communities,

and then the District receives those funds directly from agencies.

MR. JOHNSTON: Okay. So the member agencies collect from the residents, and then they remit a portion to the District?

THE WITNESS: That's correct. The member agency collects according to their own rate structure, base structure, but the 14 approximately 83, somewhere around there is earmarked for the District services and that is the treatment portion of water services.

MR. JOHNSTON: Okay. So the -- and do you have any idea what the sewage rates are for the three Districts that would incorporate both the collection rate and the treatment rate?

THE WITNESS: I want to say somewhere around -- $45 sounds right to me. They do different structures. I have called three member agencies in the past. It's been quite some time. I believe that one of them is based upon water usage. The other is based upon a flat sewer rate. But the ballpark number that is off the top of my head is about $45, in which the District gets 14 or something.

MR. JOHNSTON: Thank you.

THE WITNESS: Sure.

MR. YOUNG: Does the District operate on --

what is its fiscal year?

THE WITNESS: The fiscal year begins in July.

MR. YOUNG: July. July 1st?

THE WITNESS: Yes.

MR. YOUNG: Okay. Do you know at the end of June, what the balance was in fund 19?

THE WITNESS: I do not know that.

MR. YOUNG: The statement prior to this one, do you know if it had a negative balance?

THE WITNESS: That fund, I believe has been negative. When I look at the recent bar chart that I reviewed, I believe -- I see this where it was just starting to come out of the negative. So yes, I would believe June is probably negative from my recollection.

MR. YOUNG: And was money being transferred out of that operating fund from the expansion fund?

THE WITNESS: I don't think that is the case. I know at one time -- I want to say at one time they used to transfer in fund 26, because fund 26 has no source for funding.

But I don't -- I believe that would come from transfer 19, but I don't believe that is something the District has done recently.

MR. YOUNG: Okay. Thank you.

THE WITNESS: Sure.

MR. YOUNG: All right. That concludes the testimony for this witness, I believe.

And is that all you have for your case --

THE WITNESS: Thank you.

MR. YOUNG: -- through Mr. Yonkers?

MS. THORME: I was just going to ask him -- we have how much time left?

MR. YOUNG: Well, we're doing closing arguments at this point.

MS. THORME: Okay. Well, I would like to move all the remaining documents into evidence because there was no objection. So just for housekeeping purposes, we ask that all the District's documents will be moved in.

MR. YOUNG: Okay.

MS. JAHR: Yes, they were moved.

MS. THORME: Thank you.

MS. MACEDO: Yes, to the extent that we have dissolved all the objections regarding the prosecution team's documents, I move that regarding our documents as well, and I believe the last known exhibit for the hearing is the 118, which was provided to the Board and council, which was a copy of the prosecution team's PowerPoint presentation used today.

MS. JAHR: That's correct. This is exhibit --

MR. YOUNG: Okay. So we have five minutes for closing arguments, and the District goes first, and then the prosecution goes last.

MS. MACEDO: And then we're done.

MR. YOUNG: Yeah. I'm just curious, are there any members of the public that were not here when we took their statements that still want to address the Board?

Okay. Good. All right.

MS. THORME: Okay. So you -- and I apologize, but this isn't the most coherent closing argument ever, since it is nearly midnight at this point, but I will do my best.

So you heard a lot of evidence today and a lot of argument, and your job tonight, after -- when you deliberate this case, is to weigh the facts and judge the credibility of the witnesses, and I need you to remember who has the burden of proof in this case.

So the prosecution team has the burden to disprove the District's spill volume estimates, and the burden to prove each of the harm factors selected with evidence.

The prosecution team failed to show that the District's spill volume estimate was unreasonable. They just said, basically they would do it differently.

And particularly with the CIWQS requirement, as they currently exist, the manhole-by-manhole approach was the approach that was told to them by Jim Fischer, and that is what they did.

The prosecution team failed to justify each of the enforcement factors, and the harm factor is much higher than any other ACL.

If you look at Exhibit 101, which is up on the screen right now, this shows numerous ACL documents that we turned in as evidence in this case. This document does not encompass all of them. We did not prepare this document. This was prepared by the prosecution team.

But as you see, the red line in the middle is the District. And that is the harm factor of five. Every other one of these was a harm factor of one to four. And numerous of these, which we will talk about in a minute on the other side of this, were for much larger spills. And some of these spills happened on the same day as this.

The District was not given any recovery credit, even though it tried to store as much as possible and was working very hard and had the backup pump to push things through the treatment plant.

They gave them a higher than neutral

culpability without justification. And there was no credit given for cooperation or stelar sewer system spill history, where there has been no sewer spills from this District in 25 years.

They failed to justify any alleged economic benefit, given the evidence that was presented today or excessive staff costs. We've never been provided with any timesheets to justify hour-by-hour, the cost that they are claiming.

And they also failed to recognize that there are severe road blocks to the ability to pay, and that evidence was in Exhibit 98, among other places. But Exhibit B, we laid out, based on the budget, which is also an exhibit, which is how the District works and funds their projects, that it was a very difficult ability to pay problem. They have a large loan, which was also in evidence, that they have to pay.

So at the very least, we would ask the Board to decrease the fine or decrease the volume or decrease the factors, which are all, as you know, there is sensitivity analysis, that if you move any of those things in that spreadsheet, that the numbers go up or down.

We would also ask you that you seriously consider the upset and bypass defenses. They are in

the permit for a reason. And discharger State that those words in that permit actually mean something. Even if the Water Boards never allow those defenses to exist. And since the Clean Water Act is strict liability, there are no other defenses besides upset and bypass. That is it.

And the District met its burden to meet for each of these things. They showed that there was an exceptional incident causing intentional and temporary noncompliance and the causes identified. We know what those things are.

The permitted facility, at that time, was being properly operated and had not had a spill in 25 years.

The District submitted the required notice. There was no counter evidence that the notice was not timely, and they took the necessary remedial measures.

Next slide, please.

Upset is an affirmative defense. And they threw out a red herring that this was not a technology based requirement, and we didn't address the fact that it was technology based. A zero spill standard is technology based.

If you have one spill, you have violated

that technology based standard, and that was in our briefs, and we are argued it numerous times, even though it was not recognized by the prosecution team. And in the 9th circuit, which is where we live, they had actually recognized the upset defense, and the cases that were cited by the prosecution team were all District Court cases in New Jersey and Connecticut and other places that cannot overrule the 9th circuit. And we did show cases that actually found that sewer spills can be upsets.

Next slide, please.

And the other is bypass. And this assists with many of the alleged violations, including the storm water violation and part of the storage. So the District -- the prosecution team tried to say that this was not an intentional spill, and therefore, bypass does not reply.

But they took -- the District took intentional acts to protect the integrity of the wastewater treatment plant. And Mr. Appleton testified that he intentionally did certain things, such as intentionally close the input gates to stop the water from coming to the treatment plant to protect the headworks and to protect the downstream secondary treatment from washing out.

There are bugs in that treatment process, but if you wash them out, they are not going to work anymore, and then you would have had the effluent not meeting standards, which it did during the entire time.

He shut down the sumps that had the storm water to stop that storm water from coming back and creating more of a problem and washing out the treatment plant. And they intentionally set wastewater to the sludge lagoons.

So that was an unavoidable bypass to prevent severe property damage to the downstream part of the plant. There were no feasible alternatives at that time. They are on the ground. That is when you look at alternatives. And they had the bypass pump there for the one thing that they considered would happen, was that all the influent pumps would go down. And again, they submitted the notice as was required. So we believe that they met all of these things.

So if we can have Exhibit 101, page one, please.

So finally, I would ask you to consider consistency. There were many other larger spills. If you look at that top spill right there (indicating). Victor Valley happened also December 19th, 2010 -- 43 million gallons. They were given two cents a gallon,

and a $700,000 penalty for 43 million gallons from raw sewage.

And I would like to point out in Exhibit 89 dash -- page 8. This regional board has been reasonable in the past. In one of your own ACL's, you had 1.8 -- 1.2 million dollar penalty, and $800,000 of it was suspended if certain things happened. And 200 was in penalty and 200 was in SEP. So I would say that you have in the past, exercised great flexibility. And this was a recent ACL, so it was under the Enforcement policy as is.

So we would just urge you to please use the flexibility that you have. Either to recognize the defenses that are in the permit, or to exercise your flexibility in either the spill volume amount or the harm factors.

Thank you very much for sitting through this entire day. I know it has been painful.

MR. YOUNG: Okay. You went over by three minutes. I didn't want to stop you. I just wanted to let you know, so she has the same amount of time. So eight minutes.

MS. MACEDO: Thank you.

Rate payers are understandably concerned about the penalty in this matter. However, the Board

should recognize that there are options that the District has.

First, to the extent to believe that there was a negligent third party, such as the Wallace Group, that can seek contribution from it.

Secondly, the homeowners may have other options to recoup costs for water intrusion claims.

Mr. Horner testified that the District has the ability to pay, and the District can pay this penalty without passing on any fine to its rate payer.

Keep in mind that the District put on hired experts and spent significant legal fees fighting this fee, but continues to risk water quality impact based on Katie DiSimone's testimony.

It is up to you to weigh the credibility of the hired experts versus the witnesses put on by the prosecution team, who included the former CPO, Jeff Appleton, who has nothing to gain by assisting the prosecution team and was present on the day of the spill.

The District presented not a single witness who was present on the day of the spill. The district presented not a single witness who was present at the plant on the day of the spill.

THE REPORTER: Excuse me. Could you slow down

please? It's late.

MS. MACEDO: I apologize.

Let's look at the experts the District presented.

RMC used 14 nonflooding events for comparison. And yet, under the District's permit, it is responsible for the discharge of any storm water that mixes with sewage.

Furthermore, RMC presented no adequate explanation or analysis of Monday's spill. CH2M Hill conducted a peer review of the District's method, but incorporated any errors and unreliable -- unreliability in the District's volume calculation in its own conclusions.

Contrast that with evidence that the prosecution team presented.

There were several unresolved issues that were known and should have been repaired prior to the spill. Not just the electrical issue that may or may not have been the cause of the overflow, but the wear on the wires that led to fires because of standing water issues at the plant.

In addition, an SOP related to a valve effective response time on the day of the spill. A backup pump worked only intermittently. A leaky

influent gate, may not have been addressed in over 40 years. These delayed maintenance issues are not acts of God.

I'd like to answer Ms. Thorme's earlier question to Ms. DiSimone during cross-examination when she asked if it would be better to see money spent on plant improvements versus penalties.

It is disappointing to hear that the District's suggestion that penalties be used as a budgeting and planning mechanism. If proper funds had been budgeted and implemented when the problems were first recognized, we would not have to be here discussing the District's preference to spend money at the plant over penalties.

The District had the chance in 2004, 2005, 2006, 2007, 2008, 2009 and 2010 to invest in its plant and it chose not to. It is now too late to avoid a penalty in lieu of saying, "Oh, we have upgrades we need to do."

However, it is not too late for the Board to send the District a message about the importance of prompt attention to identify problems and deficiency.

The Board should enforce this message and approve the ACLC in the amount the prosecution team has requested.

While the prosecution team has not spent significant time during today's hearing on the upset and bypass defenses, we did cover these defenses in great detail in our rebuttal brief. The reason we did not spend much time on them is, because it is clear legally, they do not apply. They apply only to technology-based effluent limitation, such as B.O.D. and T.S.S., and not discharge violations such as this.

The main issues for the Board to decide is that the District did not use proper maintenance. The volume of the spill largely determines the amount of the penalty, and the District's method is clearly after the facts.

After this spill, they then looked around at the manholes and guessed at what flowed out of them. The Board and the prosecution team must use the penalty calculator, per the enforcement policy.

Any variation of the proposed penalty, must use the calculator and the factors. An express -- excuse me.

While you can modify the factors to the extent you simply want to change the amount of the penalty, you must make an express finding to do so under step seven, as required by the policy.

As the Board evaluates the penalty

factors in the methodology presented by Ms. DiSimone, please consider precedent setting implications. The factors presented to the Board are consistent with other ACLC's in this state, and the 2010 Enforcement Policy.

We thank the board for its considerable effort in preparing for this hearing, it's thoughtful questions, and it's anticipated order.

MR. YOUNG: Okay. Let's see where we're at. On my list, we would have a recommendation by the executive officer.

MS. JAHR: Right. We should close the public hearing.

MR. YOUNG: Before that?

MS. JAHR: Yeah. The public hearing should now be closed.

MS. MACEDO: Yes.

MR. YOUNG: Okay. Yeah, there's no -- we're done with the cases.

MS. MACEDO: Yes.

MR. YOUNG: Definitely. I thought that was kind of --

MS. JAHR: That's a good thing to do.

MR. YOUNG: Right. We're done with the testimony portion of this hearing.

MS. MACEDO: Yes.

MR. YOUNG: In fact, we were even before you gave your closing arguments.

Okay. What are the recommendations by the executive officers?

MR. JEFFRIES: Go home.

MR. JOHNSTON: Closed sessions.

MR. YOUNG: Well, I think what is obvious, is that we don't have the time to deliberate tonight. It is actually tomorrow. It's after midnight.

We need time to sit and talk to one another and go over our notes and discuss this. And so it's -- I don't know how much time it is going to take, but we can't do justice trying to do it now.

So we are going to have to renotice this for a -- we can't meet otherwise, or we can't get together on our own and just talk about this. It has to be a noticed hearing.

But we will go into a closed session to do so, which is how we notice this proceeding. And we can't do it before 10 days anyway.

MS. JAHR: Correct.

MR. YOUNG: And you're not going to be available for at least 14 days?

MS. JAHR: I will be available October 1st.

MR. YOUNG: October 1st?

MS. JAHR: And after.

MR. YOUNG: I'm wondering if we can pick --

MR. JOHNSTON: You are supposed to go on your honeymoon.

MS. JAHR: Yes.

MR. YOUNG: -- while we are together, can we pick a date now to convene?

MR. JEFFRIES: Mr. Chair, I need to remind you that through --

MS. MACEDO: Does this have to be on the record for the court reporter?

MR. JEFFRIES: No.

MS. THORME: Yes.

MS. MACEDO: Just for the date?

MR. YOUNG: Yes. I think it should be on the record, yeah.

MS. MACEDO: Okay.

MR. YOUNG: Yeah.

MR. JEFFRIES: I started to say, Mr. Chair, I have sat here since 8:30 this morning -- yesterday morning, to try to help this Board to get through this particular hearing. And my term ends September 30th. And if that was the case, I could have left at 8:35 this morning.

So I hear what you're saying. I understand what you're saying, but I just want to let you know that I may not be available.

MR. YOUNG: That's all right. I mean, we have --

MR. JEFFRIES: I know you have a quorum, but I --

MR. HARRIS: I think, Mr. Jeffries, if we pick something early October, I -- you know, we can make the request to the State Board, to the OCC, to make sure that -- if you are not reappointed, that you are allowed to stay on passed that date.

MR. YOUNG: There is a grace period.

MR. HARRIS: Well, that is true, but the governor's office is telling everybody to not plan on staying through the grace period, so I'm suggesting that we would make that request to the office of chief counsel to --

MR. JEFFRIES: Well, yeah. I know that you have enough people to make a quorum, but I -- it's just -- well, if that was the case, then I wouldn't have sat here through all these hours.

MR. YOUNG: Right. And --

MS. THORME: I just want to put an objection on the record to continuing it for deliberation for many

reasons.

One, it allows people to look at evidence that they might not have looked at if they were -- had gone into deliberation right now. You give people weeks of time. This is why you sequester a jury so they don't get to look at other stuff.

The fact that one of the board members may not be here, and it's just highly unusual for -- in this type of a case, for you to put over deliberation.

MR. YOUNG: Well, I mean, we could have continued the hearing, too.

MR. JEFFRIES: Yes.

MR. HARRIS: Right.

MR. YOUNG: At 6:00, I could have said, we have got to stop. We will renotice this and continue it for a later time.

The objection is just to the deliberation portion of it, correct?

MS. THORME: Yes. I just -- it would be nice to have an end to this sooner.

MS. JAHR: Frances could --

MR. HARRIS: Well, I'm uncomfortable with having Frances --

MR. YOUNG: Frances was not present.

MR. HARRIS: Right.

MR. YOUNG: You were, and you have been taking notes --

MS. JAHR: I know.

MR. YOUNG: -- and you're part of the advisory team.

MS. JAHR: I know.

MR. YOUNG: She's going on her honeymoon.

MR. JEFFRIES: Well, I mean, Mr. Johnston just --

MS. JAHR: We have ten days. We can't --

DR. WOLF: May I ask a question, because I think you bring up a good point.

How unusual is it to -- in similar circumstances, to split it into two days? I mean, if we looked at similar cases, would we be the exception to the rule here? Unheard of or --

MS. JAHR: Generally, I would say a 12-hour hearing -- well, wait, no -- a 16-hour hearing is the exception to the rule. It is not at all unusual to continue a hearing when there is no time. And I would say after midnight, depending how long deliberation takes, it is not unreasonable to continue the hearing.

As far as your statement about doing it before Friday, we have to have notice for the meeting for ten days prior, so we can't legally do it before

Monday.

MS. THORME: You can't just hold this meeting over --

MS. JAHR: No.

MS. THORME: -- and set it for another date --

MS. JAHR: No.

MS. THORME: -- tomorrow?

MR. YOUNG: Because we didn't give notice to do that.

MS. JAHR: Right.

MR. YOUNG: We have to notice everything we do.

MR. JEFFRIES: Well, we didn't notice it for today either so --

MS. JAHR: Actually, yeah, what happens after midnight?

MS. THORME: We've got all day today.

DR. WOLF: I just thought I would ask that question.

MS. JAHR: Exactly.

MR. JORDAN: Okay. What is the difference -- I'm sorry.

MR. YOUNG: Okay. So let's try to figure this out.

MR. JORDAN: I just -- it's midnight --

MS. JAHR: It's tomorrow already.

MR. JORDAN: Yes. So what's the difference between a one-hour lunch break and --

MS. JAHR: -- a sleep break?

MR. JORDAN: -- a nine-hour sleep break?

MS. JAHR: Because it is really now another day. And so you have to notice it for --

MR. JORDAN: Okay. But we're already in another day.

MR. JAHR: Right. But we're -- it's part of the same hearing. We have not taken a break. Once you take that break, really, that eight-hour sleep break, it's really another day. You're not --

MR. JORDAN: I'm sorry.

MR. HARRIS: We have to --

MR. YOUNG: Come on. Come on.

MR. JOHNSTON: Mr. Chair, I have to say, I have a long-scheduled trip to the East Coast that is scheduled to start on September 26th, and I'm scheduled to return on October 10th.

MR. YOUNG: Oh, God.

MR. JOHNSTON: I scheduled it around our meeting for this hearing.

MR. YOUNG: Are you going to be in California?

MR. JOHNSTON: I'm going to be looking at leaves change colors in Maine.

MR. HARRIS: That is highly overrated.

MR. JOHNSTON: I'm sure it is. Would you have a little conversation about that?

MR. YOUNG: And when are you coming back?

MS. JAHR: I come back September 30th.

DR. WOLF: I'm a local. I can be here in five minutes

MR. HARRIS: How about JeanPierre, once the harvest season starts, you're not available?

DR. WOLF: For you, I will go talk to my grapes and move around the harvest time.

MS. JAHR: We could have --

MR. YOUNG: Are you -- if we can have a closed session, are you able to participate by phone?

MS. JAHR: In London?

MR. YOUNG: Yes.

MS. JAHR: I don't know how much that would cost.

MR. YOUNG: Well -

MR. JAHR: My phone does not cover international.

MR. YOUNG: There's Skype.

MS. MACEDO: I do know that it is eight hours ahead. I do know that.

MR. THOMAS: She will be --

THE REPORTER: I'm sorry, but could you identify yourself?

MR. THOMAS: I'm Michael Thomas.

THE REPORTER: Thank you.

MR. THOMAS: She will be on her honeymoon so --

MR. YOUNG: I understand that.

MR. THOMAS: We're asking her to --

MR. YOUNG: It's for two hours. I mean --

MR. THOMAS: I think it's an extraordinary request.

MR. JEFFRIES: It will --

MS. JAHR: You know, it's an eight-hour time difference, so if you want to meet during the day, you are going to be meeting --

MR. JEFFRIES: It will be noon here and 8:00 there.

MS. JAHR: Yeah.

MR. YOUNG: I mean, what I'm hearing is, it is either we do it before September 26th and you come back on the 30? When do you leave?

MS. JAHR: Friday.

MR. JEFFRIES: Next Friday.

MS. JAHR: In 5 days -- or 6, 7 days.

MR. HARRIS: Well, the other option --

MS. JAHR: The 17th is the soonest we can

legally notice it, if I got a notice out immediately.

MR. HARRIS: I was saying, the other option would be to -- I think we can hang on so that Mr. Jeffries, and we can do without Mr. Johnston --

MS. JAHR: Or he can also appear telephonically, if he's willing.

MR. YOUNG: All right.

MR. HARRIS: That's actually a good idea. That would be easier.

MS. JAHR: But he might not be willing to do that.

MR. JOHNSTON: I'm not on my honeymoon. I am hopefully going to have a lot of fun, but I'm not going to be on my honeymoon.

MR. HARRIS: So you are willing to stand in for a closed session, Mr. Johnston?

MR. JOHNSTON: Yeah.

MR. HARRIS: Okay.

MR. YOUNG: Okay.

MR. JOHNSTON: Let me ask another question. We have a closed-session meeting noticed for the 18th, I believe.

MR. HARRIS: But it is personnel issues, it's not --

MR. JOHNSTON: It's specified?

MR. HARRIS: Yes. Sorry.

MR. JOHNSTON: Damn.

MR. HARRIS: So you should both download Skype on your computers.

MR. YOUNG: Will you be back on the 1st?

MS. JAHR: Yes. On the 1st, I'm available.

MR. YOUNG: On the 1st.

Okay. Is that the best option we have?

MS. JAHR: I don't know anyone else's schedules.

MR. YOUNG: Yeah. Well, I mean, I'm concerned about waiting that long to do this.

MS. JAHR: I know.

MR. YOUNG: And so I really would like to advance this as much as we can, even if one or two people have to call in.

MR. JEFFRIES: We've been discussing this for 15 minutes. We could have been deliberating.

MS. THORME: Yeah.

MR. YOUNG: Well --

DR. WOLF: I'm still awake.

MR. JEFFRIES: I suggest that we go into closed session, and let's see what the board -- where they are.

MR. YOUNG: Okay.

MR. JEFFRIES: And if it is not going to work, then we will reschedule.

MR. YOUNG: Okay.

MS. JAHR: We need to announce it.

MR. YOUNG: The board is going to go into closed session right now and --

MS. JAHR: -- for deliberation.

MR. YOUNG: -- for deliberation purposes.

(Break taken.)

MR. YOUNG: We'll go back on the record, and it is now 12:45 a.m., so --

MR. JOHNSTON: It's a new record.

MR. YOUNG: Yeah. It took us this amount of time just to decide how to do what we want to do, okay. So we have not made a decision on the issues. We don't have time to do that. We have briefly discussed what to do, and we all need time to come up with that. It just cannot be shoe-horned in.

MS. JAHR: I just -- I'm sorry, I just want to clarify. When you say talk about this, you mean discuss it in a closed session, and not in any other way?

MR. YOUNG: Yeah.

MS. HARRIS: Deliberate.

MR. YOUNG: We have not been able to get to

that yet, because there is too much for each of us to share and talk about, and we all have notes. And so we are going to renotice a closed-session hearing for deliberation for October 3rd at 10:00 a.m., and we will be here in this building to do it.

MR. HARRIS: For three hours? A closed session for three hours?

MR. YOUNG: Well, we might as well notice it for longer than that.

MR. JOHNSTON: Four hours.

MS. JAHR: Notice it for more than three hours.

MR. YOUNG: I would say four hours. Notice it for four hours.

MR. HARRIS: Yeah.

MR. YOUNG: But that is what -- so we're protected.

MR. HARRIS: Okay.

MR. YOUNG: So there is nothing we can do more at this point.

But the board is not going to be deliberating at all. We can't talk to each other about this. And so that is kind of the problem that we have to notice this, so we can all come together again, and do the deliberation.

MS. THORME: And then will you report out after

that closed session in public?

MR. YOUNG: Yeah. Yeah. I mean, my sense is, as the chair, we will want to produce an order with findings in it and rationale. And that may take time to do. And I'm sure it is going to take time. I don't know if that can be done during that deliberation period. So we may have something in writing we can share. But if we make a decision, we're going to report that out.

Is there anything else for us to discuss, Jessie?

MS. JAHR: The only other thing is that the ex parte rules will apply.

MR. YOUNG: The ex parte rules will apply, and Board members are free to look at their notes and look at whatever documents that have been given to them. But other than that, we're not going to be talking to one another or to anyone else about this.

So I want to thank everybody for staying around this late. It went way longer than we thought. But we were trying to get all the testimony in that we can and give ample time to both sides, and for due consideration for what is going on.

I know that a great part of the reason this took so long is all of the Board's questions that

went on. That's nothing that we can anticipate. It just happens as people testify, and the different Board members have questions that they want to get answered.

Okay. Thank you very much.

MS. THORME: Thank you.

MS. MACEDO: Thank you.

MR. YOUNG: Good night, and we will see you possibly October 3rd. Okay. We're done.

(Proceedings concluded Saturday 8, 2012 at 12:58 a.m.)

* * *

STATE OF CALIFORNIA)
) SS
COUNTY OF SAN LUIS OBISPO)

I, the undersigned, a Certified Shorthand Reporter of the State of California, do hereby certify:

That the foregoing proceedings, pages _____ through _____, were taken before me at the time and place herein set forth; that any witnesses in the foregoing proceedings, prior to testifying, were placed under oath; that a verbatim record of the proceedings was made by me using machine shorthand which was thereafter transcribed under my direction; further, that the foregoing is an accurate transcription thereof.

I further certify that I am neither financially interested in the action nor a relative or employee of any attorney of any of the parties.
IN WITNESS WHEREOF, I have this date subscribed my Name.

Date:_____

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MARCY A. STYLES, CSR No. 10604