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CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARD
JEAN-PIERRE WOLFF, CHAIR

In the Matter of the Public Hearing)
re:)
)
Consider Adopting)
Administrative Civil Liability Order)
for Carpinteria Sanitary District)
_____)

TRANSCRIPT OF PROCEEDINGS
San Luis Obispo, California
Friday, May 29, 2015

Reported by:
MADISON C. KURZ
CSR No. 13957

Job No.:
4964WQSLO

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1 APPEARANCES:
2 CHAIR: Jean-Pierre Wolff
3 VICE CHAIR: Monica S. Hunter
4 BOARD MEMBERS: Kathleen Thomasberg
5 Karina Cervantez
6 Michael Johnston
7 Bruce Delgado
8 EXECUTIVE OFFICER: Ken Harris
9 BOARD STAFF: Jessica Jahr
10 Lori Okun
11 Lisa McCann
12 Jon Rokke
13 WITNESSES: Dr. Matthew Scott Buffleben
14 Leo Sarmiento
15 Beverly Hann
16 Peter Von Langen
17 Dan Hennessy
18 Craig Murray
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15 TRANSCRIPT OF PROCEEDINGS, taken at
16 895 Aero Vista Place, Suite 101, San Luis Obispo,
17 California, commencing at 9:00 a.m.
18 on Friday, May 29, 2015, heard before the
19 CENTRAL COAST REGIONAL WATER QUALITY
20 CONTROL BOARD, reported by MADISON C. KURZ,
21 CSR No. 13957, a Certified Shorthand Reporter
22 in and for the State of California.
23
24
25

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1 San Luis Obispo, California, Friday, May 29, 2015
2 9:00 a.m.
3
4
5 MR. WOLFF: So now we will move to the main
6 agenda of the day and I do have an opening statement
7 that I will make.
8 So this is the Carpinteria Sanitary District,
9 ACL Complaint No. R3-2015-0011, Item 22. This is the
10 time and place for a hearing of a Central Coast Regional
11 Water Quality Control Board to Consider Adoption of the
12 Administrative Civil Liability Order Against Carpinteria
13 Sanitary District.
14 This hearing will be conducted in accordance
15 with the hearing procedures that were provided to the
16 parties. Designated parties as follow:
17 Regional Board Prosecution Team and Carpinteria
18 Sanitary District. The designated parties and their
19 witnesses are subject to cross-examination and for
20 prosecution staff, will be allowed 45 minutes for their
21 presentation including opening statement, direct
22 testimony, and cross-examination and five minutes for
23 closing statement.
24 Carpinteria Sanitary District will be allowed
25 45 minutes as well for their presentation including

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1 opening statement, direct testimony, cross-examination
2 and 5 minutes for their closing statements.

3 All other persons are considered interested
4 persons, who are considered interested persons and will
5 be allowed three minutes.

6 The Chair may provide additional time at its
7 discretion and we will use a timer, with the helpful
8 assistance of my Vice Chair here, and Board Members, the
9 Advisory Team and Staff Counsel, may ask questions to
10 clarify testimony of witness at the end of each witness
11 testimony.

12 So feel free, if when a witness has given their
13 presentation, you flag to me. I'll go left to right and
14 then I'll switch right to left on the next one, but I'll
15 need just one pass, so make sure you have your questions
16 all prepared. Thank you.

17 For the purpose of this hearing, the function of
18 staff and counsel are separated. Prosecution Staff, who
19 are proposing this action, have had no communication
20 with the Board Members or Board Advisors other than for
21 non-controversial procedural matters. The Board Counsel
22 has not advised the Prosecution Team in this matter.

23 For this hearing, the Prosecution Team consists
24 of Mr. Michael Thomas, Assistant Executive Officer,
25 Mr. Harvey Packard, Thea Tryon, Todd Stanley, Leo

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1 Sarmiento, Jim Fisher and Dr. Matthew Buffleben.
2 They are advised by Julie Macedo and David
3 Boyers, Counsel for the State Water Resource Control
4 Board, Office of Enforcement.

5 For this hearing the Board's Advisory Team
6 consists of Jessica Jahr, who is on the phone, I
7 believe; correct? Yes. Lori Okun and Tamarin Austin,
8 Counsel for the State Water Resource Control Board
9 Office, Chief Counsel Mr. Ken Harris, Executive Officer
10 Lisa McCann and Jon Rokke.

11 Each person who testifies at this hearing, shall
12 begin by stating his or her name and address, unless the
13 address has already been given.

14 All persons who may testify at this hearing
15 please stand, even if you do not plan to testify, but are
16 involved in this matter.

17 (Wherein individuals stand)
18 Thank you. Raise your right hands and take the
19 following oath.
20 (Wherein all standing persons took the oath)
21 (IN UNISON: "I do.")
22 MR. WOLFF: Thank you, very much.
23 The order of presentation at this hearing will
24 be as follows:
25 Number 1: Opening statements by Prosecution

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1 Staff and the Carpinteria Sanitation District.
2 Number 2: Central Coast Water Board Prosecution
3 Staff Case in Chief with cross-examination by the
4 Carpinteria Sanitary District.
5 Number 3: Other interested persons who will be
6 allowed three minutes, and then closing statement by the
7 Carpinteria Sanitary District and Prosecution Staff.
8 Cross-examination of each witness will occur
9 after the witness direct testimony and the party
10 offering the witness may then offer redirect testimony
11 as well.

12 At close of the hearing, the Board Members and
13 Advisory Team may adjourn to closed session to deliberate
14 on the evidence as authorized by Government Code (GC)
15 Section 11126.

16 After conclusion of the deliberation, the Board
17 will resume open session and provide its ruling.

18 So when you're presented, please state your
19 name, address, affiliation and whether you have taken
20 the oath before testifying. And at this time, evidence
21 should be introduced on the following issue whether the
22 Regional Board should issue, reject or modify the
23 proposed Administrative Civil Liability.

24 So I will now begin the hearing, and Mr. Harris
25 -- so we'll start with open statement from the Prosecution

8

1 Staff.
2 MR. PACKARD: Good morning, Chairman Wolff and
3 Members of the Board.
4 I am Harvey Packard of Water Board Staff on the
5 Prosecution Team. I have taken the oath and I am
6 introducing Enforcement Team's Presentation this morning.
7 We're here as a result of the Enforcement Teams
8 issuing a complaint against Carpinteria Sanitary
9 District alleging six violations of their NPDES Permit.
10 Carpinteria and the Enforcement Team have had
11 discussions regarding these violations and are in
12 agreement regarding several issues. We agreed that
13 five of the violations are subject to Mandatory Minimum
14 Penalties and regarding the loss of disinfection
15 incident, we agree on several circumstances of the
16 event, including the volume discharged.

17 There are areas of disagreement. Mainly,
18 whether the loss of disinfection violation is subject to
19 Mandatory Minimum Penalties versus a Discretionary
20 Penalty and if subject to a Discretionary Penalty, the
21 amount of the appropriate penalty, um, and as
22 considered under the Enforcement Policies Factors.

23 The MMP versus Discretionary Penalties is an
24 important issue for the Enforcement Team as detailed in
25 our written submittals. We maintained that the loss of

9

1 disinfection violation was not a violation MMP Statute
2 and therefore, if there is to be a penalty, it must be
3 of the discretionary variety.
4 You will note that this is not the largest
5 penalty we've recommended to the Board by far, and as we
6 say in our brief, Carpinteria's Facility is generally
7 well run and they do have a good reputation.
8 We did make a good-faith effort to settle this
9 matter with Carpinteria without a hearing, but there are
10 several important issues that compel us as Enforcement
11 Staff to bring this matter to the Board.
12 One is the integrity of the Water Board's
13 Regulatory Program. The Board, through a public
14 process, adopted this NPDES Permit. Once that process
15 is finished and the requirements established, Staff is
16 tasked with monitoring and enforcing compliance with the
17 permit.
18 There is no disagreement that the facility lost
19 capability to disinfect effluent on October 3rd, 2012.
20 Carpinteria argues that this violation is minor and that
21 the motion be penalized with a \$3,000 minimum penalty.
22 We maintain this violation is significant enough to
23 warrant a more substantial penalty.
24 Secondly, deterrence is an important element
25 of enforcement. Here's a quote from the Enforcement

10

1 Policy: "Enforcement is a critical ingredient in
2 creating the deterrence needed to encourage the
3 regulated community to anticipate, identify, and correct
4 violations. Appropriate penalties and other
5 consequences for violations offer some assurance of
6 equity between those who choose to comply with the
7 requirements and those who violate them. It also
8 improves public confidence and government is ready,
9 willing and able to back up its requirements with
10 action."
11 Third, this is an important case to demonstrate
12 the need for facilities to have proper treatment --
13 treatment system safeguards, including monitoring
14 systems, alarms and redundancies to ensure compliance
15 with their permits.
16 I'd also point out that there is a separation
17 of functions even within Water Board Staff; Permitting
18 Staff, draft permits, review monitoring reports and do
19 initial review and follow-up on violations. We have
20 Enforcement Staff who are separate from Permitting Staff
21 in order to pursue enforcement objectively and
22 impartially.
23 Our presentation today will focus on reviewing
24 the technical and legal reasons why I recommend a
25 penalty for this violation is appropriate.

11

1 At this time, I'll turn the time over to
2 Dr. Matthew Buffleben of the State Water Board Office of
3 Enforcement.
4 MR. HARRIS: Just for the record, I think we
5 need to announce that Ms. Cervantez is now present.
6 MR. WOLFF: And also, I apologize for
7 mispronouncing Carpinteria. This is my French-ism. You
8 may have a few more examples later on today of my
9 mispronunciations. Thank you.
10 MR. BUFFLEBEN: Good morning. My name is
11 Matthew Scott Buffleben. I'm an Engineer -- a Senior
12 Engineer with the State Water Resources Control Board
13 and I have taken the oath.
14 Let me tell you a little bit about my background
15 first before we get into the testimony case.
16 I have Bachelor's Degree in Mechanical
17 Engineering--
18 MR. CARTER: I'm sorry, is this direct
19 examination or is this opening statement?
20 MR. BOYERS: So this is intended to be a, um --
21 a witness narrative testimony, which is permitted under
22 the Hearing Procedures.
23 MR. WOLFF: Yes, please proceed.
24 MR. CARTER: If this is going to be a
25 testimony--

12

1 MR. WOLFF: Could you speak louder, please?
2 MR. CARTER: May I go to the stand?
3 MR. WOLFF: Yes.
4 MR. CARTER: Good morning. I'm William Carter
5 on behalf of Carpinteria Sanitary District.
6 I was under the impression, and I apologize,
7 that Carpinteria would have an opportunity to make an
8 opening statement before there was a presentation of
9 evidence to the Board.
10 If that's not the case, I apologize. I would,
11 though, make a motion, since all these individuals are
12 under oath and we are making a record and we want to be
13 as accurate as possible. I would be making a record to
14 exclude all witnesses who are not testifying. They
15 would have to wait outside, except for one representative
16 of the client and one expert. That way, we can assure
17 that we have a full and accurate and candid questioning
18 or cross-examination of these witnesses.
19 That's standard procedure in every court of law,
20 every administrative proceeding. I would ask for all
21 witnesses who are not testifying be excluded until such
22 time they've been called and admonish not to discuss
23 what was -- they testified to in here during the
24 hearing.
25 MS. OKUN: Would the Prosecution Team like to

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1 respond before I advise the Chair?

2 MR. BOYERS: Uh, well, you know, my response

3 would be that these proceedings are not conducted like a

4 court -- like a trial, not in, you know -- they're much

5 different.

6 And so, um, you know, we would prefer that our

7 witnesses be available to hear the testimony of all the

8 other witnesses to give perspective and context to their

9 own statements and to be able to provide answers to the

10 questions that the Board Members may have.

11 MS. OKUN: Dr. Wolff, that's also my

12 recommendation. That is the way that the Boards conduct

13 their administrative proceedings. It's consistent with

14 the Administrative Law, and it also allows the Board

15 Members to address questions to the panel.

16 In some cases, it's not necessarily clear to us

17 who the best person is to respond to a question, and we

18 leave it to the parties to designate which witness will

19 address which issues.

20 So my recommendation is not to exclude the

21 witnesses, and if you agree --

22 MR. WOLFF: Yes, I do agree not to exclude the

23 witnesses.

24 MS. OKUN: And then on the issue of opening

25 statements, the hearing procedures are silent. It says

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1 that each party has a total of 45 minutes to use as they

2 wish. So it's up to you whether the discharger will be

3 allowed to present the opening statement before the

4 Prosecution Team presents its evidence. It could be

5 helpful, but it's totally up to the Chair.

6 MR. WOLFF: Thank you.

7 So please proceed.

8 MR. BUFFLEBEN: Thank you.

9 So once again, my name's Matthew Buffleben. I

10 was telling you a little bit about my background. I

11 have a Bachelor's Degree in Mechanical Engineering from

12 UC Santa Barbara. I have a Master's Degree from the

13 UCLA School of Public Health and Environmental Health

14 Science and I have my Doctorate Degree in Environmental

15 Science and Engineering. I am a Licensed Civil Engineer

16 in the State of California, and I've been -- prior to my

17 working at State Board as a Supervising Engineer, I

18 worked at the North Coast Regional Water Board for 12

19 years.

20 So today I'm gonna discuss the Enforcement Policy

21 in its application for the penalty calculation. I know

22 many of you may not be very familiar with enforcement

23 calculations, um -- but in the interest of time, I'll go

24 through the policy, but I'll skip a few steps that we're

25 in agreement with the discharger.

15

1 I want to point out that the largest difference

2 between the Prosecution Team and the District is the

3 estimate of harm for the discharge. So when I get to

4 that step and that factor and going over the Enforcement

5 Policy, I'll spend a little bit more time discussing the

6 harm of the discharge.

7 So first, let's talk about the violations. The

8 violations that we're seeking a penalty for is the

9 discharge of the undisinfected effluent that occurred

10 for over five and a half hours. This discharge started

11 approximately at 4:00 in the morning, 4:08 in the

12 morning, and lasted until approximately 9:45 in the

13 morning on October 3rd.

14 There's other violations, including failure to

15 take care of -- take all reasonable steps to minimize,

16 prevent discharge, failure to provide safeguards and

17 failure to monitor; however, we're using our Prosecution

18 discretion and not seeking penalties for these

19 violations.

20 So California Water Code Section 13385,

21 describes several factors that the Board must consider

22 in ACL complaints. The Enforcement Policy provides

23 directions in how to weigh those factors in 13385.

24 There are 10 steps to these factors and some of

25 the steps have several factors within them. So I want

16

1 to walk us through and apply an Enforcement Policy for

2 this incident.

3 The first step is determined the potential for

4 harm for the discharge violation. Now, there's three

5 factors in this step. There's the harm or potential

6 harm for beneficial uses, there's the characteristics of

7 discharge, factor two, and then there's factor three,

8 the susceptibility to cleanup abatement. I want to take

9 these factors a little out of order, hopefully this

10 won't confuse you.

11 So the first factor I wanted to talk about is

12 susceptibility cleanup. We agree with the District that

13 this -- this discharge wasn't susceptible for cleanup

14 and therefore, it scored in a one and according to the

15 Enforcement Policy, there's no reason to further discuss

16 that.

17 And next, I want to go to is factor two, which

18 is actually the characteristics of the discharge. This

19 factor essentially looks at the material discharge and

20 isolation. Is it toxic and how harmful is the waste?

21 In other words, it's the degree of toxicity of the

22 discharge. This factor has a scale from 0 to 4, which

23 is designed based on the risk or threat of the

24 discharge. It goes from negligible, a 0, up to a 4,

25 which is significant.

17

1 So what is undisinfected secondary effluent?
2 So primary and secondary treatment at wastewater
3 treatment plants removes a lot of pollutants;
4 particularly, suspended cells, suspended solids and
5 organic materials.
6 However, primary and secondary treatment results
7 in only small reductions and human pathogens bacteria
8 and viruses remain and these include: Norovirus,
9 cryptosporidium, and giardia.
10 Until very recently, we didn't have methods to
11 detect human pathogens. The Water Quality Standards are
12 based on indicators of sewage. We call these
13 indicators Fecal Indicator Bacteria. Typically and
14 historically, they have been total and fecal coliform
15 enterococcus. Enterococcus is a subset of these
16 bacteria, and it's really the best indicator of the
17 presence of sewage in pathogens.
18 Now, since we're dealing with bacteria, there's
19 a large uncertainty in any one measurement, um -- for
20 bacteria counts. This is because coliform and bacteria
21 aren't evenly distributed through the water columns.
22 So you may take two samples and you have a wide range
23 of what the results are, and I cover this in my next
24 slide.
25 So we required in our 13267 letter to the

18

1 District to do an Impact Assessment for public health
2 in the ecosystem. The District, at this time, had
3 tested their undisinfected secondary effluent at the
4 treatment plant. Their result for total coliform was
5 160,000 MPN, that's the most probable number, per 100
6 milliliters.
7 Now, the range of this -- the confidence of
8 where that true medium is, actually lies somewhere
9 between 40,000 MPN and 460,000 MPN. There's a large
10 range of uncertainty and, like I said, it's because
11 coliform bacteria are not evenly distributed in the
12 water column and your samples, even taken at the same
13 time and using the best methods possible, will have
14 large range results.
15 Fecal coliform, their result was 92,000 MPN.
16 And now, when we compare that to the effluent limit, the
17 permit states the effluent limit is an instantaneous
18 maximum of only 2,300 MPN per 100 milliliters. As you
19 can see, the results for this undisinfected secondary
20 effluent are well above the effluent limit in the permit.
21 So now we're going to go over the score for
22 factor two. Once again, I mention that the scale goes
23 from 0 to 4. We selected a 2, a moderate risk or threat
24 to potential receptors. This is based on discharger's
25 analysis that discharged material has potential to

19

1 contain high levels of human pathogens.
2 Now, a few of the Prosecution Team -- we could
3 have selected a factor of 3, and that would have been
4 consistent with other sewage discharges. Even in cases
5 where there's been a discharge of highly diluted sewage
6 into the environment, a case where you have a sewer
7 system during a rain event where there's a high amount
8 of inflow and infiltration into the system and that
9 dilutes the sewage, the Regional Water Boards throughout
10 the state have consistently scored characteristics of
11 the discharge as a 3, above moderate risk.
12 In this case, since the discharge lasted for
13 five hours and it was -- did go through other treatment
14 processes, we determined appropriate score would be a 2.
15 Now, the next thing I wanted to talk about is
16 factor one -- is Step 1. Like I said before, this is
17 where we have the most disagreement with the District.
18 The harm considers -- or potential harm that may result
19 from exposure to the pollutants or contaminants in the
20 discharge.
21 As we've stated in our briefs, there was no
22 receiving water monitoring data collected during the
23 discharge or after the discharge, even though the permit
24 required monitoring for seven days after the loss of
25 disinfection.

20

1 Now, the presence of absence of such monitoring
2 data is not a primary determining factor regarding harm.
3 In many enforcement cases, particularly dealing with
4 spills, we usually lack that such data and a general
5 qualitative assessment of harm is conducted. Even if
6 there was comprehensive monitoring data, evidence of
7 direct harm is rare.
8 However, in response to our 13267 order, the
9 District did conduct an Impact Analysis and we use the
10 information provided by the District, as well as other
11 sources, particularly from the literature, to determine
12 the potential harm. In this case, the score goes from
13 0 to 5. 0, once again being negligible, and 5 being a
14 major impact.
15 So let's first look at the outfall location.
16 Here's a map of Carpinteria, and I put a little pin on
17 the map with the approximate location of the outfall.
18 So approximately 1,000 feet offshore and water
19 depth of 25 feet and it's off of the State Carpinteria
20 Beach.
21 Next step I'm gonna look at is the beneficial
22 uses. I'm going to focus on the two beneficial uses that
23 were most likely affected by this discharge and they
24 will receive moderate standards.
25 The first one is water contact recreation, as

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1 defined in the permit and in the basin plan. This is a
2 zone that's bounded by the shoreline and a distance of up
3 to 1,000 feet from the shoreline or to the 30-foot depth
4 contour, whichever is further from the shoreline. So
5 it's important to note that the outfall in this case, is
6 actually located in the zone for water contact
7 recreation.

8 The next beneficial use that was likely affected
9 was shellfish harvesting. Now, as defined in the basin
10 plan, shellfish harvesting is actually a combination --
11 I'm using a combination of four closely-related
12 beneficial uses and it's been defined as an existing use
13 from Coal Oil Point to Rincon Point, having been
14 designated for shellfish harvesting.

15 Now, it's important to note that when I get
16 further into this discussion, that there's no
17 distinction in the basin plan between recreational or
18 commercial uses for shellfish harvesting standards.
19 It's that these beneficial uses exist and may need to
20 be protected.

21 So this table shows the relevant Water Quality
22 Standards for water contact in that left-hand column and
23 for shellfish. The middle column shows the Commercial
24 Shellfish Standard that the California Public Health
25 uses for commercial shellfisheries. And then the last

22

1 column there, I'm calling it ABCL Analysis. This is the
2 consultants work that the discharger did to analyze and
3 estimate the potential harm for the discharge.

4 So on the left-hand side, I have the total
5 fecal coliform, single sample maximum 1,000 for total
6 coliform and 400 for fecal coliform and then
7 enterococcus and the shellfish, the medium value,
8 the permit limit is 70.

9 Now, ABCL Analysis did -- ran two essential
10 analyses. They took an ocean sample and to estimate the
11 receiving water limits, on the left-hand side they
12 assumed that dilution of 93 to 1. So that results in
13 1,720 in total coliform and the second one is for fecal
14 coliform. They also took a sample and spiked it with
15 ocean added dilution of 93 to 1 and that result came to
16 490, for fecal coliform 330.

17 And the reason why this 93 to 1 dilution is
18 important because that's what we assume that occurs
19 within the mixing zone that's allowed by the permit. We
20 have that much dilution of the effluent until it reaches
21 the receiving water zone.

22 Now, considering the variability of these
23 coliform and bacteria accounts, it's our opinion that
24 the shellfish standard was violated receiving water by
25 the discharge and it's likely that the water contact

23

1 standard was also violated.

2 So I'm gonna talk a little bit more about the
3 ABCL report. So once again this report was created by
4 the District consultants in response to our 13267 order,
5 requiring an Impact Analysis. This report concluded
6 that there was no exceedances of the water quality limits
7 and no adverse impacts. However, we find that this
8 report was incomplete and inaccurate in many aspects.

9 First of all, there was -- there was not an
10 analysis for the shellfish beneficial use. The
11 Shellfish Standard and Receiving Water Standards were
12 not mentioned in the report at all.

13 There was an incomplete analysis because there
14 was no analysis of enterococcus. Enterococcus is the
15 best indicator for human pathogens and sewage in
16 receiving waters. So the failure to conduct
17 enterococcus sampling hampers their analysis.

18 The ABCL report only partially recited the
19 Recreational Standard. They cited the higher limit of
20 10,000 MPN receiving water limit when they should have
21 been using the 1,000 MPN limit because there was a
22 presence of fecal coliform and a ratio higher than .1.

23 Now, the District and the ABCL report states
24 that there possibly could have been some additional
25 disinfection in the chlorine contact tank after the

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1 chlorine pump failed to deliver chlorine to this tank
2 and also that there might have been further UV
3 disinfection, since there's approximately a three-hour
4 to a one-hour holding time within this tank, where it
5 would be exposed to sunlight.

6 In our rebuttal we noted that the weather
7 conditions on that morning was overcast in the area,
8 therefore, likely limiting any UV disinfection and that
9 we believe that the statement that if there was any
10 leftover chlorine in the contact chamber, that there
11 would have minimal disinfection on coliform and more
12 likely minimal impact on human pathogens that may be
13 present.

14 The next part -- disagreement we have with the
15 ABCL report is that they used the wrong fate and
16 transport modeling approach. They used a dredging model
17 for wastewater effluent. Now, the parameters for dredging
18 material are much different than wastewater effluents.
19 They also used a near-field mixing zone model to
20 describe the far-field effects, and I'll go into that a
21 little bit more.

22 So here's the document on the left is what ABCL
23 used. It's a joint document between EPA and Army Corps
24 of Engineers and like I said, it's evaluation of
25 discharge dredging material. Dredging material, it's

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1 very different physical properties than effluent. It
2 sinks. It has entirely different characteristics in the
3 water column. Marine waste outfalls, which we cited in
4 our rebuttal, describes how wastewater reacts.
5 This is an example of a water outfall. Down
6 here we have the diffuser and the effluent coming out of
7 the diffuser and this mixing zone, which is defined as
8 the permit as the 93 to 1 mixing zone, you have buoyant
9 forces and momentum changes that create this.
10 Wastewater effluent is essentially freshwater
11 compared to saltwater. So it's buoyant. It flows up
12 to the surface of the water. This combination of the
13 buoyancy forces and the momentum changes creates
14 turbulence mixing in the zone and you get entrainment
15 with the surrounding seawater, and this is where you get
16 that rapid dilution of the effluents.
17 That happens rapidly, and my opinion is it
18 occurred within a minute or so after the discharge from
19 the effluent pipe, and the plume would have surfaced
20 within approximately 100 feet within the location of the
21 discharge -- within the location of the outfall.
22 Actually, let me go back to that slide.
23 So this is the near-field dilution, it's really
24 close to the outfall. Now, once it passes its
25 near-field, engineers call this a far-field, and the

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1 processes that happen to dilute the plume further into
2 far-field are very different than what happens in the
3 near-field mixing zone.
4 Once this passes that zone that has the buoyant
5 and turbulent forces, it only -- the plume only dilutes
6 by diffusion and it's carried by a long ocean
7 occurrence.
8 Since we're in a near-shore environment, it's my
9 opinion that this plume persisted for a substantial
10 amount of time, a period of hours and would have drifted
11 towards shore until it reached a more turbulent zone,
12 like a surf zone and there, once again, would have been
13 mixed up and diluted even further.
14 So finally, the District in their brief, claims
15 that since other agencies didn't require additional
16 actions, that it supports ABCL's analysis and
17 conclusions. So however, the District acknowledged
18 that they did not have a return call from Santa Barbara
19 County until the day after the event and, furthermore,
20 the analysis that was done by the Department of Public
21 Health is only for the active commercial shellfishery,
22 which is located 13 miles away from the outfall.
23 The Department of Public Health did a very crude
24 calculation on the area of impact. It serves their
25 purposes, particularly since the only active commercial

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1 fishery at this time is located over 13 miles away, so
2 we can understand their concern.
3 However, at the Water Boards, we're concerned
4 about protecting the beneficial uses of the water and
5 these are existing uses throughout the area in the water
6 column. So that's factor one and that's, like I said,
7 I spent a little more time on that factor because that's
8 where we have the most disagreement with the discharger.
9 So once again, the scale for this factor goes
10 from 0 to 5 and we selected 2, a below moderate threat to
11 beneficial uses and this is because the receiving water
12 limits for shellfish, we believe, were exceeded and it
13 was likely that the water contact recreation and
14 receiving water limit was also exceeded.
15 So Step 2. I'll move a little bit faster
16 through these other steps in the Enforcement Policy.
17 This is the assessment for discharge violations. Here
18 we talk about the deviation requirement.
19 Often, the Prosecution Team assigns a major for
20 violating the prohibition against unpermitted
21 discharges. However, since this discharge lasted for
22 five and a half hours, we were conservative and selected
23 moderate for the deviation permit requirement.
24 The high volume discharge, instead of assigning
25 the maximum of 10 gallons per gallon, we stipulated with

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1 the District to assign this as \$2.00 per gallon.
2 I'm going to skip Step 3 in the Enforcement
3 Policy because there -- we're not prosecuting
4 non-discharge violations.
5 So moving on to Step 4. There's several
6 adjustment factors to the penalty: Culpability, cleanup
7 and cooperation and history of violations. These
8 factors can increase or decrease the penalty amount.
9 I want to talk first about the history of
10 violations. Since we stipulated with the discharger
11 that this should be a 1, since there were no previous
12 undisinfected violations from the District.
13 Next, I want to talk about culpability. The
14 general Enforcement Policy says that higher liability
15 should result from intentional and non- -- and negligent
16 violations than for accidental or non-negligent
17 violations.
18 Our first step is to identify any Performance
19 Standards or, in their absence, prevailing Industrial
20 Practice in the context of this violation. Now, the
21 likely cause in this case was an air lock. However, the
22 lack of alarm or automated backup system contributed to
23 the duration in the volume of the spill and we scored it
24 as a 1.1.
25 At this stage, I'm gonna pass the testimony over

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1 to Leo Sarmiento, and he'll talk a little about the
2 treatment plant and the alarm.
3 MS. OKUN: Could you use the microphone, please?
4 MR. CARTER: Excuse me.
5 When would cross-examination be for the
6 District?
7 MS. OKUN: It's up to the Chair. You can have
8 the Board questions and the Board cross-examination
9 after each witness or you can save all the questions
10 until the end of the presentation. Both for the
11 discharger and for the Board questions, and I don't know
12 if the District has a preference on whether to
13 cross-examine each witness after they finish their part
14 of the presentation or whether you prefer to wait till
15 the end.
16 I would suggest you wait until after the Board
17 asks its questions because they may ask a lot of the
18 same questions without using your allotted time.
19 MR. CARTER: I'll defer to that. Thank you.
20 MR. WOLFF: So I think, because there's quite a
21 bit of material being presented, it would help if, you
22 know, my colleagues here had an opportunity after a
23 presentation to ask questions because, you know, we're
24 taking a lot of notes, and I think while it's fresh in
25 our mind, that would be best.

30

1 So at this time, and of course, you know, we'll
2 hold off the total allotted time, but I would like to
3 give the opportunity to my fellow Board Members, if you
4 have specific questions for that very first presentation
5 that was made before we go to your step.
6 So I will start with my right.
7 MS. OKUN: I think Mr. Boyers is trying to say
8 something.
9 MR. WOLFF: Oh, I'm sorry.
10 MR. BOYERS: To the extent that you might
11 indulge me, um--
12 MR. WOLFF: Yeah, we'll indulge you.
13 MR. BOYERS: Thank you.
14 Um, my recommendation is that you allow for the
15 entire presentation to be heard. There is some continuity
16 and some context in tying in what Mr. Sarmiento is going
17 to testify as to the Culpability Standard, and then
18 Mr. Buffleben is actually gonna go back and wrap it up.
19 So, you know, we're kind of maybe, a little more
20 than halfway through. So to the extent that that would
21 be allowed by you, I would ask for that.
22 MR. WOLFF: I'm gonna look at my Board Members.
23 We're fine with that?
24 Okay. So please proceed.
25 MR. SARMIENTO: Good morning, Board Members,

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1 Chair and Advisement Team. My name is Leo Sarmiento,
2 Water Control Engineer with the State Water Control
3 Board, Office of Enforcement, located at 1001 I Street
4 in Sacramento. I am also Licensed California Chemical
5 Engineer, and I have taken the oath.
6 I'm here today to support the Prosecution Team's
7 assertion that the October 3rd, 2012, discharge of
8 undisinfectated effluent could have been prevented or
9 minimized had the District installed a low-dosage alarm
10 system to alert operators of chlorination problems.
11 I will provide information about my experience
12 and tell you why the District violated the Standard
13 Provisions of the NPDES permit and I finished explaining
14 why a low-dosage chlorine alarm system is considered
15 Industry Standard Practice, especially at facilities
16 like Carpinteria that all the staff have planned for
17 eight hours per day.
18 I have over three years of experience as Grade 3
19 Certified Wastewater Treatment Plant Operator at the
20 City of Palo Alto's Regional Wastewater Treatment Plant.
21 I received numerous hours of training on Standard
22 Operating Procedures for equipment at the plant
23 including the chlorination system. Our plant was
24 equipped way back then, 25 years ago, with a chlorine
25 system alarm that notified operators of deficiencies,

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1 malfunctions or hazardous situations, including low or
2 high-chlorine dosages.
3 I also have more than 16 years of regulatory
4 experience as a Water Resources Control Engineer at both
5 Regional and State Water Boards, writing NPDES and WDR
6 permits and conducting dozens of non-compliance and
7 enforcement inspections of wastewater treatment plants.
8 For routine compliance inspections, we typically
9 check areas such as adequate staffing, discuss unit
10 processes, monitoring systems, etc. For incident
11 related investigations, like the chlorination failure of
12 the Districts wastewater treatment plant, we conduct
13 detailed investigations as to the cause of the incident.
14 The NPDES permits Standard Provisions require
15 the District to provide all reasonable steps to minimize
16 or prevent distress that's reasonable likelihood of
17 adversity affecting human health or the environment and
18 provide safeguards to assure maximum compliance with all
19 terms and conditions of this discharge permit.
20 In this case, the District has to identify
21 possible situations that could cause upset, overflow,
22 bypass or other non-compliance, could lead to
23 unauthorized discharge and to provide the necessary
24 safeguards or reliable disinfection processes.
25 Industry Standard Practices are generally

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1 accepted set of methods of practices or practices within
2 an industry. Alarm systems are considered Industry
3 Standard Practices that provide safeguards of key
4 treatment components in wastewater treatment plants.
5 Alarms are critical components, especially for
6 facilities of remotely monitored plant operations by
7 state assistants like the District's wastewater treatment
8 plant. By providing a low-dosage chlorine alarm,
9 operators would be notified of any chlorination failures
10 that could be caused by chemical pump failure, absence
11 of adequate or in supply, the brief clogging in feed
12 lines or pumps, air locking, loss of pump prime or
13 chemical supply.
14 I would also point out that the District's
15 report on page 7, "The cause of failure" indicates --
16 and I quote, "The chlorination pump inlet does not
17 appear to be flooded at all times, i.e., low liquid
18 levels in the tank may not be higher than the elevation
19 at the inlet of the pump. This can cause or can create
20 an increased risk for air locking or loss of prime,"
21 end of quote.
22 This admission of risk further illustrates the
23 critical nature of having a safeguard in place as a low
24 chlorine dosage alarm to notify operators, which the
25 District did not provide.

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1 An example of Public Industry Standard Practice,
2 specific for chlorination systems was published on the
3 SWRCB's website entitled, "Manual for Wastewater
4 Chlorination and Dechlorination Practices." This is
5 Exhibit 6 of our evidence list.
6 The purpose of assuming this manual was to
7 provide regulatory agencies, consulting engineers and
8 treatment plant operators with recommended chlorination
9 and dechlorination practices. The manual focuses on the
10 use of compressed liquid molecular chlorine, but is
11 applicable to any facility with a chlorination system,
12 including those facilities like the District that use
13 hyperchloride disinfection system.
14 The manual states on page 51, and I quote,
15 "Every chlorination facility should have an alarm system
16 that adequately alerts the operators in the event of
17 deficiencies, malfunction or hazardous situations
18 related to chlorine supply, chlorine monitoring
19 equipment, chlorine leaks and chlorine residual."
20 The manual also specifies, "Utilization of
21 monitoring equipment, such as chlorine residual,
22 analyzes at the end of the contact chamber and
23 recording of chlorine flow through the chlorinator."
24 As a Certified Wastewater Plant Operator, it was
25 crucial that I was alerted as soon as possible about any

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1 potential equipment or process problems to ensure
2 continuance and reliable operations to avoid any
3 non-compliance issues, including violations of our
4 District's permit.
5 Based on my communal experience as a Certified
6 Wastewater Plant Operator and Board Staff and in my
7 expert opinion, chlorination process is a critical
8 treatment component that should be continuously
9 monitored with an alarm system that would alert
10 operators to respond for corrective actions and return
11 to normal process operation. This course of action is
12 considered Industry Standard Practice.
13 District violated Standard Provisions in its
14 NPDES permit by not having such an alarm. Had there
15 been an alarm, a safeguard, that could have immediately
16 notified plant operators of low-chlorine condition in
17 chlorine contact tank, this type of unauthorized
18 discharge could have been prevented or minimized.
19 Thank you.
20 MR. BUFFLEBEN: So continuing on. I only have
21 a few more slides in this presentation to go through the
22 rest of the Enforcement Policy.
23 Cleanup and cooperation. This is the extent to
24 what the discharger voluntarily cooperated in returning
25 to compliance in correcting the environmental damage.

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1 In this case, the discharger created an alarm a few
2 weeks after the event and was cooperative in our
3 responding for our request for information.
4 However, it failed to complete the required
5 monitoring in the permit. A discharger that fails to
6 comply with its permit should not be given the maximum
7 reduction in any recommended penalty. Therefore, the
8 Prosecution Team proposes a score of 0.9, which slightly
9 reduces the penalty.
10 I'm gonna skip over steps 5, which is the
11 determining the base liability and step 6, which is the
12 ability to pay, since the District agrees that they have
13 the ability to pay the proposed penalty.
14 And moving on to Step 7, other factors that
15 justice may require. One of the factors is staff costs.
16 We calculated the staff cost at the time ABCL was issued
17 and excludes the cost of several members of the
18 Prosecution Team.
19 Step 8, the economic benefit. This includes the
20 cost of the alarm and failure to monitor the receiving
21 waters. There is a difference between the District
22 and our estimate of the economic beneficial, and we
23 believe the main difference is that the District did not
24 include staff time to collect the samples for seven days
25 at two different locations and their estimate of economic

1 benefit.

2 All right. So the final steps. Discuss the

3 minimum and maximum liability for this discharge

4 violation. The minimum liability by the Enforcement

5 Policy is 10 percent more than economic benefit, which

6 we estimate is \$28,000. The maximum penalty is defined

7 by statute, and that's \$2,978,960,000.

8 Step 10, the final liability amount is that --

9 what we're proposing for this discharge. So I know

10 today I've talked a lot about the steps and factors and

11 the calculations of the penalty and in the Enforcement

12 Policy. Once again, our biggest disagreement with the

13 discharger is the assessment of harm to the beneficial

14 uses.

15 It's up to you to decide if we applied the

16 Enforcement Policy appropriately and if the proposed

17 fine is reasonable for this discharge.

18 That ends our testimony. I'm going to take

19 questions now.

20 MR. WOLFF: Thank you.

21 So you're done with your opening statements?

22 MR. BUFFLEBEN: Yes.

23 MR. WOLFF: Thank you. So I would like now,

24 to give the opportunity to my fellow Board Members to

25 ask questions and this time, I will start on my right.

1 order in attachment A, the table covers two things.

2 There's the avoided sampling and analysis of the

3 receiving waters violations. So the permit requires

4 that sampling occurred for seven days at two different

5 locations and five samples total. So that's what those

6 estimates of the cost were.

7 The second part of that table shows the delayed

8 installation of the alarm and economic benefit for that.

9 Um, do you want me to break down the cost a little bit

10 further?

11 MS. CERVANTEZ: No, thanks.

12 MR. WOLFF: Mr. Johnston?

13 MR. JOHNSTON: Thank you.

14 I have a few questions. Um, okay, so in the

15 economic benefit analysis, the biggest chunk of the

16 economic benefit is a failure to monitor. Um, but if I

17 understood correctly in your explanation of the charges

18 themselves, you explained that the Prosecution Team had

19 exercised their discretion to not charge the failure to

20 monitor as a violation; is that correct?

21 MR. BUFFLEBEN: That's correct.

22 MR. JOHNSTON: So the economic benefit is the

23 discharger can't reap an economic benefit from their

24 violation and the violation of -- or the potential

25 violation of failing to monitor is not before us. So

1 MS. THOMASBERG: Kathleen Thomasberg.

2 I want some clarification, if you could, please.

3 I was listening to your description -- um, of the

4 effluents coming from the wastewater treatment plant --

5 thank you -- going out 100 feet as the outfall outlet.

6 MR. BUFFLEBEN: 1,000 feet.

7 MS. THOMASBERG: And 25 feet depth.

8 MR. BUFFLEBEN: In water depth, correct.

9 MS. THOMASBERG: Correct.

10 So the concept is, because of the heavier

11 weight of the seawater, the lighter fresher water, even

12 if it is effluent, will float up, move to the shore and

13 then be eventually mixed, is that correct.

14 MR. BUFFLEBEN: Yes, that's my testimony. Yes.

15 MS. THOMASBERG: Okay, thank you. That's all I

16 have.

17 MR. WOLFF: Ms. Cervantez.

18 MS. CERVANTEZ: Hi.

19 I just wanted some more clarification on the

20 economic benefit piece. If you could just sort of

21 clarify the various calculations you included in

22 reaching that dollar amount.

23 MR. BUFFLEBEN: Yes.

24 So there's two steps. There's the economic

25 benefit for the alarm. So if you look at the proposed

1 why would an economic benefit from failing to monitor be

2 before us as part of this damage calculation?

3 MR. BOYERS: David Boyers, Counsel for the

4 Prosecution Team. If I might just try to address that,

5 Board Member Johnston.

6 There's a legal theory that's called "res

7 judicata" and it basically precludes us from bringing a

8 claim that is alleged in this complaint, but because

9 we've alleged this is a violation and it's discussed in

10 the amended ACL complaint and it's discussed in proposed

11 order, our opinion is that that violation is resolved

12 through this proceeding, even though no penalty has

13 been assessed. And because the violation has been alleged

14 and resolved, it's appropriate to consider the economic

15 benefit that arises from that violation and looking at

16 the penalty methodology.

17 MR. JOHNSTON: And I'm sorry, I heard that legal

18 theory as a "rest your cod," and I'm sure I got it wrong.

19 MR. BOYERS: No, "res judicata."

20 MR. JOHNSTON: Oh, res judicata.

21 MR. BOYERS: The claim is precluded from being

22 alleged again.

23 And I think the District would, you know,

24 certainly argue that if after these proceedings we

25 issued another complaint and said, "We are now going to

1 penalize you for the failure to conduct monitoring." It
2 would say, "Well you alleged those claims in your
3 complaint and therefore, you're precluded from bringing
4 those again."

5 MR. JOHNSTON: Okay. I -- I think I understand.
6 Um, now, you mentioned in your testimony that
7 highly diluted sewage discharges in major rain events
8 have consistently been scored at 3. Were those treated
9 sewage or were those, uh, something analogous to this?

10 MR. BUFFLEBEN: It was raw sewage that was
11 diluted through inflow and filtration during a rain
12 event.

13 So what happens in sewer systems is, during
14 large rain events, you get a lot of freshwater mixed
15 with the sewage and that mixes and dilutes that sewage
16 down quite a bit in some cases. However, when there has
17 been an overflow or a spill event of that, the Regional
18 Water Boards, and we cite two examples for this region,
19 we consistently score that as a 3, mainly because that
20 sewage has the potential to carry a high amount of
21 pathogens.

22 MR. JOHNSTON: Thank you.

23 Now, I was a little -- I'm a little curious
24 about the testimony around the design standard -- it
25 being a design standard for -- to have, uh, chlorine

1 here is that the hazardous nature of the chemical is also
2 applicable for this hyperchloride solution, because it's
3 also hazardous material, and so not only because for
4 safety and health concerns of operators out there, but
5 also for the process control.

6 So that is what I'm referring to.

7 MR. JOHNSTON: Okay, so -- but the manual was
8 specific to liquid chlorine systems?

9 MR. SARMIENTO: Yes. It was designed or it was
10 intended for the use of liquid compressed gas.

11 MR. JOHNSTON: Okay, and, um -- I guess the
12 other question I have is, I'm aware from just reviewing
13 the parties' filings that there's -- I guess there's
14 about 15, uh, permitted municipal wastewater treatment
15 systems in the region. Couple of them don't have
16 chlorination and I know Prosecution distinguished those
17 by having a deeper or further outfall.

18 But of the others that do have chlorination
19 systems, did the Prosecution Team attempt to ascertain
20 how many of those did or did not have chlorination
21 alarms?

22 MR. SARMIENTO: No, I was not involved in that.

23 MR. BUFFLEBEN: No, we haven't done that.

24 MR. JOHNSTON: So you did not review to see
25 which of the other systems did or did not have

1 alarms and the, um -- there was a quote from the
2 Wastewater Treatment Manual -- I'm probably naming it
3 incorrectly -- and that referred -- I believe the
4 testimony said, that that -- actually, that quote
5 referred to liquid chlorine systems, but it was
6 analogous. And, um, I would just like to hear a
7 little more about that, because some of the other words
8 I've heard in the testimony around that was to deal with
9 leaks and hazardous situations.

10 I know the liquid chlorine has the potential --
11 I mean, obviously, you don't just want an alarm
12 principally, you don't want an alarm for when it's not
13 chlorinating. You want an alarm for when it's leaking
14 and liable to kill your operators.

15 Um, so I'm trying to understand how that's --
16 how that establishes that it's an Industry Standard to
17 have a low-chlorination alarm in a situation where using
18 what I assume to be some sort of a dry pattern, something
19 other than liquid chlorine.

20 MR. SARMIENTO: The manual was intended for --
21 during the time, it was a lot of use of compressed gas,
22 which is the liquid gas.

23 And so there's a lot of concerns about
24 protection of human health, protection for operators, and
25 so the -- that's why I pointed out that the analogous

1 chlorination alarms in the region?

2 MR. BUFFLEBEN: No.

3 The permit requires that they have safeguards.
4 The permits don't list out each and every alarm that's
5 required.

6 MR. JOHNSTON: I understand that. My question,
7 just to be specific is, did in the course of its
8 investigation, the Prosecution Team or anyone on the
9 Prosecution Team, attempt to act, to poll, to ask the
10 other dischargers -- the other permitted municipal
11 wastewater treatment facilities in the region, as to
12 whether they do or do not have chlorination alarms?

13 MR. BUFFLEBEN: We did not.

14 MR. JOHNSTON: Okay. Thank you.

15 That's the only questions I have. Thank you.

16 MR. WOLFF: Okay, thank you. Dr. Hunter?

17 MS. HUNTER: Thank you.

18 So, Mr. Flaven, is that your name?

19 MR. BUFFLEBEN: Buffleben.

20 MS. HUNTER: Okay. Thank you.

21 So I'm interested in understanding the fate of
22 the plume as it moved -- as it rose in the water column.

23 MR. BUFFLEBEN: Yes, that's the near-field
24 mixing zone.

25 MS. HUNTER: So your contention is that

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1 currents would have moved it towards the shore?
2 MR. BUFFLEBEN: Correct.
3 MS. HUNTER: Okay, and then my question is,
4 would it have reached the shoreline, and could it have
5 moved into that area that borders shore and actual
6 beach?
7 MR. BUFFLEBEN: Yes.
8 So my experience and my professional experience
9 dealing with waves and how near shore processes work is
10 that the surface of the ocean slowly moves towards the
11 coast. This is a combination of wind and wave action
12 and the ocean swells and how those wave actions move
13 particles.
14 So, however, that dilution of that plume happens
15 very slowly, so that plume, I believe, would be
16 relatively stable until it reached the surf zone where
17 there's breaking waves and that turbulent action would
18 further dilute the plume at that stage.
19 MS. HUNTER: So your -- if I'm understanding you
20 correctly then, um, that further dilution, which is
21 pretty dynamic in the surf zone--
22 MR. BUFFLEBEN: Correct.
23 MS. HUNTER: -- that anything that may have
24 actually landed on the beach would have been diluted
25 sufficiently that we wouldn't be concerned about

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1 bacteria or human pathogens at that point?
2 MR. BUFFLEBEN: It would have been highly
3 diluted by the time -- when it reaches the surf zone and
4 certainly reaches the shore throughout the surf zone,
5 yes.
6 MS. HUNTER: Okay.
7 Then my second question is, the shellfish
8 operation. That's what I'm concentrating on.
9 So shellfish operations. During the seven days
10 following, aren't shellfish operations highly, highly
11 monitored on a almost hourly basis?
12 MR. BUFFLEBEN: No, I don't believe the
13 frequency of monitoring is that frequent. And I can't
14 remember what the required monitoring frequency is in
15 the permit -- we did include that --
16 MS. HUNTER: Would it be daily?
17 MR. BUFFLEBEN: No, I don't believe it's daily.
18 For -- it depends on when they're actually harvesting
19 the shellfish.
20 And, actually, I take that back. So if they
21 are harvesting on a daily basis, then yes, I believe
22 they do have to take a daily sample. But typically,
23 they're not harvesting on a daily basis.
24 MS. HUNTER: Okay.
25 So during harvest time, which we don't know

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1 when that would be, but --
2 MR. BUFFLEBEN: Correct.
3 MS. HUNTER: So were there any shellfish
4 operation reports of exceedances?
5 MR. BUFFLEBEN: No, there were not.
6 MS. HUNTER: Okay.
7 My last question -- and I think you answered
8 this already, but I just want to clarify. In the
9 economic benefit calculation, um, there were costs
10 associated with staff time for sampling?
11 MR. BUFFLEBEN: Correct.
12 MS. HUNTER: And there was a total of five
13 samples would have been required in seven days.
14 MR. BUFFLEBEN: Correct.
15 MS. HUNTER: And I'm going to assume and just
16 to confirm, that also includes the lab fees for the
17 analysis of the samples?
18 MR. BUFFLEBEN: Correct, yes.
19 MS. HUNTER: Okay, because those can be
20 substantial?
21 MR. BUFFLEBEN: What's that?
22 MS. HUNTER: Those can be substantial?
23 MR. BUFFLEBEN: Right, but the District has a
24 laboratory that does at least two of the tests that was
25 required by the permit.

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1 MS. HUNTER: Okay, and I'm sorry, I do have one
2 more question.
3 As far as -- and you may have answered this to
4 Mr. Johnston's point. In the -- within the permit,
5 there are monitoring requirements over -- during the
6 duration of the permit. And on occasion staff will
7 actually inspect systems. Is that triggered by an event
8 minor or major, those inspections? Or are they routine?
9 Do staff just circulate across the wastewater system
10 within our region and take a look at what's going on on
11 any given date?
12 MR. BUFFLEBEN: So this NPDES permit is
13 considered a major facility and EPA requires major
14 facilities get inspected every other year or even
15 annually if there's sufficient violations and it's on
16 their watch list.
17 So in addition to permitting staff or compliant
18 staff reviewing the monitoring reports, they're supposed
19 to visit and inspect the facility on a two-year cycle
20 for major facilities like this.
21 MS. HUNTER: Right.
22 So my follow-up on that would be, would staff
23 then, under the category of safeguards, look at or
24 question or ask for information about what safeguards
25 exist within the operating system?

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1 MR. BUFFLEBEN: They can, but as Leo testified
2 earlier, that generally they're not looking at specific
3 safeguards or alarm systems, but that generally could be
4 part of their inspection.
5 MS. HUNTER: So have you examined the
6 inspection records that occurred prior to this event to
7 see if staff noted what safeguards they observed?
8 MR. BUFFLEBEN: We did review the inspection
9 reports, and they were pretty general in nature and
10 didn't provide specific details about safeguards and
11 alarms and that sort of details.
12 The more thorough report that we included and
13 that was the EPA compliance report, which I believe was
14 in 2010, that report was a little bit more detailed,
15 but also I don't believe it touched on the issue of
16 safeguards or alarms.
17 MS. HUNTER: Okay.
18 So let's say that there is a spill and there is
19 monitoring system or an alarm system in place. If the
20 alarm fails, which can happen, um, then at that point,
21 staff would be looking specifically at the failure of
22 the alarm system or whatever redundancies failed in case
23 of a spill such as this?
24 MR. BUFFLEBEN: Sure. When there's a failure of
25 process equipment and definitely in violation of the

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1 permit, staff will investigate that and work with the
2 District and try to help determine -- try to determine
3 what the cause of the alarm failure or the process from
4 there as best we possibly can.
5 MS. HUNTER: Okay.
6 So I guess the -- just to be sure I'm clear on
7 this. Those systems redundancy is a feature of the
8 operation according to Industry Standards?
9 MR. BUFFLEBEN: Correct. Yes.
10 MS. HUNTER: But we don't really look at that
11 unless one of those systems fails. And so when we go
12 and look at the operation as required by EPA, we don't
13 look for those safeguards, we don't ask about those
14 safeguards, and we don't record or observe our documents
15 or observations of what those safeguards might be?
16 MR. BUFFLEBEN: Generally, the inspections are,
17 compliance inspections is of a more general nature and
18 don't dive into those type of details about alarm
19 systems.
20 MS. HUNTER: Hm, okay.
21 Well -- and is there an EPA checklist?
22 MR. BUFFLEBEN: EPA has their contractors, a
23 checklist, and State Water Board also recently developed
24 a checklist and so, in general, that's some of the
25 things on the checklist, but unless there is a permit

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1 violation that would indicate that there might be a
2 problem in the operations of the facility, like I said,
3 those inspections are in general nature.
4 MS. HUNTER: Well, I would hope that the
5 checklist is applied more effectively in the future
6 because if it's on there, then perhaps this discussion
7 could have occurred, because I agree with you that we do
8 -- our role is both in monitor- -- you know, observing
9 or assuring that the permit conditions are met, but we
10 also are out there, you know, eyes on the system and we
11 have that technical expertise to observe, you know, how
12 the system is actually set up for redundancy and if it's
13 on the checklist, then it would seem that the staff
14 should have that dialogue and make sure they understand
15 what those safeguards are.
16 MR. BUFFLEBEN: Yes, I'm sure after this hearing
17 that the enforcement staff and compliance staff will
18 discuss those issues.
19 MS. HUNTER: Mm-hm. Thank you.
20 MR. WOLFF: Mayor Delgado?
21 MR. DELGADO: Yes, thank you.
22 Regarding shellfish, the Exhibit 8 of the
23 Prosecution's opening brief on page 8, this is a
24 January 2014 Carollo report, I guess a consultant to
25 Carpinteria Sanitary District.

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1 It says that the result of the discharge was a
2 maximum 1.57 mile radius. Looking -- considering
3 shellfish in this case, do the Prosecution -- does the
4 Prosecution Team agree with that?
5 MR. BUFFLEBEN: So that calculation was done by
6 Public Health and, actually, I included that calculation
7 in one of our exhibits, and I can walk you through that
8 if you want me to.
9 MR. DELGADO: I just wanted to know if you
10 agreed with that number, more or less.
11 MR. BUFFLEBEN: Um, no. Because that
12 calculation is done specifically for commercial
13 fisheries by Public Health.
14 MR. DELGADO: Right, that's what the figure
15 says. It's no impact to shellfish growing due to a
16 1.57.
17 So do you agree with the number, not the --
18 MR. BUFFLEBEN: Oh, the actual calculation
19 processing?
20 MR. DELGADO: Yes.
21 MR. BUFFLEBEN: Yes, that calculation, that was
22 accurate.
23 MR. DELGADO: Okay, so I asked that because my
24 two next questions are regarding that.
25 Within that area of impact, that 1.57, generally

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1 a mile radius, how much shellfish recreational harvesting
2 occurs?
3 MR. BUFFLEBEN: I don't have information on
4 that.
5 MR. DELGADO: Okay, wouldn't you want that
6 information to assess potential harm to that beneficial
7 use?
8 MR. BUFFLEBEN: It would be nice to have
9 information like that, but, once again, we're interested
10 in protecting the existing beneficial uses that have
11 been defined by the permit and the basin plan.
12 MR. DELGADO: So if you want to protect
13 beneficial use, don't you need to know what kind of use
14 is occurring on some level?
15 MR. BUFFLEBEN: At some level when the basin
16 plans were corrected, that analysis was done, and so
17 that's why it's an existing beneficial use for that
18 region.
19 MR. DELGADO: So did that analysis, in general,
20 do you think, disclose the amount of recreation
21 occurring in this area?
22 MR. BUFFLEBEN: I don't have the history on
23 that.
24 MR. DELGADO: Okay.
25 My other question about shellfish, let's say

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1 there was no recreational shellfish harvesting in this
2 1.57-mile radius. I don't understand shellfish biology,
3 but is there impact to the ecology of the shellfish
4 regionally, let's say there are larva reproduction going
5 on in this area of the coast that might contribute to, um,
6 shellfish occurrence available for recreation harvesting
7 somewhere nearby. I would guess their larva probably
8 float, you know, a good distance, but do you believe that
9 there is an impact potentially on the shellfish ecology
10 of the area due to this discharge?
11 MR. BUFFLEBEN: No. The main concern why the
12 limit is so low for shellfishery is the human
13 consumption, and so shellfish are filter feeders, and so
14 they can accumulate the bacteria and for a limited time
15 give that bacteria and viruses an opportunity of further
16 growth.
17 So that's why the limit, it concentrates potential
18 pathogens, and so it's strictly a Human Health Standard.
19 I don't expect that those pathogens would affect the
20 shellfish ecosystem, itself.
21 MR. DELGADO: Okay.
22 So then just to conclude on this track for my
23 understanding as a layperson in this area, would you
24 agree that the impact of the discharge or the potential,
25 would relate closely to how many people are

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1 recreationally harvesting in that area or the frequency
2 of that activity?
3 MR. BUFFLEBEN: Um --
4 MR. DELGADO: 'Cause if no one's there, no ones
5 gonna get hurt by eating the shellfish; right?
6 MR. BUFFLEBEN: So the active of consumption or
7 shellfish harvesting, that's not part of the beneficial
8 uses, and so we're talking about the potential harm for
9 the beneficial uses. And so that would be an example
10 of actual harm, where if somebody ate a contaminated
11 shellfish and got sick from it, that would be strong
12 evidence that this discharge was harm. We don't have
13 that in this case; however, we're supposed to be
14 protecting the existing beneficial uses.
15 MR. DELGADO: Okay.
16 Um, my next question is the same regarding water
17 recreation, that's one of the two beneficial uses we're
18 concerned with. Is there a lot of water recreation
19 going on in this area of impact or a very little bit or
20 you have no, no --
21 MR. BUFFLEBEN: There's a lot in this region.
22 It's a State Beach and there's also Rincon Point, which
23 is a world famous surfing area. So there's a lot of
24 water contact recreation in this zone.
25 MR. DELGADO: Okay, thank you.

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1 Um, Leo Sarmiento, you mentioned that for up
2 to 25 years ago, Palo Altos' Waste Treatment Plant had a
3 chlorine pump alarm; right?
4 MR. SARMIENTO: (Nods head affirmatively)
5 MR. DELGADO: Uh, I just wanted to confirm that
6 it's the same kind of pump alarm that wasn't present in
7 this case?
8 MR. SARMIENTO: The alarm that was present in
9 Palo Alto was the low-chlorine dose alarm, and they don't
10 have that in this particular facility.
11 MR. DELGADO: Okay, and that relates then to my
12 next question, thank you.
13 I thought you said that it would be ill-advised --
14 that wasn't your exact quote, but basically what I got
15 out of it is it would be ill-advised if the chlorine
16 levels in the tank at the time of this incident were
17 low.
18 MR. SARMIENTO: Yeah, there should be an alarm
19 for a low-level chlorine residual.
20 MR. DELGADO: Okay, and I wasn't aware until you
21 mentioned that, that the chlorine levels might have been
22 low at the time of incident.
23 Is it that the chlorine stopped pumping into the
24 tank and that's why they were low?
25 MR. SARMIENTO: That's a possibility. There

1 could be other issues, but mainly it's loss of
 2 chlorination.
 3 MR. DELGADO: Okay. All right. Well, maybe the
 4 District will clarify on that when they have a chance.
 5 My next question is for staff. You mentioned
 6 toward the end of your presentation that the cost of
 7 several members of the Prosecution Team weren't included
 8 in the cost sought for recovery. My question is why
 9 weren't they?
 10 MR. BOYERS: Um, well, I'm not sure that I
 11 actually have the knowledge to testify as to why they
 12 were not. Assistant Executive Officer Michael Thomas
 13 is not here today.
 14 Um, I think, you know, the fact is there are
 15 several members and if I were to speculate, I would say
 16 it was intended to keep the costs, you know, down to a
 17 reasonable level. Um, you know, these things take a
 18 lot of time to prosecute. And so, you know, it was
 19 probably a way to try to mitigate the number of hours,
 20 and the dollars keep racking up.
 21 MR. DELGADO: Right. Well, I would hope
 22 that the District was made whole in paying for -- we
 23 have a lot of conflicting needs to spend our money and
 24 if we're not recovering costs in this kind of a
 25 situation, I would not like to see only part of our

1 MR. DELGADO: Okay, thank you very much. That's
 2 all I have. Thanks.
 3 MR. WOLFF: Thank you.
 4 So my question is for Mr. Sarmiento. So
 5 you're a Licensed Plant Operator?
 6 MR. SARMIENTO: 25 years ago.
 7 MR. WOLFF: Okay. And what was the level of your
 8 license?
 9 MR. SARMIENTO: Grade 3.
 10 MR. WOLFF: Level 3?
 11 MR SARMIENTO: Yes.
 12 MR. WOLFF: How many levels are there?
 13 MR. SARMIENTO: There are five.
 14 MR. WOLFF: Five levels.
 15 And in order to maintain a license as an
 16 operator, does it require taking an exam?
 17 MR. SARMIENTO: Yes.
 18 MR. WOLFF: Does that exam include questions
 19 associated with monitoring level of chlorination for
 20 these infection purposes?
 21 MR. SARMIENTO: I don't recall, but it might
 22 include certain levels of safety. There are safety
 23 questions that they pose like, for example, if there's a
 24 spill of a chemical or hazardous was gonna be a
 25 reaction, those types of questions may be in the exam,

1 costs recovered, so it was curious to me that we would not
 2 include all of the costs. At least Board the would be
 3 aware of what the real costs were when we got to the point
 4 of making a decision here today.
 5 My very last question was -- is to the staff here.
 6 If you had inventory or polled all of the or many of the
 7 central coast treatment operations and if you had found
 8 from that polling that most or all of them didn't
 9 maintain -- didn't have the chlorine alarm pump that is set
 10 to be Industry Standard in the presentation, would you still
 11 think it was Industry Standard?
 12 MR. BUFFLEBEN: Well, as Leo testified, alarms
 13 are very important and particularly for compliance and
 14 notification of operators.
 15 So yes, in this case, particularly since
 16 chlorination is part of their unit processes that we
 17 contend that is an Industry Standard to have an alarm
 18 system.
 19 MR. DELGADO: So if you polled the closest 12
 20 plants and none of them had it, you would maintain that
 21 this pump was still Industry Standard?
 22 MR. BUFFLEBEN: Yes, and then we would also write
 23 them all a notice of violation that they're failing to
 24 contain safeguards in their permit and expect them to
 25 correct that deficiency.

1 but it varies from what level you're taking -- Grade 1,
 2 Grade 2, up to Grade 5.
 3 MR. WOLFF: Okay, and so I would assume that the
 4 questions are based on the standard manual, operators
 5 manual and their expected competency at the various
 6 levels.
 7 So do you recall if the training manuals do
 8 cover alarm systems, monitoring systems --
 9 MR. SARMIENTO: Yes.
 10 MR. WOLFF: -- for chlorination?
 11 MR. SARMIENTO: Yes.
 12 MR. WOLFF: So it does include that?
 13 MR. SARMIENTO: Yes.
 14 MR. WOLFF: And in order to maintain your
 15 license, do you have to take continued education
 16 classes?
 17 MR. SARMIENTO: There are -- yes. At that time
 18 it was not required. I don't know if it's required now,
 19 but it is equally important to have continuance training
 20 and education.
 21 MR. WOLFF: And I would assume there are
 22 associations that do provide ongoing training for
 23 operators--
 24 MR. SARMIENTO: Yes, there were.
 25 MR. WOLFF: -- in order to assure they maintain

1 their license. Do you know a couple of the names of these?
 2 MR. SARMIENTO: CWEA is one of them that has
 3 conferences and training programs for operators.
 4 MR. WOLFF: And could you spell what the acronym
 5 means?
 6 MR. SARMIENTO: California Water Environmental--
 7 MR. BUFFLEBEN: Association.
 8 MR. WOLFF: Association.
 9 So in the course of their training for their
 10 members, do these training programs also do cover the
 11 importance of alarm systems?
 12 MR. SARMIENTO: I do think so. They have --
 13 they have different aspect or subject matters.
 14 MR. WOLFF: Mm-hm.
 15 MR. SARMIENTO: It deals with effective operations
 16 and also safety.
 17 MR. WOLFF: All right. Thank you.
 18 MR. SARMIENTO: You're welcome.
 19 MR. WOLFF: Mr. Harris?
 20 MR. HARRIS: Mr. -- Mayor Delgado just asked
 21 the question about surveying other wastewater treatment
 22 plants and said that if -- if you found that 12 didn't
 23 have them, would this be -- would you be treating this
 24 the same way and your answer was, "Well, we'd write them
 25 up for a violation of not having safeguards."

1 This plant's been inspected multiple times; has
 2 this plant ever been written up under that portion of
 3 their permit for not having an alarm?
 4 MR. BUFFLEBEN: Not that I know of.
 5 MR. HARRIS: Okay.
 6 Did the Prosecution Team do any modeling of the
 7 plume? You had a nice slide that showed the -- how it
 8 floats, and I was just wondering if you did any near
 9 shore modeling of where that might have gone onto shore
 10 concentrations -- I don't know if there are models that
 11 even do that--
 12 MR. BUFFLEBEN: I reviewed the model that the
 13 District used, and I applied that model to a certain
 14 extent to understand why it was saying it was diluting
 15 beyond my expectations. And then after that, I looked
 16 at the general research and literature to, you know,
 17 estimate what the far field dilution factors would be
 18 and the time frame that occurs over hours. So I didn't
 19 do a mathematical model of that dilution process, but I
 20 reviewed that in general sense.
 21 MR. HARRIS: Was the beach ever posted -- now,
 22 you said this occurred near a state beach; is that
 23 correct?
 24 MR. BUFFLEBEN: Correct.
 25 MR. HARRIS: Was that beach ever posted or closed

1 because of this spill?
 2 MR. BUFFLEBEN: It was not.
 3 MR. HARRIS: Um, Southern California has a
 4 history of problems with bacteria and beach closures, a
 5 lot due to stormwater, rain events, and that kind of
 6 things and, um, there's a lot of work going on in terms
 7 of trying to make the monitoring much more timely, but
 8 it's pretty common to go out and post beaches to close
 9 them to protect public health, so I'm just wondering
 10 why -- do you have any sense of why this one was
 11 not posted?
 12 MR. BUFFLEBEN: I did not talk to the public
 13 health official for Santa Barbara County, so I don't
 14 know why the day after, he didn't take any further
 15 action.
 16 Um, in an open shore environment like this, we
 17 would expect the plume and the discharge to dilute
 18 relatively rapidly and if it was an enclosed bay, that
 19 would be a different situation.
 20 We also reviewed the monitoring data from the
 21 beach itself, and there was a water quality sample taken
 22 at the beach five days after the event that we included
 23 as part of our evidence and that showed a standard
 24 background level of bacteria.
 25 MR. HARRIS: So bacteria in a marine

1 environment -- I'm not a biologist, but does it die off
 2 faster than, say, in freshwater or is it more a matter
 3 dilution in terms of discharges of treated effluent to
 4 the ocean?
 5 MR. BUFFLEBEN: Dilution is much more an
 6 important process in these environments than the actual
 7 persistence or what I would call the half-life of the
 8 bacteria in the viruses in the ocean environment.
 9 MR. HARRIS: So if the, um -- I think what
 10 you're saying is, you don't think there was any issue
 11 with bacteria at the beach because more than likely in
 12 that turbulent environment, there would have been
 13 sufficient mixing to protect public health.
 14 Where would the -- and I'm thinking about Rec. 1
 15 Standard, where would the Rec. 1 Standard -- where would
 16 the potential harm for Rec. 1 be occurring?
 17 MR. BUFFLEBEN: So that Rec. 1 Standard, that
 18 zone is defined from a thousand feet offshore, um, or to
 19 the 30-foot depth contour. So that range that we're
 20 talking about to the breaking waves, I believe,
 21 concentrations were likely exceeded for water recreation
 22 within the surf zone itself, like I said, there would
 23 have been more rapid dilution that would lower that
 24 exposure level.
 25 MR. HARRIS: So if I'm out in the water

1 swimming, in theory, their outfall is at 25 feet. So
2 what it's saying is, if I swim out a thousand feet and I go
3 down 25 feet, I should be protected under Rec. 1 and
4 that is where a violation --

5 MR. BUFFLEBEN: That is incorrect.

6 MR. HARRIS: -- that is where the potential harm is,
7 all the way out there, so I should be able to swim that
8 entire area without worrying about my health.

9 MR. BUFFLEBEN: No, that's incorrect.

10 So there is a mixing zone and within that mixing
11 zone the receiving water limits don't apply, but once
12 you're outside that mixing zone, you have the receiving
13 water elements, and it's our contention that that plume
14 would have likely exceeded the water recreation.

15 So that zone from a thousand feet to the surf
16 zone, just typically a couple hundred feet, I believe
17 there would have been an area where that plume would
18 have traveled and violated -- likely violated the
19 receiving water limits.

20 MR. HARRIS: So I looked through the permit
21 last night. I don't recall seeing -- is the mixing zone
22 defined in the permit as a -- an actual numeric spacial
23 volume of water?

24 MR. BUFFLEBEN: No, it's understood that the
25 mixing zone is where those turbulent forces, the

1 where we come up of those estimate hours that we worked
2 on it.

3 MS. OKUN: Thank you.

4 MR. WOLFF: Okay. So this is now an
5 opportunity for the Defense to ask questions.

6 MR. CARTER: May I ask if we can take a quick
7 break before we start the Defense presentation?

8 MR. WOLFF: Yes. Absolutely, so let's make --
9 can we make it 10 minutes?

10 All right, so we'll reconvene at 5 to 11:00.

11 Good idea, thank you.

12 MS. OLSON: Please remember to use your mics.
13 If you don't use you mic, it won't be on the recording
14 devices.

15 (Wherein a 10-minute recess was taken)

16 MR. WOLFF: Okay, folks, it's 5 to 11:00, so we'd
17 like to -- now that we have reconvened, this is now an
18 opportunity for the Defense Team to ask questions that
19 you had from the Prosecution.

20 So this -- my understanding from Counsel is
21 that this is part of your overall time allotment that
22 you were given. Okay.

23 MR. CARTER: Good morning, Mr. Chair, Members of
24 the Board.

25 Again, my name is William Carter, and with me at

1 buoyancy and momentum changes that entrains the ocean
2 water and rapidly mixes, that's the mixing zone.

3 Typically, in a situation like this where there
4 is a shallow outfall near the shore, I believe that
5 mixing zone would be essentially a hundred feet around
6 the outfall.

7 MR. HARRIS: Okay, all right. Thank you.

8 MS. OKUN: Okay. I have just a couple
9 questions.

10 The \$300 economic benefit or savings for failure
11 to have an alarm, that's based on the delay costs and
12 not the cost of purchasing the alarm; is that correct?

13 MR. BOYERS: That is correct.

14 MS. OKUN: And then on the \$22,000 in staff
15 costs, there's a table in part of the Prosecution Team
16 submittal that lists the tasks and hours, and I think it
17 says it's based on an estimate of the time spent on this
18 matter.

19 What are those estimates based on and how do you
20 track your time?

21 MR. BUFFLEBEN: So those estimates are based on
22 my work, Leo Sarmiento's and Jim Fisher's hours that
23 they spent to conduct this investigation.

24 We don't have a formal tracking process, but
25 those are estimates based on our meeting notes and times

1 the table we have the members and representatives of
2 Carpinteria Sanitary District.

3 I'll be very brief in my opening statement and
4 then I'll move to cross-examination of the various
5 witnesses.

6 I think the first and only question I have that,
7 and hopefully you will ask is, why are we here? Why is
8 this matter even here? This is the first time I'm aware
9 of that this Board will have ever seen such a case.
10 This is the first time that we are aware of, that this
11 type of violation has been brought before the Board as a
12 discretionary ACL. First time. Why? And we haven't
13 heard any good reason for it.

14 As you have heard, there's very little of any
15 harm. None. There's been actually no evidence of any
16 harm, or any potential harm. You even heard a gentlemen
17 say it's highly diluted by the time it gets to a certain
18 point and you will hear that from an expert. An expert
19 that actually does this. Not speculation. Not
20 guessing. Not potential. Maybe. You can see that the
21 Prosecution hasn't done their job. They haven't proven
22 any harm, whatsoever.

23 With respect to the alarm, we have a lot of
24 speculation. We have a citation to a 1981 manual that
25 doesn't even apply to the type of chemical we're dealing

1 with here as the basis for an alarm. The manual that
2 Mr. Sarmiento referred to, in the very first pages in
3 the abstract says, "The manual has been directed at
4 chlorination systems that meter and control compressed
5 liquid molecular chlorine." These are quotes. The text
6 does not, does not include aspects of hyperchloride
7 instances in chlorination systems. That's what
8 Carpinteria had.

9 Board Member Johnston, you asked the right
10 question, sir. How is this applicable? It's not. In
11 fact, Board Member Hunter, you also asked a lot of good
12 questions. This facility had been inspected for years.
13 Not once did ever any of the inspectors, either
14 permitting or enforcement, say that the plant was
15 deficient in any way about their alarm systems, whether
16 they be redundant or not.

17 And in fact, if you look at the manual, the
18 Standard Provisions, the Standard Provision states these
19 are the safeguards that you may want to consider, and
20 there is no reference whatsoever to having an alarm of
21 the type that the Prosecution says the District should
22 have had. It's not in the permit and it's not in the
23 standard provisions.

24 They are suggesting things that, as Board Member
25 Delgado also pointed out, maybe you should have done a

1 survey of the other plants in the area to see what they
2 were doing. Well, we have. And people just don't have
3 these kinds of alarms on these kinds of pumps.

4 So the two bases of which -- why we're here,
5 the harm and the alarm, they are just -- they crumble
6 when you really look at it, and those are the
7 conversations we've been having with the Prosecution
8 Team for many months, and we are thankful we are finally
9 in front of an objective body who can look at this and
10 ask these questions because frankly, we don't know why
11 we're here.

12 And as to cost, correct, we would hope that you
13 wouldn't be spending all this time and money. Certainly,
14 the District doesn't want to spend all this time and
15 money. In fact, less than a year before this event
16 happened, the EPA vendor, the vendor that works for
17 the EPA that does NPDES compliance, the entity, a third
18 party came in and did a full inspection of the plant in
19 December of 2011, less than a year before this incident.
20 They did a thorough top-to-bottom examination of the plant.
21 Not one reference that there was a deficiency in any of the
22 alarm systems in the plant. Not one.

23 So this plant, which was named Plant of the
24 Year in 2008, 2013, 2014 -- in 2008, they had the same
25 system they had at the time of the event and they were

1 Plant of the Year. So if this is Industry Standard,
2 I'm not sure where they're getting that standard.
3 That's a hard award to get, Plant of the Year.

4 So with respect to costs, everything that we
5 are talking about today, every fact, every consideration
6 that you are thinking about today in evaluating whether
7 to impose an ACL penalty, was known within a day or two
8 of the incident in 2012. Every fact you are
9 considering.

10 So why all the costs? If the District had
11 looked at this event and gone through the Enforcement
12 Policy and ranked it on a priority basis, this would
13 have been down at the bottom. This would have been
14 either no enforcement or an MMP at most, because that's
15 what this District -- this region normally does.

16 If the Regional Board had done the enforcement
17 priority, based on Enforcement Policy, this would have
18 been nothing as they normally treat these cases. But
19 why did they go to all this expense? Years and years
20 and years of going and spending costs, not only
21 requiring the District to pay costs to defend itself, but
22 Board Member Delgado is right, why did you spend so much
23 money on this? Why? I have no idea. Why? You can ask
24 that question because all the facts were known.

25 On the day of the event, it was fully reported

1 that this was a pump that failed because it air locked
2 and they reported the amount of volume, which most
3 people don't do. The District did, and now it's like no
4 good deed left goes unpunished.

5 They reported the full volume. It was off about
6 15 to 20,000 gallons, but it was pretty close to 300,000.
7 The County Health knew that, the Department of Public
8 Health knew that, the Region knew that. Everyone knew
9 within a day or less what the volume of the spill was,
10 and nobody posted the beaches. Nobody.

11 In fact, if you look at Exhibit 21, I believe, of
12 the Prosecution, that's the calculation that the Department
13 of Health did, that 1.57 miles. They used a calculation
14 of one million MPN. One million. And they didn't even
15 require the beaches to be posted. Look at that exhibit.
16 Look at it. That's the states -- your colleagues in the
17 states used a one-million calculation, and they didn't
18 post the beaches. They didn't require the shellfish
19 harvesting to close. Nothing. So why are we here? I
20 don't know.

21 The District has stipulated they're willing to
22 pay a mandatory minimum penalties. They're willing to
23 pay, just like everyone else does. But we have to have
24 a third party look at this ACL because it is unusual.
25 It is odd. It is precedent setting. We've never done

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1 it before for a case like this. Never.

2 So I hope you ask those questions, and I would

3 recommend just letting the District pay the MMPs as

4 recommended and dismiss the ACL penalty proposal. You

5 have the authority to do that. And the District will

6 pay the MMPs and dismiss the ACL. We ask you to do

7 that. We thank you for listening to this evidence.

8 I'm closing my opening statement now and I would

9 like an opportunity, if I may, to cross-examine

10 Mr. Buffleben.

11 MR. BUFFLEBEN: Buffleben.

12 MR. CARTER: Buffleben, I'm sorry. I apologize.

13 If I may?

14 This was not a sanitary sewer overflow; correct?

15 MR. BUFFLEBEN: Correct.

16 MR. CARTER: This was a loss of disinfection?

17 MR. BUFFLEBEN: Correct.

18 MR. CARTER: Have you ever calculated the harm

19 of a loss of disinfection case?

20 MR. BUFFLEBEN: I personally have not, but I am

21 aware of other ACLs that have.

22 MR. CARTER: Well, you never have yourself?

23 MR. BUFFLEBEN: Correct.

24 MR. CARTER: And you said that the -- but you

25 would defer to experts on this issue, wouldn't you?

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1 MR. BUFFLEBEN: I am an expert.

2 MR. CARTER: On this loss of disinfection?

3 MR. BUFFLEBEN: And water quality permits and

4 regulations, yes.

5 MR. CARTER: But you did not do loss of

6 disinfection calculation for this, did you?

7 MR. BUFFLEBEN: I'm sorry, I don't quite

8 understand the question.

9 MR. CARTER: Well, have you ever worked on a

10 loss of disinfection case?

11 MR. BUFFLEBEN: As I stated, I personally have

12 not, but I know of other ACLs that have.

13 MR. CARTER: What case was that?

14 MR. BUFFLEBEN: I believe we cite one case in

15 Napa in our evidence.

16 MR. CARTER: No, did you work on it, though?

17 MR. WOLFF: Defense, could you move the mic, so we

18 can hear you? Thank you.

19 MR. CARTER: I'm sorry.

20 Did you work on that case?

21 MR. BUFFLEBEN: I did not work on that case.

22 MR. CARTER: Now, what is the specific violation

23 at issue here?

24 MR. BUFFLEBEN: It's the discharge of

25 unpermitted discharge.

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1 MR. CARTER: Loss of disinfection?

2 MR. BUFFLEBEN: The permit requires compliance

3 with, um, all components of the system as described in

4 the permit.

5 MR. CARTER: Would that mean loss of

6 disinfection?

7 MR. BUFFLEBEN: Yes.

8 MR. CARTER: Is that the specific violation?

9 MR. BUFFLEBEN: The specific violation is the

10 discharge of unpermitted material.

11 MR. CARTER: And what is the unpermitted

12 material?

13 MR. BUFFLEBEN: It's the undisinfecting

14 effluent.

15 MR. CARTER: Okay.

16 So if I say loss of disinfection, is that what

17 that means?

18 MR. BUFFLEBEN: You're taking a shortcut, yes.

19 MR. CARTER: Okay. I just want to make sure we

20 understand each other.

21 Have you ever been involved in a ACL prosecution

22 for loss of disinfection?

23 MR. BUFFLEBEN: No, I have not. I've only been

24 working in my current position for three years.

25 MR. CARTER: And in those three years, you've

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1 never seen a loss of disinfection ACL case in this

2 region?

3 MR. BUFFLEBEN: Not in this region.

4 MR. CARTER: Are you aware of loss of

5 disinfection incidents in this region in the last

6 three years?

7 MR. BUFFLEBEN: I am not aware, no.

8 MR. CARTER: Okay. Are you familiar with a

9 Dr. Carter Olman?

10 MR. BUFFLEBEN: Um, possibly.

11 MR. CARTER: Is he at the University of

12 California Santa Barbara?

13 MR. BUFFLEBEN: I believe so, yes.

14 MR. CARTER: Did you speak with him about this

15 matter?

16 MR. BUFFLEBEN: Yes, I did.

17 MR. CARTER: And didn't he tell you that he did

18 not believe that this discharge would have any impact?

19 MR. BUFFLEBEN: I do not believe that was part

20 of our conversation.

21 MR. CARTER: What did you talk with him about?

22 MR. BUFFLEBEN: I talked to him about the

23 modeling that he did at the Montecito outfall.

24 MR. CARTER: And did that have anything to do

25 with this case?

1 MR. BUFFLEBEN: I mentioned this case in general
2 terms; I did not go into specific details about this case.

3 MR. CARTER: Did he provide you with an opinion
4 about what he believed?

5 MR. BUFFLEBEN: No, he did not.

6 MR. CARTER: Okay. Now, you mentioned that you
7 believe that this discharge would be highly diluted by
8 the time it hit the beach; is that correct?

9 MR. BUFFLEBEN: No, I said -- well, so I said by
10 the time the plume reaches the surf zone, the turbulent
11 mixing in the surf zone will dilute the plume to
12 background levels essentially.

13 MR. CARTER: Now, um, are you familiar with the
14 -- or have you had an opportunity to review the District's
15 Exhibit G?

16 MR. BUFFLEBEN: The ABCL report that I referred
17 to, yes.

18 MR. CARTER: Can I show this to you? If you look
19 at Table 3 -- would you look at Table 3, please?

20 MR. BUFFLEBEN: Yes.

21 MR. CARTER: Do you understand that table?

22 MR. BUFFLEBEN: Yes, I do.

23 MR. CARTER: And can you -- do you understand
24 that that's calculating what the concentration would be
25 of the effluent within distance?

1 disagreements with this table, yes.

2 MR. CARTER: Have you ever done such
3 calculations?

4 MR. BUFFLEBEN: Yes, I did.

5 MR. CARTER: Okay, and in what case?

6 MR. BUFFLEBEN: For this case.

7 MR. CARTER: All right. And how was it
8 deficient, in your opinion?

9 MR. BUFFLEBEN: Um -- first of all, the model is
10 a model for dredged discharge material, which is -- acts
11 very differently than waste water effluent, particularly
12 in marina environment, as I said earlier in my testimony.

13 There's other factors that are incorrect, in my
14 opinion, for the modeling exercise, understanding the
15 physical processes of the effluent.

16 This -- first of all, this zone, they did the
17 93 to 1 dilution in this zone. That's the near zone
18 mixing field dilution that I was talking about.

19 So they're applying this model into the far
20 field. So the application of this model, in and of itself,
21 is incorrect. Furthermore, the discharge rate is too low.
22 The average current is also very low for the situation.
23 The effluent limit, they got correct. The assumed mixing
24 depth is wrong, as I stated before, the sewer effluent
25 would float on the surface; it would not reach the

1 MR. BUFFLEBEN: Sorry, you showed me Table 1,
2 I'm flipping to table 3 right now.

3 MR. CARTER: Okay, Table 3, would you look at that?

4 MR. BUFFLEBEN: Yes, I am looking at Table 3,
5 now.

6 MS. HUNTER: Um -- may we understand which
7 exhibit you're referring to? Where would we find that?

8 MR. CARTER: That's in the -- that's Exhibit G
9 for the District, Table 3, Board Member Hunter.

10 MR. WOLFF: Okay. Now that we're on the same
11 music sheet, could you please tell us again which
12 section your pointing out?

13 MR. CARTER: Table 3 of Exhibit G.

14 MR. DELGADO: What's the title of Table 3,
15 please?

16 MR. CARTER: I'm sorry. Table 3?

17 MR. BUFFLEBEN: It's the estimate of plume
18 mixing characteristics for the October 3rd, 2012 loss
19 of disinfection event.

20 MR. CARTER: Have you had an opportunity to
21 study that table?

22 MR. BUFFLEBEN: Yes, I have.

23 MR. CARTER: And do you have any concerns about
24 that table, any disagreements with that table?

25 MR. BUFFLEBEN: I have a lot of concerns and

1 25 deep, depth of the diffuser and mix throughout that
2 water column.

3 MR. CARTER: Can I ask you -- what is the mixing
4 zone in the permit? How is that spelled out in the
5 permit?

6 MR. BUFFLEBEN: The mixing zone is defined where
7 the actions of the initial mixing of the plume is.

8 MR. CARTER: Isn't it true that the mixing zone
9 is not spelled out in the permit?

10 MR. BUFFLEBEN: Um, correct.

11 MR. CARTER: Then how do you know it's the wrong
12 mixing zone?

13 MR. BUFFLEBEN: Because I understand the
14 engineering terms and the science behind effluent
15 discharges and consumer out costs.

16 MR. CARTER: So even though there's no mixing
17 zone specified in the permit, you think it's the wrong
18 mixing zone?

19 MR. BUFFLEBEN: So the mixing zone, as understood
20 in the permit, is that zone where there is rapid diffusion
21 and turbulent mixing of the discharge.

22 MR. CARTER: Aren't mixing zones sometimes
23 spelled out in permits?

24 MR. BUFFLEBEN: Sometimes they are, yes.

25 MR. CARTER: But not in this case?

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1 MR. BUFFLEBEN: No.
2 MR. CARTER: Okay. Um, I have no further
3 questions.
4 MR. BUFFLEBEN: I have some further comments on
5 that table if you want me to comment on in other
6 inaccuracies.
7 MR. CARTER: No, thank you. Someone can ask you
8 those questions on their time.
9 Um, I'd like to cross-examine Mr. Sarmiento.
10 MR. BOYERS: In terms of process, would it be
11 more appropriate to redirect Mr. Buffleben before we
12 move to cross?
13 MS. OKUN: No, I don't believe so. I think we
14 should let the discharger finish their questions.
15 MR. CARTER: If I may?
16 MR. WOLFF: Yes, please.
17 MR. CARTER: Thank you.
18 Good morning, Mr. Sarmiento.
19 MR. SARMIENTO: Good morning.
20 MR. CARTER: Mr. Sarmiento, that manual that you
21 have cited, this 1981 manual, isn't it true that it does
22 not refer to hyperchloride chlorine?
23 MR. SARMIENTO: Yes.
24 MR. CARTER: That's correct?
25 MR. SARMIENTO: That's correct.

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1 MR. CARTER: And the hyperchloride system is
2 what the District has; is that correct?
3 MR. SARMIENTO: Correct.
4 MR. CARTER: Now, Mr. Sarmiento when you -- you
5 recall conducting an inspection at the facility in
6 October of 2013; correct?
7 MR. SARMIENTO: I believe so.
8 MR. CARTER: All right. And during that
9 inspection, do you recall asking some of the members of
10 the District whether -- whether or not they believed
11 sabotage was involved with that pump?
12 MR. SARMIENTO: Yes.
13 MR. CARTER: And why did you ask that?
14 MR. SARMIENTO: Because in my experience, one of
15 the plants that I inspected, um, they could not figure
16 out what's the cause of the chlorination failure, and
17 they found out that it was one of the employees actually
18 closed the valve of the chlorination system, and that
19 caused the alarm because they have an alarm system at
20 that time to notify the operators on standby. And this
21 particular operator was on administrative leave, and he
22 came to the plant and just locked the valve.
23 And so that was part of the investigation they did
24 and submitted to us at that time, and so that was one of
25 my experience that sabotage could be an issue when you

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1 couldn't figure out what's the cause of the chlorination
2 failure.
3 MR. CARTER: So here you found -- what did you
4 find the cause of that pump failure to be?
5 MR. BOYERS: Objection. That misstates his
6 testimony.
7 MR. CARTER: Well, did you ever determine what
8 the cause of the pump failure was?
9 MR. SARMIENTO: No.
10 MR. CARTER: Did you -- how did you -- then how
11 do you know that the plant was deficient in your estimate?
12 MR. SARMIENTO: Are we talking about the city
13 involved or --
14 MR. CARTER: District. In this case.
15 MR. SARMIENTO: Could you repeat the question
16 again?
17 MR. CARTER: In this case, did you determine
18 what the deficiency was, or the failure was of the
19 District's pump in this case?
20 MR. SARMIENTO: No, at that time, no.
21 MR. CARTER: Have you -- did you later
22 determine that?
23 MR. SARMIENTO: Yes, we did after they submitted
24 the report that they were not, um, they could not
25 determine what was the cause of the failure.

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1 MR. CARTER: And you believe it was an air lock?
2 MR. SARMIENTO: I don't think so.
3 MR. CARTER: It wasn't sabotage, was it?
4 MR. SARMIENTO: I don't think so.
5 MR. CARTER: Okay. So have you found any other
6 factors relating to that pump that failed, any other
7 issues that may have caused that pump to fail?
8 MR. SARMIENTO: I don't think there -- it was a
9 pump failure. Um, as the information that I got, at the
10 time, the pump was still running, but it was just sucking
11 air, and so there was no delivery of the hyperchloride
12 solution into the system and so, therefore, there was
13 no chlorination at that time.
14 MR. CARTER: So other -- is there any other
15 factor that you investigated as to the cause of the pump
16 failure?
17 MR. SARMIENTO: What we looked at is that
18 there's possibly a loss of prime, because at that time
19 there was delivery of the chlorine solution at the plant
20 and just, incidentally, it just returned into operation
21 after the delivery of the hyperchloride solution.
22 MR. CARTER: And so -- and the District reported
23 immediately that the pump was probably -- the pump
24 failure was the cause of the discharge failure; isn't
25 that correct?

1 MR. SARMIENTO: I'm not aware of that.
 2 MR. CARTER: You didn't see the notices that the
 3 District sent to the Regional Board?
 4 MR. SARMIENTO: They notified the Regional Board
 5 of the disinfection failure, yes.
 6 MR. CARTER: They also reported in their first
 7 report that it was a pump failure; correct?
 8 MR. SARMIENTO: I'm not aware of that.
 9 MR. CARTER: Did you look at Exhibit C of the
 10 District's exhibit?
 11 MR. SARMIENTO: I have not seen it.
 12 MR. CARTER: I can show it to you if you'd like.
 13 Take a look at District Exhibit C, which is within a day
 14 of the event. Read that.
 15 MR. SARMIENTO: It's a -- dated 10-4-12 to
 16 Mr. Roger Briggs from Mark Bennett and the subject
 17 is noncompliance notification, and it says here "On
 18 October 3rd, 2012, at 4:08 A.M. to 9:45 A.M. the
 19 Carpinteria Sanitary District disinfection system
 20 malfunctioned. The District estimates 281,250 gallons of
 21 effluent were discharged during this period. The cause
 22 is suspected to be an air bound chemical feed pump. The
 23 District had over 1,200 gallons of sodium hyperchloride
 24 in inventory at that time. The District notified coastal
 25 -- the Central Coast Water Board and left messages for

1 Peter Von Langen and his supervisor."
 2 Do you want me to finish it?
 3 MR. CARTER: Um -- no, thank you.
 4 So in that notice, within a day of the event
 5 that -- the District advised the Regional Board that they
 6 believed it was a pump failure; correct?
 7 MR. SARMIENTO: It says here air bound chemical
 8 feed pump. It may not be pump failure, the pump may be
 9 running, but it's just sucking air.
 10 MR. CARTER: Okay, and it specified what they
 11 believed to be the estimated volume, correct?
 12 MR. SARMIENTO: Yes.
 13 MR. CARTER: Which ultimately was lower than
 14 anticipated by about 17,000; correct?
 15 MR. SARMIENTO: After we looked at the actual
 16 effluent flow based on their data system.
 17 MR. CARTER: Did you learn any additional facts
 18 about the cause of the event?
 19 MR. SARMIENTO: There are possible causes as
 20 reported by the District, which could be debris in feed
 21 lines, which could be loss of prime.
 22 MR. CARTER: But other than that pump that the
 23 District suspected was the cause of discharge, did you
 24 determine that there was any other potential cause for
 25 why that pump failed?

1 MR. SARMIENTO: Um, I did not see any other
 2 causes.
 3 MR. CARTER: Okay. And so for the last two or
 4 three years, you've been investigating what?
 5 MR. SARMIENTO: I've been investigating a lot
 6 of, you know, unauthorized discharges, like SSOs --
 7 MR. CARTER: No, on this case.
 8 MR. SARMIENTO: On this case?
 9 MR. CARTER: What more did you need to know than
 10 what was reported within a day of this discharge?
 11 MR. SARMIENTO: We sent a letter -- like the 13267
 12 letter, asking for technical report as to what was the
 13 cause of the discharge.
 14 MR. CARTER: And you read the technical report?
 15 MR. SARMIENTO: Yes.
 16 MR. CARTER: And is the technical report
 17 consistent with that initial notice?
 18 MR. SARMIENTO: It's part of this, but it has all
 19 other causes stated in technical report.
 20 MR. CARTER: But ultimately the cause was a pump
 21 failure; correct?
 22 MR. SARMIENTO: According to the District.
 23 MR. CARTER: Would you have any reason to doubt
 24 it wasn't pump failure?
 25 MR. SARMIENTO: Like I said, it's not a pump

1 failure for me. The pump was running, but it was just
 2 sucking air, so it could be a loss of prime.
 3 MR. CARTER: But it was that pump?
 4 MR. SARMIENTO: That was the particular pump in
 5 operation at that time.
 6 MR. CARTER: One pump?
 7 MR. SARMIENTO: Yes.
 8 MR. CARTER: And we're talking about the same
 9 pump that was under investigation; correct?
 10 MR. SARMIENTO: Yes.
 11 MR. CARTER: I have no further questions of
 12 Mr. Sarmiento.
 13 Thank you sir. Thank you sir.
 14 I have no further cross-examination, obviously.
 15 If it's appropriate, we can certainly move to the
 16 District's witnesses. Appropriate?
 17 MR. WOLFF: Yes, please. Proceed.
 18 MR. CARTER: The District is going to ask
 19 Beverly Hann to testify, if I may get my folder.
 20 MR. WOLFF: Question?
 21 MR. BOYERS: Yeah, I'm interested in going back
 22 to the process in terms of a redirect. It may be more
 23 appropriate now while it's fresh in everyone's mind.
 24 MR. WOLFF: I agree with that.
 25 MR. BOYERS: Thank you. Again, David Boyers,

1 Counsel for the Prosecution Team.
 2 Mr. -- Dr. Buffleben, let's go back to Table 3
 3 of the District's Exhibit G; do you have that in
 4 front of you? I can give you my copy.
 5 MR. BUFFLEBEN: I see it.
 6 MR. BOYERS: Can you finish explaining to the
 7 Board what else is wrong or incorrect, in your opinion,
 8 about the calculations or other data in that table?
 9 MR. BUFFLEBEN: The other aspect is going
 10 through that list of initial parameters in that table is
 11 the assumed turbulent dissipation parameter.
 12 Well, once again, we're talking about a far
 13 field zone after the initial zone, so that's a turbulent
 14 dissipation parameter. That's an incorrect parameter.
 15 Furthermore, that parameter is set at its
 16 highest level in that recommended model. I would not
 17 agree with that setting and that model and would have
 18 gone with a much, much, lower level that would reflect a
 19 dissipation by the diffusion.
 20 After that -- after going through those assumed
 21 parameters in that model, the rest of the model was ran
 22 accordingly to the equations for that model. But pretty
 23 much all the input parameters that the District and the
 24 analysis chose were incorrect, in my opinion.
 25 MR. BOYERS: And let me ask a question about

1 your testimony. You stated that the effluent limit of
 2 4,000 MPN was accurate; is that correct?
 3 MR. BUFFLEBEN: That's correct. There's
 4 actually a change of units there that when you look
 5 closely at it, it goes from -- that's 4,000 per liter
 6 versus, typically, we're talking about 100 milliliters
 7 for the limits.
 8 MR. BOYERS: It is -- it is correct that the
 9 permit specifies 2300 MPN per 100 milliliters; is that
 10 correct? Is that an equivalent value?
 11 MR. BUFFLEBEN: (Nods affirmatively)
 12 MR. BOYERS: Thank you. That's all the questions
 13 I have for Mr. Buffleben -- Dr. Buffleben. I'd like to
 14 bring Leo.
 15 Mr. Sarmiento, there was a lot of talk about, you
 16 know, did you find out the cause of the pump failure and
 17 that the District had recorded it as to be basically an
 18 air locking situation. Did you further investigate that
 19 or did you assume on face value that the District had
 20 determined what the cause was or the District would
 21 continue to investigate the cause of the failure?
 22 MR. SARMIENTO: I, um, basically relied on the
 23 District's determination because that's their system.
 24 And so my opinion may be different from what they
 25 submitted to us, but, um, that's what it is -- what

1 they reported as the cause is an assumption, not a
 2 determination.
 3 MR. BOYERS: And when you're preparing for an
 4 enforcement action such as this, um, does -- do the
 5 things that you do to prepare for this stop at the time
 6 you learn of the cause of the violation?
 7 MR. SARMIENTO: Um, I don't follow that. I'm
 8 sorry.
 9 MR. BOYERS: So let me ask you another
 10 question. Um, do you assist in preparing the ACL
 11 complaint?
 12 MR. SARMIENTO: Yes.
 13 MR. BOYERS: Do you go to meetings and have
 14 discussions about what factors might be applied?
 15 MR. SARMIENTO: Yes.
 16 MR. BOYERS: So your activities to prepare for
 17 a case like this don't stop at the time you know all the
 18 facts that give rise to the violation, do they?
 19 MR. SARMIENTO: Correct.
 20 MR. BOYERS: Okay. And let me actually have you
 21 read from the Enforcement Policy, which is included as
 22 the District's Exhibit A.
 23 If you can read from page 19, so that the Board
 24 members can follow along, where I've highlighted the
 25 cost of investigation and enforcement.

1 MR. SARMIENTO: It says here that "These costs
 2 may include the cost of investigating the violation,
 3 preparing the enforcement action, participating in
 4 settlement negotiations and putting on a hearing,
 5 including any expert witness expenses."
 6 MR. BOYERS: Thank you. No further questions.
 7 MR. WOLFF: Okay. So at this time, does any
 8 other Board Member have a question?
 9 MR. JOHNSTON: Yes, just one question.
 10 The Prosecution felt that the, uh, that the input
 11 value for the title current at the outfall was wrong.
 12 What input value would you have used?
 13 MR. BUFFLEBEN: I don't have my notes in front
 14 of me, but if I remember correctly that current value is
 15 actually a very low value. Um, and would have adjusted
 16 that accordingly to the tidal currents in that area.
 17 MR. JOHNSTON: Okay.
 18 Do you have any sense of what the tidal currents
 19 in that area are in terms of feet per minute or per
 20 second?
 21 MR. BUFFLEBEN: I am a sailor, so I usually talk
 22 in knots for current velocity. I actually have quite
 23 an experience in sailing in that area and, furthermore,
 24 there are data available using radar about current
 25 velocities, too, but I didn't specifically check that at

1 that time.
 2 MR. JOHNSTON: Can you give me a guesstimate? I
 3 mean, what are we talking about --
 4 MR. BUFFLEBEN: For knots, I would say a half a
 5 knot of current would be more applicable.
 6 MR. JOHNSTON: Okay, so half a knot is a -- a
 7 nautical mile, as I recall, is about 6,000 feet; is that
 8 right?
 9 MR. BUFFLEBEN: That's correct.
 10 MR. JOHNSTON: So half a knot would be about
 11 3,000 feet an hour?
 12 MR. BUFFLEBEN: Correct.
 13 MR. JOHNSTON: Or about, uh -- wait a minute, I'm
 14 trying here -- uh, 350 -- about 50 feet a minute?
 15 MR. BUFFLEBEN: I assume so. I can't calculate
 16 that fast.
 17 MR. JOHNSTON: Okay, and would a -- and they
 18 estimated six feet a minute.
 19 So would the higher current have given you less
 20 diffusion?
 21 MR. BUFFLEBEN: It potentially would have
 22 diffused it more.
 23 MR. JOHNSTON: Okay, so this is what I don't
 24 understand. You're proposing that the value for the
 25 current -- tidal current should have been 10 times as

1 high as the -- as the consultant -- the discharger's
 2 consultant put it, but -- or I guess it was another state
 3 agency that estimated, I don't know -- whoever it was,
 4 but that would have given you more diffusion.
 5 MR. BUFFLEBEN: This is the current -- this
 6 is the report from the discharger and this is their
 7 consultant that did that, but the biggest -- the largest
 8 factor that I have most disagreement with -- well,
 9 there's two. There's the depth. The depth is clearly
 10 not going to be 25 feet for the diffusion of the
 11 effluent.
 12 The second one is that turbulent mixing
 13 parameter. I believe that is off by two to three orders
 14 of magnitude because of the different mixing processes.
 15 MR. JOHNSTON: Okay, but if the -- if the
 16 current is off by an order of magnitude, which is
 17 roughly what you're saying?
 18 MR. BUFFLEBEN: Correct.
 19 MR. JOHNSTON: Then that would give increased
 20 diffusion?
 21 MR. BUFFLEBEN: This is not a linear equation.
 22 MR. JOHNSTON: I understand, there's a lot of
 23 different variables.
 24 MR. BUFFLEBEN: And exponential factors, too.
 25 MR. JOHNSTON: Okay.

1 MR. BUFFLEBEN: So it's not a simple case of
 2 multiplying across.
 3 MR. JOHNSTON: Okay, so what you're saying is
 4 that they did various factors wrong, and some of those
 5 factors would have given much less diffusion and
 6 apparently some of them would have given more?
 7 MR. BUFFLEBEN: Correct.
 8 MR. JOHNSTON: Thank you.
 9 MR. WOLFF: Mrs. Thomasberg?
 10 MS. THOMASBERG: I can ask questions of
 11 Carpinteria, right?
 12 MR. WOLFF: Sure.
 13 MS. THOMASBERG: Okay. I have two categories --
 14 MS. OKUN: Actually, why don't we let them make
 15 their presentation before we start asking them
 16 questions.
 17 MS. THOMASBERG: Oh, sorry. So I'll hold off.
 18 MR. WOLFF: Okay. Any other clarification?
 19 MR. DELGADO: Over here. I don't want to be out
 20 of turn, I just didn't know if you were --
 21 MR. WOLFF: No, no, no, it was your turn.
 22 MR. DELGADO: Okay. I wanted to clarify that
 23 unlike what the Carpinteria representative said, I
 24 didn't ask earlier why we spent so much money. I asked
 25 earlier why wasn't all the money spent on staff included

1 in their cost analysis. And so I just wanted to clarify
 2 that.
 3 Then I did have some other questions, but they
 4 were mainly for the District, so I understand just now
 5 that based on Kathy's question, we want to save those for
 6 later; is that correct? Okay.
 7 Then the only question I have for our staff is,
 8 why was the 1990, 1980, some old manual referenced,
 9 rather than a more recent manual?
 10 MR. SARMIENTO: Um -- I'm just referring to that
 11 as a standard practice, industry practice that's for
 12 chlorination, although it's focusing on liquid gas
 13 chlorine.
 14 It's also, for me, it's applicable for chlorination
 15 system and in some practices it's just a reference like,
 16 for example, standard operating procedures that they
 17 should have at the facilities. Those are standard
 18 industry practices that are considered safeguards in the
 19 operation and maintenance of the wastewater treatment plant.
 20 MR. DELGADO: So if they're industry standard,
 21 wouldn't you be able to find such a reference in manuals
 22 that were more recent or manuals of equipment that was
 23 more relevant to the equipment in question here?
 24 MR. SARMIENTO: There are references that are
 25 vaguely referencing to a particular alarm system. This

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1 is very specific for a chlorination system that we're
2 looking at alerting operators.
3 An alarm system that will trigger an alert, a
4 notification to a -- whoever is designated operator in a
5 facility or standby operator, so that there is an
6 immediate response. So that's the most specific
7 information or literature that is also published by
8 the State Water Board.
9 MR. DELGADO: Okay. Thank you very much.
10 MR. WOLFF: I have a question pertaining to
11 reporting quantities.
12 If the Central Coast Regional Quality Control
13 Board staff makes a request the following day to have
14 the estimated amount of the spill, is the answer a
15 courtesy answer, or is this an answer that is required
16 as part of permit that we have the authority to ask and
17 request that question, so it should not be treated as a
18 -- as a courtesy answer?
19 MR. BUFFLEBEN: So I don't think there is
20 anything in the permit that specifically requires them
21 to report the volume, but clearly if you're reporting a
22 discharge the very first question is, how much was
23 discharged? I think that's a question that we asked in
24 discharge cases or spills like this and if we need to, we
25 could always follow that up with an order if they are not

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1 cooperating with the investigation.
2 MR. BOYERS: I was just gonna add that a lot of
3 times if the discharge doesn't specify the requirement,
4 we will follow up with a 13267 order asking for a
5 variety of information related to the discharge
6 including the gallonage.
7 MR. WOLFF: Thank you for that clarification.
8 So now I think -- let's, we'll let you proceed.
9 Thank you.
10 MR. CARTER: Thank you, and I apologize, Board
11 Member Delgado, if I misspoke about our conversation --
12 your statements.
13 The District would now question Beverly Hann, if
14 I may? Should I start?
15 MR. WOLFF: Yes, please. Go ahead, thank you.
16 MR. CARTER: Ms. Hann, what's your background in
17 education?
18 MS. HANN: I received a Bachelor of Science and
19 Civil Engineering from University -- I'm sorry,
20 California State University of Chico followed by a
21 Master's Degree in Environmental Engineering by UC
22 Davis.
23 MR. CARTER: And where do you currently work?
24 MS. HANN: I work for Carollo Engineers.
25 MR. CARTER: How long have you worked there?

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1 MS. HANN: Over nine years.
2 MR. CARTER: And what do you do for them?
3 MS. HANN: I do water and wastewater design,
4 construction, and also permitting.
5 MR. CARTER: Were you, at some point, retained
6 by the District to perform work on this particular
7 matter that we're dealing with today?
8 MS. HANN: Yes.
9 MR. CARTER: And when was that?
10 MS. HANN: I believe the phone call came late
11 December 2013.
12 MR. CARTER: All right.
13 And what kind of work did you do or perform on
14 behalf of the District?
15 MS. HANN: I prepared a response report,
16 specifically in response to the notice of violation
17 received by the District.
18 MR. CARTER: And is that report a technical
19 report?
20 MS. HANN: Yes.
21 MR. CARTER: Is that what's shown in Exhibit 8,
22 the Prosecution Team's Exhibit 8?
23 MS. HANN: I believe so.
24 MR. CARTER: And you prepared that?
25 MS. HANN: Yes.

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1 MR. CARTER: And was that signed off by an
2 engineer?
3 MS. HANN: Yes. That was signed off by me.
4 MR. CARTER: And in preparing that report, what
5 kind of documents and materials did you receive or look
6 at?
7 MS. HANN: Um, I -- in preparing the report, I
8 conducted a site visit and investigated the facilities
9 at the plant, interviewed staff and operations crew and
10 also reviewed the -- the logs of information that were
11 prepared by the District.
12 MR. CARTER: And in preparing that report and
13 reviewing this material, you were looking both at this
14 October 20, 2012 incident, as well as some other
15 incidents?
16 MS. HANN: Yes.
17 MR. CARTER: I just want to refer specifically
18 to the October 2, 2012 incident.
19 Did you prepare and state a conclusion in your
20 report?
21 MS. HANN: Yes. Our conclusion was that it was
22 likely -- I'm sorry, the event on October 3rd was likely
23 caused due to air locking of the sodium hyperchloride pump.
24 MR. CARTER: And in doing that -- in reaching that
25 conclusion, did you consider other possibilities,

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1 regarding the pump failure?
2 MS. HANN: Yeah. We looked at loss of power,
3 the facility hadn't lost power. We looked at --
4 sorry -- the, um, operation of the pump. The pump was
5 noted to still be operating when the flow was not being
6 delivered.
7 We looked at, um, the condition that the pump had
8 returned to normal operation following delivery of the
9 chemical.
10 MR. CARTER: And what was the basis of that
11 conclusion?
12 MS. HANN: The basis of the conclusion was that
13 the pump had continued to run and the pump hadn't
14 been -- I'm sorry, the chemical hadn't been delivered,
15 but upon delivery of the chemical, the increase in head
16 on the delivery system could have cleared an air lock
17 condition.
18 Also, it looked at an evaluation of what happens
19 with sodium hyperchloride. It does off gas and an
20 off-gas situation can cause air locking on pumps.
21 MR. CARTER: And did you -- was there any other
22 factor that you believed caused the pump failure,
23 anything else that you considered?
24 MS. HANN: Um, yes, we did note that the inlet
25 to the pump appeared to be lower than, you know,

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1 potentially lower than a low level within the chemical
2 tank, and so that would be a possible cause of loss of
3 prime to the pump, but because -- oh, I'm sorry, because
4 the District had noted that there was chemical available,
5 that was likely not the cause.
6 MR. CARTER: And in your opinion, the cause of
7 the incident was the failure of the pump?
8 MS. HANN: Um, it was the air locking of the
9 pump. The pump was still operating.
10 MR. CARTER: I have no further questions.
11 MS. HANN: Thank you.
12 MR. CARTER: We'd move to the next witness, if I
13 may?
14 MR. WOLFF: Yes, please proceed.
15 MR. CARTER: I would like to question Dan
16 Hennessy.
17 Mr. Hennessy, good morning. Mr. Hennessy, can
18 you tell us your background in education, please.
19 MR. HENNESSY: Yeah, my background is, I'm an
20 Environmental Consultant specializing in Human Health
21 Ecological Risk Assessments and Site Assessments. My
22 highest degree is Master's in Fishery from the
23 University of Washington. I also have an Environmental
24 Science Degree from Western Washington University and a
25 Social Science Degree from University of California,

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1 Irvine.
2 MR. CARTER: What's your current employment
3 status?
4 MR. HENNESSY: I'm currently employed at Anchor
5 QEA LLC, I've been there for about 14 years.
6 MR. CARTER: And what do you do for them?
7 MR. HENNESSY: I am a Risk Assessor Toxicologist
8 specializing in waste site cleanup and water quality
9 concerns for our clients.
10 MR. CARTER: And were you retained to work with
11 the District on this matter?
12 MR. HENNESSY: Yes, I was.
13 MR. CARTER: And when was that?
14 MR. HENNESSY: I believe that was probably
15 towards the end of 2013, early 2014.
16 MR. CARTER: And in doing that work, what type
17 of work were you doing? What did you do?
18 MR. HENNESSY: I was investigating the potential
19 risk to human health and the environment from the three
20 events that I was asked to look at, the two chlorination
21 events and the loss of chlorination event that we're
22 speaking of today.
23 MR. CARTER: I want to focus on the October 3rd,
24 2012 loss of chlorination event.
25 How did you go about reviewing and assessing

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1 that matter?
2 MR. HENNESSY: I basically applied pretty
3 standard risk assessment procedures. I try and consider,
4 um, a conservative maximum exposure scenario and by
5 default use very, very conservative exposure parameters,
6 and then, in this case, to look at the potential effects
7 using the permitted standards and other applicable rules
8 from the State of California.
9 MR. CARTER: And in doing so, did you prepare a
10 report?
11 MR. HENNESSY: Yes, I did.
12 MR. CARTER: And do you see District Exhibit G? I
13 think it's also part of Prosecution Team H. I think it's
14 Attachment L --
15 MR. HENNESSY: Yes.
16 MR. CARTER: -- to the Prosecution Team's 8, but
17 if you could look at Exhibit 8, or excuse me, Exhibit G
18 from the District; is that your report?
19 MR. HENNESSY: Yes, it is.
20 MR. CARTER: And in your report, did you reach a
21 conclusion?
22 MR. HENNESSY: Yes, I did.
23 MR. CARTER: Can you tell us what your conclusion
24 is?
25 MR. HENNESSY: My conclusion was that this is a

1 very minor event and that the potential harm to human
2 health or the environment was minimal, if not just
3 negligible.

4 MR. CARTER: And when you say the environment,
5 did that include beneficial uses, such as shellfish
6 harvesting and water contact?

7 MR. HENNESSY: I would put that in the camp with
8 human health concerns, but, yes, I did look at that.

9 I very, very much was concerned about all the
10 permit limits including the beach recreational direct
11 contact, as well as potential impacts from coliform
12 bacteria on shellfish and human consumption of those
13 shellfish.

14 MR. CARTER: Did you -- what is the basis
15 of that conclusion?

16 MR. HENNESSY: The basis of that conclusion is
17 essentially the exposure -- understanding of exposure
18 from the discharge event and comparison to the
19 applicable standards for shellfish, specifically.
20 Um, I did not look at that 14 MPN number because that
21 number is intended to be applied as a long-term average.
22 This is a very short-term event.

23 So in that case, I used the 400 MPN maximum
24 single sample value as the basis for comparison.

25 MR. CARTER: So let's be clear. What modeling

1 MR. HENNESSY: Yeah, again, as a Risk Assessor
2 um, just our Standard Default is to go to a very
3 conservative model of exposure right out of the gates,
4 and then if we see potential harm after that, we would do
5 a more complex fate and transport model, for example, if
6 I think it was being alluded to.

7 This -- this model we parameterize it as -- was
8 noted at very low current rates. I consulted with a
9 coastal engineer about the other parameters in that, and
10 we felt that the default parameter that was discussed
11 previously was appropriate, given its use in model in
12 estuarine default whereas this coastal, it's a much more
13 high-energy dynamic environment.

14 MR. CARTER: So you actually used a lower title
15 or mixing rate?

16 MR. HENNESSY: Exactly. We used 1/10th of a
17 foot per second, which is about, maybe, three centimeters
18 per second, roughly. Looking at some of the available data
19 that's online for this area, um, currents are typically
20 in the, you know, 10 to even 30 centimeters per second
21 range.

22 MR. CARTER: So if you had used the number
23 suggested by Mr. Buffleben, your numbers might have been
24 different?

25 MR. HENNESSY: We would have come up with a

1 or what standards did you use in coming -- to render
2 your opinion?

3 MR. HENNESSY: Yeah, two things. The
4 laboratory tests that were conducted by the Carpinteria
5 Sanitary District, as well as the model that has been
6 discussed on Table 3 of my report.

7 That model was parameterized to be very
8 conservative. It's a very simple dilution model. I do
9 have some contesting opinions regarding the other side
10 on that.

11 Um, it is not intended necessarily to be
12 modeling dredging effluent as you can picture, it's muddy
13 water. It's actually intending to be modeling in a very
14 simple and straightforward way water that comes off of
15 dredging material after it's been placed upland and has
16 been dewatered, it's meant to apply to the water that
17 is then discharged back into the system out of a pipe.

18 So it's not intended to address mud, for
19 example, that's being discharged.

20 MR. CARTER: Now, you heard some comments from
21 Mr. Buffleben about -- he disagreed with some of the
22 factors; do you recall that?

23 MR. HENNESSY: I do recall that, yes.

24 MR. CARTER: Do you have any comments about the
25 nature of those comments?

1 much, much lower potential hazard, that's correct.

2 MR. CARTER: So your calculations are actually
3 higher than what Mr. Buffleben would have done?

4 MR. HENNESSY: I believe we were being as
5 conservative as was appropriate here.

6 MR. CARTER: Can you tell us what you found in
7 terms of distance and concentration?

8 MR. HENNESSY: Well, again the model is a very
9 simple type of way to estimate this. You know, we were
10 trying to keep this reasonable, um, but essentially
11 the distances that are required to dilute this to levels
12 that are below the applicable standards are matters of
13 feet and very short time durations as well.

14 MR. CARTER: Could you give us an example?

15 MR. HENNESSY: Well, on Table 3, I believe it's
16 approximately two feet and 20 seconds to reach the 400 MPN
17 per 100 milliliters standard.

18 MR. CARTER: And so you've heard that -- so
19 within 20 seconds and within two feet of the outfall, you
20 would have met that 400 MPN?

21 MR. HENNESSY: That's what we would expect with
22 this very conservative model again, yes.

23 MR. CARTER: And you've also heard this number,
24 14 MPN?

25 MR. HENNESSY: 14 MPN, yes.

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1 MR. CARTER: And what is that?
2 MR. HENNESSY: Well, it's a Shellfish Standard
3 that's applied. Its genesis is from the FDA National
4 Sanitary Shellfish Program, um, which indeed has very
5 specific monitoring requirements to apply that.
6 It's intended to be applied as a long-term
7 average for monitoring shellfish waters or waters where
8 shellfish are harvested. It's not intended to be a,
9 um, single point sample. Um, the National Sanitary
10 Shellfish Program, for example, talks about maybe five
11 annual samples. Again, they're referencing an annual
12 averaging. They specifically talk about this being a
13 median or a geometric mean of data over a long time.
14 MR. CARTER: So this is -- you wouldn't
15 consider that 14 MPN an enforcement sample?
16 MR. HENNESSY: Not for this event, no. That
17 would be more of a long-term monitoring type of
18 benchmark, and if you were exceeding that, then -- I think
19 this was discussed earlier, you would actually then look
20 at the tissue samples of the organisms being harvested.
21 MR. CARTER: Did you calculate at what distance
22 from the outfall the effluent would have met the 14 MPN?
23 MR. HENNESSY: I believe I did, and it would
24 clearly be, you know, less than the 400. I don't have
25 that in front of me right now.

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1 MR. CARTER: Um, may I show you something to
2 refresh your recollection?
3 MR. HENNESSY: Yeah. This is a chart that I
4 have prepared, um, that essentially shows the fecal
5 coliform concentrations by the length from the diffuser
6 and what those concentrations would be relative to that
7 length.
8 So at approximately two feet, we would see that
9 we reached the 400 MPN value. By the time we're
10 approximately 23 feet away from that diffuser, we reached
11 the 14 MPN threshold. And then, for example, going out
12 to 150 feet, it would be less than 1 MPN per 100
13 milliliters.
14 MR. CARTER: Thank you. I have no further
15 questions.
16 May I go to the next witness?
17 MR. WOLFF: Yes, please.
18 MR. CARTER: Thank you.
19 The District would call Peter Von Langen.
20 Doctor, I'm not sure where you can sit, um.
21 Beverly, may I ask you to stand up, please? Thank you.
22 May I?
23 MR. WOLFF: Yes, proceed, please.
24 MR. CARTER: Dr. Von Langen, I'm sorry. Good
25 morning.

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1 MR. VON LANGEN: Morning, Chair, Members of the
2 Board. Peter Von Langen. Staff -- Central Coast Water
3 Board Staff. Peter Von Langen.
4 MR. CARTER: Doctor, were you involved in the
5 drafting of the permit for the District?
6 MR. VON LANGEN: I was involved in the drafting
7 and reviewing of the draft permit.
8 MR. CARTER: And so you're familiar with the
9 permit?
10 MR. VON LANGEN: Um, to some degree, yes.
11 MR. CARTER: And you work closely with the
12 District in making sure it was in compliance with that
13 permit?
14 MR. VON LANGEN: Yes.
15 MR. CARTER: And how often had you inspected
16 that facility prior to 2012 -- October of 2012?
17 MR. VON LANGEN: I recall inspecting it
18 approximately every year or every other year since 2010,
19 so probably two to four times.
20 MR. CARTER: And during that time period, did
21 you ever issue a violation to the District for failure
22 to have the appropriate alarms on any of these chemical
23 feed pumps?
24 MR. VON LANGEN: No.
25 MR. CARTER: Were you aware of any deficiencies

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1 with their chemical feed pumps, including the pump at
2 issue?
3 MR. VON LANGEN: No, I wasn't.
4 MR. CARTER: Are you familiar with the
5 monitoring requirements after a discharge like this,
6 there's been discussions about the District having to go
7 out and sample and monitor. Are you familiar with that
8 provision in the monitoring requirements?
9 MR. VON LANGEN: It came to me later, yes.
10 MR. CARTER: When did you first -- when did it
11 first come to you about this requirement?
12 MR. VON LANGEN: At some point the discharger
13 contacted me in October of 2012 regarding that there was
14 monitoring, that the initial monitoring had been missed.
15 MR. CARTER: So that was news to you that this
16 sampling and monitoring was required?
17 MR. VON LANGEN: At that point, yes.
18 MR. CARTER: Even though you were involved in
19 writing the permit?
20 MR. VON LANGEN: Yes, we have a contractor that
21 drafts the permit and then we review them.
22 MR. CARTER: Now, in that monitoring and
23 sampling requirement, does it require what kind of boat
24 or how the District is supposed to conduct that sampling?
25 MR. VON LANGEN: No, it doesn't.

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1 MR. CARTER: So it's very general; is that
 2 correct?
 3 MR. VON LANGEN: Yes.
 4 MR. CARTER: It doesn't require them to conduct
 5 any particular -- use any particular kind of boat or
 6 any particular kind of system to collect those samples?
 7 MR. VON LANGEN: No.
 8 MR. CARTER: I mean, it's correct. That's
 9 correct?
 10 MR. VON LANGEN: Yes. That's correct.
 11 MR. CARTER: All right. I have no further
 12 questions.
 13 MR. WOLFF: Thank you.
 14 MR. CARTER: At this point, we would call
 15 General Manager -- thank you, Doctor. Craig Murray.
 16 General Manager, Craig Murray.
 17 MR. WOLFF: And according to our uncalibrated
 18 time clock, there was about four minutes left, but, you
 19 know, I wanted to give you a bit of extra time. But
 20 just so you keep track of the time.
 21 MR. CARTER: I appreciate that, I really do.
 22 MR. WOLFF: No problem. Time flies and I
 23 understand.
 24 MR. HARRIS: Mr. Chair, if we could ask, do you
 25 have a sense of how much time you will need to present

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1 your case?
 2 MR. CARTER: I would say with respect to
 3 Mr. Murray -- General Manager Murray, who I think is
 4 probably one of the key witnesses here, I would say
 5 15 minutes.
 6 MR. HARRIS: 15 additional minutes?
 7 MR. CARTER: Yes, if I may. I mean, I think it's
 8 important to hear from Mr. Murray.
 9 MR. WOLFF: I will grant you that.
 10 MR. CARTER: Thank you very much.
 11 MS. OKUN: And the Prosecution Team will also
 12 get the same amount of additional time.
 13 MR. CARTER: We have no objection to that.
 14 Whatever is fair.
 15 MR. WOLFF: Yeah, fairness for both sides.
 16 MR. HARRIS: So just to be clear. That's 60
 17 minutes, total of 60 plus 5 for closing arguments?
 18 MS. OKUN: Correct.
 19 MR. HARRIS: Okay.
 20 MR. CARTER: Thank you very much.
 21 Mr. Murray, what's your background and
 22 education?
 23 MR. MURRAY: Good morning, my name is Craig
 24 Murray. I'm the General Manager of the Carpinteria
 25 Sanitary District. The address is 5300, 6th Street.

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1 I remembered that part, in Carpinteria. And I did take
 2 the oath and with respect to your question, my background
 3 -- my educational background, I have a Bachelor's Degree
 4 from the University of California Santa Barbara. I hold
 5 a Master's Degree in Civil and Environmental Engineering
 6 from Cal Poly San Luis Obispo. I have a Certificate
 7 from UCSB in Hazardous Materials Management, and I'm a
 8 Registered Professional Engineer in the State of
 9 California.
 10 MR. CARTER: Okay, and what is your current
 11 position?
 12 MR. MURRAY: I'm the General Manager of the
 13 Carpinteria Sanitary District.
 14 MR. CARTER: And how long have you been in that
 15 position?
 16 MR. MURRAY: I started in May of 2004.
 17 MR. CARTER: And are you familiar with the NPDES
 18 permit for that facility?
 19 MR. MURRAY: Yes, I am.
 20 MR. CARTER: And during the course of your
 21 managing of that plant, have you received awards or
 22 commendations?
 23 MR. MURRAY: Yes, we've received a lot of
 24 recognition.
 25 In 2008, as was mentioned, we were named the CWEA

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1 Statewide Plant of the Year for all treatment plants in
 2 California less than five million gallons per day, flow
 3 rate. Just last year, we received the Statewide Award
 4 from CWEA for the Collection System of the Year. That's
 5 all treatment -- all collection systems less than 250
 6 miles of sewer.
 7 We've had operators of the year recognized.
 8 We've received recognition, many times over for a recent
 9 project we've completed, the breakout point subject to
 10 sewer conversion project. I think we've earned a good
 11 reputation in the industry.
 12 MR. CARTER: And you -- over the course of the
 13 years, are you familiar with how any notices of
 14 violations or enforcement actions that have been taken
 15 against the District?
 16 MR. MURRAY: In my tenure, I think we have had
 17 just a handful of MMP violations that were settled
 18 through an expedited payment letter.
 19 MR. CARTER: Have you ever received an ACL, any
 20 type of discretionary penalty like that?
 21 MR. MURRAY: We have not.
 22 MR. CARTER: Were you aware of, or involved in,
 23 the incident on the 3rd of October 2012? Were you there
 24 at the plant at the time?
 25 MR. MURRAY: I was.

1 MR. CARTER: And was that reported immediately?
 2 MR. MURRAY: Yes, it was.
 3 MR. CARTER: And was the volume reported as
 4 well?
 5 MR. MURRAY: Yes, it was.
 6 MR. CARTER: And was -- you saw the technical
 7 report that Ms. Hann described in Exhibit 8. Is that
 8 accurate representation of what you understand to be the
 9 events of the incident?
 10 MR. MURRAY: It is. It provides a very
 11 comprehensive timeline and sequence of events, and I
 12 found it to be accurate.
 13 MR. CARTER: And in a nutshell, what was the
 14 cause of the event, the incident?
 15 MR. MURRAY: The cause of the event, that we
 16 believe, was an air lock in that chemical feed pump
 17 suction line, but it really wasn't determined, and I think
 18 there was discussion about what caused it, but that's the
 19 only thing that we can point to in our after the fact
 20 assessment, you know, in the minutes after we identified
 21 the problem.
 22 We looked at all of those possible sources and
 23 um, as was mentioned within minutes of -- 10 minutes or
 24 so of identifying the fact that this pump was no longer
 25 sending chemical to the chlorine contact tank, we had a

1 MR. CARTER: And from the time of the October
 2 incident when it failed until it was removed in April
 3 of this year, had that pump failed again?
 4 MR. MURRAY: It did not. It worked perfectly.
 5 MR. CARTER: When was -- this upgrade you're
 6 talking about, this improvement project, when did you
 7 first start considering that improvement project?
 8 MR. MURRAY: It first started, I think, in 2007
 9 as part of an assessment -- a facilities planning effort
 10 for our solids handling, our digesters and dewatering
 11 systems at the treatment plant. And this replacement of
 12 the chemical feed system was really just a component of
 13 that project. We needed to move that equipment out of the
 14 way to construct new tanks and we took the opportunity
 15 to build what, I believe, is a brand new state-of-the-art
 16 system. It costs our tax -- our rate payers over a
 17 million dollars, so, um --
 18 MR. CARTER: After the incident on October 2012,
 19 did you have any contacts with Dr. Von Langen?
 20 MR. MURRAY: Yes.
 21 MR. CARTER: Was the incident reported to him?
 22 MR. MURRAY: It was reported by Mark Bennett, our
 23 operations manager, yes.
 24 MR. CARTER: And in your conversations with Mr. --
 25 Dr. Von Langen, was there any discussion about having

1 delivery of chemical that was prescheduled that
 2 basically returned that pump to its normal state.
 3 MR. CARTER: So when you say you're not sure
 4 what the cause was, you're saying you're not sure
 5 what caused the pump to fail?
 6 MR. MURRAY: I mean, that's correct. I mean,
 7 after the fact, we disassembled the pump, we inspected
 8 it and we didn't identify any mechanical issues with the
 9 pump itself.
 10 MR. CARTER: But it's clear that the incident
 11 was caused by that pump failing?
 12 MR. MURRAY: Yeah, and that pump had been a
 13 very reliable piece of equipment for our facility. It
 14 operated without fail since 1998, I think like 14 years
 15 of operation.
 16 Obviously, it's maintained and inspected. And
 17 we track it with our computerized asset management system
 18 and we're looking at it every day, but it was a very
 19 reliable piece of equipment.
 20 MR. CARTER: Is that pump still in operation?
 21 MR. MURRAY: It is not in operation.
 22 MR. CARTER: When was it removed?
 23 MR. MURRAY: Earlier this year it was removed
 24 and we completed the installation construction of an
 25 entirely new chemical disinfection system for our plant.

1 to take samples for monitoring?
 2 MR. MURRAY: There was not.
 3 MR. CARTER: Did he direct you to do that?
 4 MR. MURRAY: No, he not.
 5 MR. CARTER: Were you aware of any of the
 6 beaches were posted in the area after the spill?
 7 MR. MURRAY: They were not.
 8 MR. CARTER: Did you report this at a later date
 9 as set forth in the District Exhibit J, this was
 10 reported later to the Regional Board? If you can look
 11 at District Exhibit J.
 12 MR. MURRAY: Yes, this was reported as part of
 13 our monthly monitoring report that we submit to the
 14 Regional Board.
 15 MR. CARTER: And in that report, or Exhibit J,
 16 does it lay out the basic events of the incident and
 17 what the cause might have been or was?
 18 MR. MURRAY: It does. We simply attached this
 19 report, the original notice of noncompliance, and we also
 20 had reported this incident onto the State's CIWQS online.
 21 We recognized this was noncompliance and we reported it
 22 as that.
 23 MR. CARTER: Between the time of the incident
 24 and this report in Exhibit J, did anyone contact you
 25 that there was gonna be an enforcement action, there was

1 gonna be any kind of follow-up by the Regional Board
 2 because of this incident?
 3 MR. MURRAY: Not until October of 13 when we
 4 were visited by the Office of Enforcement Staff.
 5 MR. CARTER: Was that a surprise to you?
 6 MR. MURRAY: Yes, it was.
 7 MR. CARTER: Now, after the incident in
 8 October 2012, did you undertake any corrective actions?
 9 MR. MURRAY: Yes, we did.
 10 MR. CARTER: What were those?
 11 MR. MURRAY: Well, within a week we engaged our
 12 engineering consultant to engineer in that alarm that
 13 has been maintained as what's required or missing.
 14 So within a week we engaged our consultant;
 15 within two weeks that alarm was in place and remained in
 16 place until we replaced that system.
 17 MR. CARTER: Between the time of the incident in
 18 October and then October 2013, when the inspectors came
 19 to the facility, did you have any communication with the
 20 Regional Board about this October incident enforcement,
 21 anything like that?
 22 MR. MURRAY: We did not.
 23 MR. CARTER: Are you familiar with this
 24 compliance examination or the CEI inspection that was
 25 conducted at the plant in December of 2011?

1 MR. CARTER: During -- were you present during
 2 the inspection or -- excuse me, yeah, the inspection by
 3 the investigators in October 2013?
 4 MR. MURRAY: Yes.
 5 MR. CARTER: And Mr. Sarmiento showed up?
 6 MR. MURRAY: Yes.
 7 MR. CARTER: And did they ask for consent to
 8 come into the facility?
 9 MR. MURRAY: They did.
 10 MR. CARTER: And did you give them consent?
 11 MR. MURRAY: Yes, I did.
 12 MR. CARTER: Did they ask for documents?
 13 MR. MURRAY: Yes.
 14 MR. CARTER: Did you provide those documents?
 15 MR. MURRAY: Yes, I did.
 16 MR. CARTER: Was Dr. Von Langen in that meeting
 17 as well?
 18 MR. MURRAY: Yes, he was.
 19 MR. CARTER: And you heard Dr. Von Langen said
 20 that at some point he learned about or -- I don't want
 21 to say learned, but he was focused on the sampling and
 22 monitoring provision that was in the permit? Did you
 23 hear him discuss that during that inspection?
 24 MR. MURRAY: Yeah, it appeared to me he was, you
 25 know, paging through the permit and identified the section

1 MR. MURRAY: Yes, I participated in that.
 2 MR. CARTER: And during the course of that, was
 3 that conducted by a vendor from the USEPA?
 4 MR. MURRAY: Yes.
 5 MR. CARTER: And was Dr. Von Langen there?
 6 MR. MURRAY: He was for most of that.
 7 MR. CARTER: So during that -- at some point
 8 after the October -- or excuse me, sometime in 2012, did
 9 you receive a report regarding that inspection?
 10 MR. MURRAY: Yes, I did.
 11 MR. CARTER: And in that inspection, was there a
 12 report that listed various things that were inspected at
 13 the facility?
 14 MR. MURRAY: Yes.
 15 MR. CARTER: And was there any mention that
 16 there was a deficiency in your alarm system?
 17 MR. MURRAY: No, there wasn't.
 18 MR. CARTER: Did you have conversations with
 19 Dr. Von Langen about that report?
 20 MR. MURRAY: Yes.
 21 MR. CARTER: Did Dr. Von Langen indicate to you
 22 whether any enforcement action was gonna be taken as a
 23 result of that report?
 24 MR. MURRAY: Yeah, he indicated that there would
 25 be no enforcement as a result of that inspection.

1 that's kind of buried in the monitoring and reporting
 2 program that required that seven-day sampling, and we talked
 3 about that requirement; that there is no threshold and, you
 4 know, if we lose chlorination for 30 seconds, does that
 5 trigger seven-day monitoring? So it seemed to be a new
 6 revelation for everyone.
 7 MR. CARTER: What do you mean everyone, who
 8 else?
 9 MR. MURRAY: The Office of Enforcement Staff,
 10 for me, frankly, um --
 11 MR. CARTER: And who else when you say Office of
 12 Enforcement Staff?
 13 MR. MURRAY: It was Jim Fisher and Leo
 14 Sarmiento.
 15 MR. CARTER: It appeared to you that they didn't
 16 also understand the sampling and monitoring provision?
 17 MR. MURRAY: That's the way it appeared.
 18 MR. CARTER: At some point -- in regards to that
 19 sampling and monitoring provision, are you -- you had an
 20 opportunity to review it?
 21 MR. MURRAY: Yes.
 22 MR. CARTER: And in that, is there any specific
 23 requirement about what kind of boat, what kind of method
 24 you have to use in terms of conducting such sampling and
 25 monitoring?

1 MR. MURRAY: No. We collect surf zone ocean
2 samples. Um, our operator will go out on a boogie board
3 to collect those samples, so it's possible to do in any
4 manner.

5 MR. CARTER: Now, are you aware of how the
6 Regional Board calculated their economic benefit as it
7 relates to that particular item failing to sample and
8 monitor?

9 MR. MURRAY: Yes.

10 MR. CARTER: How did they do it as you
11 understand it?

12 MR. MURRAY: They called our consultant that
13 does our five-year cycle benthic monitoring program and
14 asked them how much it cost, how much they charge to
15 engage a charter vessel, and basically that was the
16 basis for the sampling.

17 MR. CARTER: So it's your understanding that
18 when Regional Economic Board was calculating economic
19 benefit, they based it on a larger vessel that is
20 normally used in a five-year benthic study, underwater?

21 MR. MURRAY: I believe so.

22 MR. CARTER: That's your understanding?

23 MR. MURRAY: Yes.

24 MR. CARTER: And in your experience, if you
25 were to have done the sampling and monitoring, what

1 MR. CARTER: At some point, you received a notice
2 of violation?

3 MR. MURRAY: Yes.

4 MR. CARTER: In response to that, did you retain
5 the consultants that we've heard here today?

6 MR. MURRAY: Yes, I did.

7 MR. CARTER: And you've -- as part of that, your
8 team collected samples and had them analyzed and
9 provided to Mr. Hennessy?

10 MR. MURRAY: That's correct.

11 MR. CARTER: And you provided him the information
12 that he and Ms. Hann needed, excuse me, to conduct their
13 analysis and draft the report?

14 MR. MURRAY: Yes, we did.

15 MR. CARTER: Now, at some point after you
16 received the NOV, did you conduct a review of available
17 public enforcement data and information?

18 MR. MURRAY: I did.

19 MR. CARTER: And did you focus on this region or
20 elsewhere?

21 MR. MURRAY: I focused primarily on this region,
22 but I looked at enforcement activity throughout the
23 state.

24 MR. CARTER: And what did you find -- tell us
25 what you looked at first.

1 would it have cost you?

2 MR. MURRAY: Um, you know, far less than that.
3 A couple thousand dollars, I would expect over the seven
4 days.

5 MR. CARTER: What would you have done?

6 MR. MURRAY: I would have likely sent my
7 operators out on a kayak to collect the samples, and we
8 would have run the majority of them in our lab and sent
9 the enterococcus samples to Fruit Growers Lab in
10 Santa Paula.

11 MR. CARTER: Does your permit require the
12 monitoring for enterococcus?

13 MR. MURRAY: It does not.

14 MR. CARTER: But your lab -- so that's why your
15 lab doesn't have that ability; correct?

16 MR. MURRAY: Correct.

17 MR. CARTER: So had you done it, you would have
18 done in-house sampling, in the kayak, perhaps, and/or done
19 your analysis in-house in your laboratory and maybe sent
20 out the samples to another lab for enterococcus?

21 MR. MURRAY: In retrospect that sounds right to
22 me.

23 MR. CARTER: It would not have cost \$25,000, would
24 it?

25 MR. MURRAY: No, sir.

1 MR. MURRAY: I looked at -- since May of 2010
2 when the Enforcement Policy was published, I looked at
3 all of the enforcement actions and reported violations
4 that were on the CIWQS online system.

5 I also spent a day here in this office looking
6 at all the files for all of the POTWs within this region
7 and focusing then on enforcement and violation
8 reporting.

9 MR. CARTER: And what did you find?

10 MR. MURRAY: I found that there has never been a
11 discretionary penalty action in that time period for a
12 POTW where they assessed a per gallon penalty for any
13 type of violation, except for one overflow of raw sewage
14 that was not at a treatment plant or not akin to this
15 kind of violation. All of the violations were treated
16 as MMPs.

17 MR. CARTER: In this case, is it your opinion
18 this would be the first ever discretionary ACL imposed
19 for this kind of violation?

20 MR. MURRAY: Based on the information that was
21 available to me, I would say so.

22 MR. CARTER: Have you seen anything to the
23 contrary?

24 MR. MURRAY: Um, no.

25 MR. CARTER: One moment. I'm sorry. I have no

1 further questions.
 2 Oh, I'm sorry, go ahead.
 3 MR. MURRAY: I'd just like to add a couple
 4 things.
 5 It's been mentioned that, you know, we were
 6 somehow deficient in monitoring, but our treatment
 7 facility has a very comprehensive SCADA monitoring and
 8 alarm system, um, it's now called Rockwell Factory Talk.
 9 It is connected to a WIN 911, which is an alarm plan
 10 that does call out our operators in the event of
 11 an alarm in our plant.
 12 We have in October 12, at that time, over a 150
 13 discrete alarm points. Within our disinfection system,
 14 we had a whole number of alarms, high effluent chlorine
 15 residual, low-tank level, high-tank level. We had a
 16 whole number of alarms, even in that specific standpoint.
 17 So the representation that we don't have alarms
 18 or don't have alarm systems is just not accurate. We
 19 simply lack this low-chlorine dose alarm system, and it's
 20 kind of one of those things where until you sort of
 21 recognize that it's necessary -- in this case we didn't,
 22 the pump worked perfectly for 14 years straight -- it's
 23 hard to anticipate. You can't have an alarm on every
 24 piece of equipment within, you know, a large wastewater
 25 treatment facility. It's not practical.

1 getting Plant of the year, during any inspections, during
 2 any kind of examination of your plant, did anyone ever tell
 3 you, you don't have the right alarm on the right piece
 4 of equipment?
 5 MR. MURRAY: No, they did not.
 6 MR. CARTER: And this reference manual that's shown
 7 in Prosecution Team Exhibit 6, this 1981 manual, do you
 8 believe that applies to your operations?
 9 MR. MURRAY: No. I believe that applies to gas
 10 chlorine systems and those don't even exist, except in
 11 a couple large municipalities in the state.
 12 MR. CARTER: And why is that? Why don't you
 13 think it applies to your plant or at least to the plant
 14 at the time?
 15 MR. MURRAY: I think it -- you pointed out it
 16 says in the abstract, it does not apply, but we have a
 17 liquid chlorination system. We use sodium hyperchloride,
 18 which is essentially a strong bleach, and all of those
 19 safety alarms that are referenced in that manual don't
 20 apply.
 21 MR. CARTER: All right, thank you very much.
 22 Thank you.
 23 MR. WOLFF: Okay. So your --
 24 MR. CARTER: That was our last witness.
 25 MR. WOLFF: Okay. Thank you very much.

1 We had over 150 alarms -- as soon as we identified
 2 this vulnerability we put that alarm in place. Um, and
 3 you know, I believe that was a reasonable response to this
 4 one-time, minor loss of chlorination.
 5 MR. CARTER: Well, that was my last question I
 6 forgot to ask you was, at the time of the incident in
 7 October of 2012, you had various alarm systems and various
 8 SCADA systems in place; correct?
 9 MR. MURRAY: That's correct, yeah.
 10 MR. CARTER: And, uh, so this notion -- how many,
 11 essentially, how much different individual alarms did you
 12 have at the time?
 13 MR. MURRAY: Around 150 alarms.
 14 MR. CARTER: Would this pump have been amendable
 15 to that type of alarm?
 16 MR. MURRAY: The pump itself is mechanical,
 17 there's no type of alarm that you could connect to it
 18 other than loss of power. That's just -- the feature of
 19 it.
 20 The new chemical disinfection system that we
 21 installed has inline flow meters that will detect when
 22 and if the chemical itself, the liquid chemical stops
 23 flowing or goes to a low level.
 24 MR. CARTER: In doing these -- your years as
 25 general manager, including this time period when you were

1 So now I provide the opportunity for our Board
 2 to ask questions. I'm gonna start on my left with Mayor
 3 Delgado.
 4 MR. DELGADO: Can we ask questions of staff and
 5 Carpinteria, or just Carpinteria?
 6 MR. WOLFF: Just ask your questions.
 7 MR. DELGADO: Okay. For our staff -- and this is
 8 the only question I have for our staff -- if seven days of
 9 the permit required monitoring had occurred, would there
 10 have been better facts available today regarding dilution
 11 concentrations after this October 2012 event?
 12 MR. BUFFLEBEN: Yes.
 13 MR. DELGADO: Okay, so that's it for my question
 14 for staff.
 15 For Carpinteria representatives, I wanted to ask
 16 you the same question, and I don't know who's the best to
 17 answer it.
 18 MR. HENNESSY: Can you repeat the question?
 19 MR. DELGADO: Yeah, if the seven days of
 20 monitoring had happened with samples taken, et cetera,
 21 would we have had better facts on the table today regarding
 22 the October 2012 event?
 23 MR. HENNESSY: Yes. I would -- when you
 24 have data to answer that kind of question, it's helpful.
 25 MR. DELGADO: Okay. A lot of people don't like

1 the government telling them how to meet desired outcomes
2 or results. Just tell us what you want, what you need
3 and we'll figure out a way of getting there.

4 So I wanted to ask if the District staff
5 understood the details of their NPDES permit and the
6 waste discharge requirements that are relevant to that
7 permit, such as the monitoring requirements?

8 MR. MURRAY: Did we understand the details of
9 the requirement?

10 MR. DELGADO: Yeah. You have permit. Do you
11 understand what that permit says? Do you understand the
12 requirements within that permit?

13 MR. MURRAY: Yes, we do.

14 MR. DELGADO: Okay. So regarding the seven days
15 of monitoring, did you understand that that requirement
16 was in the permit?

17 MR. MURRAY: I understood it not at that moment,
18 and I think it was perhaps an oversight. Perhaps, due
19 to the fact that it's somewhat buried and sort of
20 strangely worded in the monitoring and reporting
21 program.

22 It's, um -- that's all I can say, you know, I
23 think once we realized that was a requirement, we said,
24 "Mea Culpa, we didn't do this. Next time, we will."

25 We asked the Regional Board staff, would it be

1 what's been represented by the Prosecution Team; that
2 that alarm was required and we should have had it before
3 this one-time failure and, you know, we installed it
4 after the fact, as I mentioned on our own accord.

5 MR. DELGADO: Okay, and do you consider
6 installing a pump after an unwanted discharge or
7 noncompliant discharge, installing an alarm on that
8 pump, do you consider that to be a proactive action?

9 MR. MURRAY: Perhaps reactive is a better
10 word. I mean, I wish I'd had a crystal ball to have
11 known that pump was going to fail at that moment and I
12 would you have installed the alarm beforehand, but
13 sometimes in mechanical systems, that's how things
14 improve.

15 MR. DELGADO: Okay. And my last question is,
16 I'm confused about your comment and other's today that
17 after delivery of chemical, that the pump returned to
18 its normal state. Can you--

19 MR. MURRAY: Yeah, I can. I can clarify that.
20 It wasn't very explicit.

21 So we have a large 6500-gallon chemical storage
22 tank, it's a bulk storage tank. A line comes from that
23 tank, piping, to the pump that's in question today.
24 That pump delivers a precise amount of chemical to the
25 chlorine contact tank.

1 possible to get some clarification, some threshold
2 information, as I mentioned earlier. Do you trigger
3 seven days of ocean monitoring if you lose chlorination
4 for 10 seconds? 10 minutes? 10 hours? 10 days? And so
5 in that regard, it's a vague requirement that I'm aware
6 of; I don't fully understand it.

7 MR. DELGADO: Okay. And I think it's kind of
8 obviously, but I just want to ask, why did you install
9 the alarm, either on the pump or on the feed to the pump,
10 after the incident?

11 MR. MURRAY: I think that's indicative of our
12 whole approach to operating our facility. We try to
13 make it the very best system that it can be all the time
14 and once we recognized this as a vulnerability, we
15 installed that alarm proactively. Nobody told us to do
16 it. It wasn't a directive from the Regional Board. We
17 said, "We want to know when this happens, so we can
18 minimize any impacts that may occur from a future event."

19 MR. DELGADO: Okay. And Mr. Murray, you stated
20 in your response to a question from your counsel that
21 within one week of the incident, that your district's
22 engineers installed the pump that you said, quote, "Was
23 required or missing," quote -- unquote. What did you
24 mean when you said it was "required or missing"?

25 MR. MURRAY: I only meant that -- that that's

1 So when I say we got a chemical delivery, a big
2 tank truck came in and filled that larger tank, and that
3 process is what returned the chemical feed pump to
4 normal operation.

5 MR. DELGADO: So to me, a layperson in this
6 instance, it sounds like the tank didn't have enough
7 chemical in it. You added chemical and everything was
8 okay, but I don't think that's correct.

9 MR. MURRAY: That's not correct. There was over
10 1200 gallons remaining in that tank when we received the
11 additional delivery, so we basically topped it off.

12 But we've gotten below 1200 gallons many, many
13 times, you know, down to hundreds of gallons without
14 this pump failing, so it wasn't a -- not related to the
15 level in the tank.

16 MR. DELGADO: So when I read through all
17 the documents for today, there was some reference to
18 turbulence or some change in pressure that happens when
19 you add more to a tank, but can you explain why adding
20 more to a tank would clear whatever problem the pump was
21 having?

22 MR. MURRAY: It really -- just, I believe, is a
23 matter of pressure, you know, you have all of a sudden
24 20 feet of chemical high, you know, in that tank that you
25 didn't have before. It puts more pressure, and maybe if

1 there was an air bubble or an air lock condition, it'll
 2 push through the pump itself.
 3 MR. DELGADO: Okay, thank you very much.
 4 MR. MURRAY: You're welcome.
 5 MR. WOLFF: Dr. Hunter?
 6 MS. HUNTER: Thank you.
 7 My first question is for Prosecution or Staff.
 8 Um, just to clarify my understanding is, that in our
 9 regulations and permits, well, we provide standards, um,
 10 that define what violation parameters set, define what a
 11 violation is. We do not provide direction as to how you
 12 would assure that those standards are met.
 13 So in other words, we do not direct within the
 14 language of a permit, we would not direct what types of
 15 alarms or what types of safeguards. We don't define
 16 that in anyway and we don't instruct or limit or constrain
 17 what types of safeguards would be required in order to
 18 be consistent and compliant with the permit -- conditions
 19 of the permit; is that correct?
 20 MR. SARMIENTO: That's correct. It's not
 21 restricted.
 22 MS. HUNTER: That's true of all of our permits?
 23 MR. SARMIENTO: Most of the permits are, um --
 24 there are some specific information or requirement like
 25 some operating procedures that's part of the permit, but

1 In this case, it would have been the alarm goes
 2 to the treatment plant operator on-call, and then there
 3 is a chain of command all the way up to our operations
 4 manager.
 5 MS. HUNTER: And is there a time frame in which
 6 they are expected to respond and be on site?
 7 MR. MURRAY: Yes, within 30 minutes.
 8 MS. HUNTER: Within 30 minutes, okay.
 9 Um, can you tell me then -- so apparently, the
 10 pump and its dysfunction status was identified then
 11 first thing in the morning when the staff returned?
 12 MR. MURRAY: Essentially. They started at 7:00
 13 A.M. They do their normal safety meetings and shortly
 14 thereafter the assigned operator that does the plant
 15 inspection or the rounds, starts his way around. When
 16 he came around to this part of the system that's
 17 inspected every day, he realized that, you know, this
 18 pump had some problem.
 19 MS. HUNTER: Can you describe to me what
 20 specifically were the cond- -- how did he or she know
 21 the condition of the pump, that it was in dysfunction?
 22 MR. MURRAY: Well, as was mentioned, the pump
 23 appeared to be turning and operating normally and it was
 24 the appearance of the water in the chlorine contact
 25 tank. One of my operators noticed that it looked dark.

1 not all are in there.
 2 MS. HUNTER: Okay. So in the case of this
 3 permit, that is typical or consistent with all permits
 4 issued, that we would not specify how those safeguards
 5 are in order to be compliant, would need to be designed
 6 or what function they would serve?
 7 MR. SARMIENTO: That's correct.
 8 MS. HUNTER: Okay, thank you.
 9 Now, um, to the Carpinteria group. Um, so this
 10 system failure occurred at 4:00 A.M. in the morning and
 11 I'm curious. Is there a difference in day staff and
 12 night staffing? Are there differences in the number of
 13 people and the type of expertise?
 14 MR. MURRAY: Our plant is manned from 7:00 A.M.
 15 until 3:30 P.M. in the afternoon. We even have a shorter
 16 schedule on the weekends, so that's -- the remaining
 17 16 hours of the day, our -- you know, that monitoring
 18 system that I mentioned is what is controlling and
 19 calling out operators in the event of any failure.
 20 MS. HUNTER: Okay. So is there a line of a
 21 hierarchy of who gets called in first through those
 22 alarm systems? How does that work?
 23 MR. MURRAY: There is. We have an on-call
 24 assigned operator for the treatment plant. We also have
 25 an on-call assigned operator for the collection system.

1 This was the operator who would be collecting the sample
 2 normally that day.
 3 He ran a chlorine concentration from that
 4 location and, um, it happened kind of all in an instant,
 5 "Hey, let's start looking at what's going on here," and
 6 then they identified the problem.
 7 MS. HUNTER: And so how was it determined that
 8 the pump was not functioning for five and a half hours?
 9 MR. MURRAY: As I mentioned, we have a SCADA
 10 system that, um, monitors the plant at all times.
 11 So we're continuously monitoring both chlorine
 12 residual and oxidation reduction potential at the head
 13 of that treatment plant, at the location where we would
 14 -- well, where we installed the alarm after the fact.
 15 Um, so we can go back and chart in our 13267 report, we
 16 provided some of that information. We can very clearly
 17 show exactly when the chlorine residual went to 0 and
 18 when it came back on.
 19 So we have all that data, we monitor it, very
 20 sophisticated systems, industry standard systems. We
 21 just didn't have the alarm.
 22 MS. HUNTER: So if this had occurred during the
 23 day when staff was there, do you think that the chlorine
 24 levels would have been detected in a much shorter
 25 time frame?

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1 MR. MURRAY: I'd say that's probable.
2 MS. HUNTER: Mm-hm, okay. What was actually
3 required, what were the actions taken to restore the pump
4 function to get back online?
5 MR. MURRAY: Um, we did nothing to get it back
6 online, other than take that delivery of chemical.
7 MS. HUNTER: Can you explain that me again?
8 MR. MURRAY: Sure. Well, the pump appeared to
9 be working. When they delivered -- excuse me, the tank
10 truck came and put more chemical, another 5,000 gallons
11 into the 6500-gallon tank; the pump just starting working
12 again.
13 MS. HUNTER: So the 5,000 was the difference
14 between the -- the full capacity of the tank and what was
15 remaining in the tank.
16 What was remaining in the tank, would you
17 consider that point at which the pump would have locked
18 up?
19 MR. MURRAY: No, ma'am. It's -- we've ran without
20 any failures many, many times well below that level.
21 MS. HUNTER: What would you say is "well below"?
22 MR. MURRAY: Oh, down into the hundreds of
23 gallons of chemical remaining. We try not to get that
24 low, but sometimes it works out, schedules for delivery
25 and so forth.

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1 MS. HUNTER: Okay. So simply restoring supply
2 at the full capacity of the tank, the pump then began to
3 deliver chemicals into the tank?
4 MR. MURRAY: I wish I knew definitively why that
5 pump stopped sending chemical to the tank. You know, we've
6 speculated that there was an air lock condition and it
7 was remedied, but after we did our post-event debriefing
8 and download of information, we took the pump apart, we
9 couldn't find anything mechanically wrong with it.
10 Nothing wrong with the control system. It just really
11 appeared to be some temp- -- you know, short duration,
12 temporal failure.
13 MS. HUNTER: So when you took the pump apart,
14 did you stop the operation system altogether or did you
15 put in a secondary pump?
16 MR. MURRAY: Well, we have a secondary pump.
17 There's a fully redundant pump in this system and there
18 was at this time, um --
19 MS. HUNTER: It's just a flip of the switch?
20 MR. MURRAY: Flip of the switch, yes.
21 MS. HUNTER: One pump or the other?
22 MR. MURRAY: Yes.
23 MS. HUNTER: Okay. Um, so then you made a
24 statement that gave me pause, and you said that there
25 are many alarm systems within your -- the design of your

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1 operation, um, but you're looking at reasonableness of
2 alarming everything.
3 So my question is, wouldn't this particular
4 pump, which is delivering chemicals for tertiary
5 treatment, wouldn't that be considered a significant
6 part of the system in which you -- that should have
7 been one of the 150 alarms installed in your system?
8 Especially, given that you have two pumps, so to me, it
9 would seem that you would have a redundancy there; that
10 if that pump is not delivering chemical, that it would
11 automatically switch to the other pump.
12 MR. MURRAY: You know, in hindsight, I think
13 that the answer is easy. We've -- I did not design this
14 system. We had engineers that designed this system. We
15 have periodically gone and looked for vulnerabilities in
16 our process and remedied things. We've added redundant
17 equipment and so forth just to make sure we're, you know,
18 not going to have a situation like this.
19 This was one particular alarm that we simply
20 didn't have, nor was it, you know, in the forefront as
21 critical, and I think part of that is based on the
22 reliability of that particular pump. Um, we put the same
23 model of pump back in place, and anyway --
24 I did poll some of our area treatment plants and
25 asked the question that was raised earlier. I'm reluctant

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1 to say who has what and who doesn't, based on what we heard
2 from the Prosecution Staff. I can say that in Region 3,
3 I would not say that alarm is an industry standard alarm.
4 MS. HUNTER: Yeah, okay. So I mean, to me, that
5 would seem like a really critical point to understanding
6 your tertiary treatment sequence that that pump and with
7 its backup pump, that one or the other was functioning
8 correctly.
9 So getting to the mechanical part of it, um,
10 everything that's mechanical fails at some point. I
11 mean, some things have long lives. I just discovered
12 how long an airplane flies before they take it out of
13 service, and it's remarkable to me, but there's a great
14 deal of maintenance, there's a great deal of expert systems,
15 checks, and it would seem to me that a pump with 14 years
16 of non-failure would suggest that that pump is -- what
17 is the lifespan of a pump like that, do you know? Did
18 you ever look into that?
19 MR. MURRAY: This one was 15 years, until we
20 proactively replaced it with this new system. Um, but
21 it's not uncommon for, you know, wastewater equipment of
22 this caliber to last 20, 25 years and that's with active
23 maintenance and monitoring, which we provide.
24 MS. HUNTER: So what is the maintenance
25 schedule for that pump in particular? Not your system

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1 overall.

2 MR. MURRAY: Sure. Well, that pump is inspected

3 every day. Annually, I know that we change the gear

4 oil. We do sort of a more comprehensive breakdown on an

5 annual basis.

6 The remainder is really kind of on a operator

7 experience replacement, um, basis, not scheduled. Just,

8 you know, let's change the diaphragm on this one, on

9 this interval.

10 MS. HUNTER: So just an inspection of observing

11 wear or tear, things like that?

12 MR. MURRAY: Yes.

13 MS. HUNTER: But in this case, this particular

14 system relies on human intervention because you did have

15 a backup pump. So if someone had been online, it may

16 have been a much shorter duration before they recognized

17 -- wouldn't have been five and a half hours, I'm guessing.

18 MR. MURRAY: You could speculate that way. I

19 can't say, it would depend on when somebody was going

20 around the plant looking at that it particular function.

21 It's a fairly large facility.

22 MS. HUNTER: How many people do you have online

23 that work the system itself?

24 MR. MURRAY: In the treatment plant, we have a

25 total of six people.

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1 MS. HUNTER: Okay. And finally, if there had

2 been an alarm -- and I realize I'm asking you, it's a

3 hypothetical -- but let's say there was an alarm, either

4 it would have triggered the secondary pump switching on,

5 or it would have been off some human observation of some

6 sort; is that -- would you agree with that?

7 MR. MURRAY: It would have been an alarm that

8 called out an operator to come and address that specific

9 alarm. With our new system that we've installed, we

10 have automatic switchover, we have flow monitoring. You

11 know, we have sort of the state-of-the-art system.

12 What we had before was, you know, 15 years old

13 working perfectly fine, very, very reliable system, but

14 it didn't have every bell and whistle.

15 MS. HUNTER: Okay, thank you.

16 MR. MURRAY: You're welcome.

17 MR. WOLFF: Mr. Johnston?

18 MR. JOHNSTON: Mr. Chair, I'm correct in

19 assuming I can ask question of both the Prosecution and

20 the Defense?

21 MR. WOLFF: Yes.

22 MR. JOHNSTON: Okay. Starting with the Defense.

23 Um, you stated that you had surveyed wastewater

24 treatment plants in -- to establish who was using these

25 types of alarms and who wasn't; is that correct?

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1 MR. MURRAY: Yes.

2 MR. JOHNSTON: And can you tell me who exactly

3 you surveyed and what you learned?

4 MR. MURRAY: I can if I'm obligated to do

5 that. I've heard this Prosecution say they would be

6 issuing notices of violation to those people who don't

7 have such an alarm, so I'm reluctant.

8 MR. JOHNSTON: Let me rephrase the question.

9 Can you tell me how many wastewater treatment plants you

10 surveyed in -- how many of them were in this region and

11 what you learned?

12 MR. MURRAY: Um, I -- I'd say five or six and

13 all but one did not have this alarm.

14 MR. JOHNSTON: Fair enough. Um, now, um, I want

15 to ask a question about this dredging model. So the

16 way that I heard the Prosecution explain the deficiency

17 of the model is that it's designed to deal with

18 essentially stuff that's heavier and doesn't mix and

19 disburse in the same way as effluent, which has a very

20 low specific gravity related to seawater.

21 And, um, and the way I heard you respond to

22 that -- I hope I've got this right -- is that well, it

23 was a model that really wasn't designed to deal with

24 mud; it was designed to deal with, uh, the water that

25 the solids had dropped out of; is that correct?

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1 MR. MURRAY: That's correct, yes.

2 MR. JOHNSTON: So it would -- was it a model

3 that was designed to deal with -- with undersurface

4 discharges?

5 MR. MURRAY: Yes it is, yes it is.

6 MR. JOHNSTON: And was it a model that was

7 designed to deal with discharges that had a much lower

8 specific gravity than the waters they were being

9 disbursed into?

10 MR. MURRAY: Not specifically, no.

11 MR. JOHNSTON: Okay. So -- so the

12 characteristics of effluent disbursement where the effluent

13 is significantly lighter because it doesn't have the

14 salts in it like seawater does, and so there's this

15 turbulence as it rises, aren't really contained in that

16 the model, is that correct?

17 MR. MURRAY: That's correct. The model is a

18 very simple application that we use to look at the

19 dilution and the concentrations that would occur at

20 different times and distances from the discharge. We

21 did not do a more complicated fate and transport model,

22 because we attempted to parameterize this or did

23 parameterize this model to really be conservative and

24 again underestimate the current to try to use the

25 parameters that would underestimate the dilution that

1 would occur in an ocean environment, such as this.
 2 MR. JOHNSTON: So would the fact that the model
 3 that you were using was -- it did not take into account
 4 the lighter, uh, the broiling that happens when a lighter
 5 effluent rises through the seawater, make it a more
 6 conservative model? That's what I'm trying to
 7 understand.

8 MR. MURRAY: I don't have an answer for that.
 9 My understanding from this model is that it's as was
 10 described a near field model, the farther field figure
 11 that was shown previously that showed the buoyancy, is
 12 not something that we tried to address. We looked at
 13 this at a very small localized scale and tried to
 14 understand what dilution would occur using some very
 15 conservative parameters when we saw that the numbers
 16 we were obtaining indicated that we were below our
 17 permit standards that were relevant. We basically
 18 said there was no need to continue to look at a far
 19 field more complicated fate and transport model.

20 We were very much trying to focus on the
 21 immediate zone around the area of discharge.

22 MR. JOHNSTON: Okay. Prosecution. I want to
 23 ask about the same thing.

24 Um, and it's, it's hard for me as a layman to
 25 get my head around these things, you know, intuitively,

1 you said a hundred or 150 feet?

2 MR. BUFFLEBEN: Yes. Within a hundred feet,
 3 yes.

4 MR. JOHNSTON: Okay. And that that's -- when
 5 you talk about the near field, that's what you're
 6 talking about?

7 MR. BUFFLEBEN: Correct.

8 MR. JOHNSTON: And so you're saying that their
 9 model assumes, almost assumes it's coming out of the
 10 pipe already diluted?

11 MR. BUFFLEBEN: That's the way they ran their
 12 model, right.

13 MR. JOHNSTON: And that -- so what you're saying
 14 is their model has what's coming out of the pipe diluted
 15 to the level that you would have it at 100, 150 feet out?

16 MR. BUFFLEBEN: Correct. The way they ran their
 17 model--

18 MR. JOHNSTON: Yeah, I understand that and I
 19 just want to come back and make sure I understand
 20 what they're saying with this, and then I'm done with
 21 that.

22 Okay, I have two other questions for the
 23 Prosecution. One is the, uh, their fisheries, uh, expert,
 24 testified that the -- in terms of the question between
 25 the 14 and the 400 standard -- that the 14 standard was

1 and I got my engineering degree at K-MART, so --

2 Intuitively, it seems like if their using a
 3 disbursal model for the near field disbursal that does
 4 not have the same rising towards the surface and mixing
 5 characteristics as the effluent actually has, would that
 6 not make it more conservative because there would be
 7 less short-term mixing going on?

8 MR. BUFFLEBEN: So they're applying this model
 9 in theory to the far field. So if you look at Table 3
 10 in their calculations, they have already assumed that
 11 the effluent was diluted 93 to 1.

12 So they're already assuming that it's been
 13 mixed, and then they run the model off of that
 14 concentration and see how long it takes.

15 They didn't describe how big that initial mixing
 16 zone is. I've testified it's probably within a hundred
 17 feet of the outfall and probably occurs within a couple
 18 of minutes of the outfall, but that 93 to 1 assumption
 19 that they've built into their application model is the
 20 near field -- the mixing zone. So they've actually
 21 tried to apply that model beyond that because they've
 22 already taken the dilution concentration into account.

23 MR. JOHNSTON: So let me see if I understand
 24 what you're saying. You're saying that that 93 to 1
 25 dilution takes place over a hundred or -- I forget if

1 a long-term average standard, not a -- not an appropriate
 2 standard for -- for a short-term event like this. Um,
 3 do you have -- do you view this as a -- the 14, as a
 4 long-term average standard or are you prepared to answer
 5 that?

6 MR. BUFFLEBEN: So the way Public Health sees
 7 this is that when 14 fecal chloroform limit is exceeded,
 8 they shut down commercial harvesting.

9 So that's not a long term. They see that number
 10 greater than a 14 fecal coliform, they shut down the
 11 commercial harvesting fishery.

12 MR. JOHNSTON: Okay. Finally, the last question
 13 I have for you, well actually, it's the second to last.

14 There was reference to a -- a Regional Board
 15 Staff Member telling the, uh, the District that they did
 16 not have to do monitoring. Um, we didn't hear testimony
 17 on it, but there was reference to it in the briefs.

18 Um, I would just like to know when that happened
 19 and what was told to them.

20 MR. BOYERS: Well, perhaps, that's best answered
 21 by the witness himself or, you know, we can have Harvey
 22 Packard talk about sort of staff and their rules and
 23 what he understands the incident to be.

24 MR. PACKARD: Harvey Packard.

25 Do you have a preference on who you -- would

1 like Dr. Von Langen to answer that?
 2 MR. JOHNSTON: I do not.
 3 MR. PACKARD: Can you repeat the question that
 4 you are inquiring, please?
 5 MR. JOHNSTON: Um, there's been reference made
 6 in the briefs and I think in passing in the testimony to
 7 Regional Staff telling the District at some point --
 8 it's unclear to me when, that they did not need to do
 9 monitoring. I just need to know what was said and when
 10 to the District.
 11 MR. PACKARD: Okay. I won't testify to what
 12 Dr. Von Langen may have said to the District, but we've
 13 heard testimony today that the requirements of the MRP
 14 in the loss of disinfection incident weren't widely
 15 understood either by our staff or by the District at
 16 that point.
 17 There's also reference in the written testimony
 18 to a call that the District made to the -- both the
 19 State Health Department and the County Health Department
 20 and there may have been instruction there, but other than
 21 that, I would defer to Dr. Von Langen.
 22 MR. JOHNSTON: Okay. I mean, there's a statement
 23 in the Prosecution's brief that the District erroneously
 24 told -- that the Region erroneously told the District
 25 that they did not have to do monitoring. That's the --

1 Do you have a problem with this, Chair? Or if
 2 so, you're the Chair.
 3 MR. WOLFF: Well, no, but you know, I think we
 4 may be getting into hearsay because we're gonna be hearing
 5 from staff saying, "Well," you know, "this is what we
 6 said," but we don't have also the District on the other
 7 hand saying, "Well, this is what my understanding was."
 8 So we're, you know, at a bit of a quandrum here.
 9 MR. JOHNSTON: I think that the way we would
 10 avoid hearsay is that if it's any participant in the
 11 conversation, it's not hearsay.
 12 MR. WOLFF: Yeah, but we should really hear from
 13 both sides.
 14 MR. JOHNSTON: I would agree.
 15 MS. OKUN: And before Dr. Von Langen testifies,
 16 I just want to point out that there is an evidentiary
 17 stipulation between the parties and they did address
 18 this issue to some extent; they didn't resolve it,
 19 but what they stipulated to was the following language:
 20 "Although this failure to conduct sampling could
 21 be considered a violation of the discharger's permit it
 22 is not included in the proposed administrative
 23 liability. In providing notification to the Central
 24 Coast Water Board Permitting Staff, the discharger was
 25 apparently told there was no need to sample after the

1 I don't see it right in front of me, but I think a pretty
 2 accurate paraphrasing of the statement in the brief.
 3 MR. PACKARD: Right. I would agree that that's an
 4 accurate paraphrasing in the brief. I'm not certain that
 5 that's exactly what happened. Our understanding of
 6 what happened may be -- may have progressed beyond what
 7 we understood at the time we wrote that brief.
 8 MR. JOHNSTON: Okay. Um --
 9 MR. BUFFLEBEN: Sorry. I'm gonna clarify.
 10 I believe in our brief we said "may have told,"
 11 and there was some qualifiers on that.
 12 MR. JOHNSTON: I'm gonna quote from your brief.
 13 "Although a Water Board Staff Member erroneously told
 14 Carpinteria that they did not have to conduct the
 15 required sampling." That is from page 3 of your
 16 April 15th brief.
 17 MR. PACKARD: And that was our understanding as
 18 of April 15th.
 19 MR. BOYERS: And again, I might add that there's
 20 no real time element there. So I think the best way to
 21 address this is to have the witness come and talk about
 22 his recollection about, you know, what he said, when he
 23 said it, and what he remembers.
 24 MR. JOHNSTON: I just want to know what happened
 25 and when.

1 October 3, 2012 discharge. However; the discharger is
 2 responsible for compliance with the terms of its permit
 3 despite verbal directives to the contrary."
 4 MR. JOHNSTON: Okay, actually, I think that's
 5 good enough. I don't think we need to beat a dead
 6 horse. I missed that. Thank you, Counsel.
 7 Um, finally, I -- the last question for
 8 Prosecution. If the, um, there was a question raised about
 9 monitoring, and the monitoring while it's not charged as
 10 a violation is a significant chunk of the proposed penalty,
 11 the cost of monitoring in terms of economic benefit. If
 12 the discharger had -- what is the threshold?
 13 If the discharger had caught this and, let's say
 14 the alarm had gone off and somebody had rushed in and
 15 they caught it in 30 minutes, or let's say somebody had
 16 noticed in five minutes. Is there a threshold in this
 17 permit for monitoring in the view of the Prosecution?
 18 MR. PACKARD: Harvey Packard, again. I can read
 19 the provision if you want, if I can find it.
 20 MR. BOYERS: And while Harvey's looking that up,
 21 again, David Boyers. Let me just make sure we're all
 22 clear that the economic benefit that is being calculated
 23 based on this failure to monitor is not an additive part
 24 of this penalty.
 25 It sets a floor so that if you decide that, you

1 know, we want to reduce the proposed penalty by the
2 Prosecution Team, the water code says you can't go below
3 this floor. We have to recover at least the economic
4 benefit plus 10 percent, but it's not kind of an additive
5 part of the penalty.

6 MR. JOHNSTON: I understand that, but as part of
7 the enforcement process by the guidelines, we have to
8 set the minimum and the maximum penalties, which means we
9 actually do have to have an answer to that.

10 MR. BOYERS: Absolutely.

11 MR. PACKARD: So the monitoring program says,
12 "The discharger shall monitor for total coliform, fecal
13 coliforms and enterococcus at receiving water sampling
14 stations RSWF and RSWG as identified in MRP Section 2
15 above in addition to three shore sampling stations
16 approved by the Executive Officer for seven days after
17 loss of disinfection."

18 MR. JOHNSTON: Okay, thank you.

19 Um, well, I want to ask just one more question,
20 and then I'm done. To the Defense, I just would like to
21 hear a response to what I heard from the Prosecution
22 about the modeling of the dispersal of the bacteria.

23 MR. HENNESSY: So basically, my understanding
24 of the way the outfall diffuser works is it has ports on
25 it.

1 is basically going to be dissipated into the environment
2 at a rapid rate and is going to be below applicable
3 standards, um, quickly and within a short distance.

4 Um, and that the area where there is potential
5 exposure is very small, very limited to the area around
6 the discharge.

7 Um, if I may, I would also like to comment that
8 I don't have the permit in front of me, but the 14 MPN
9 per 100 milliliter standard, I believe, in the permit
10 specifies that that's a median concentration.

11 So I believe it's incorrect to say that once
12 that is exceeded, there is closures of shellfish that
13 have died. In fact, that's not my understanding of the
14 rule, that's not my understanding of the genesis of
15 that 14 number in The National Sanitary Shellfish
16 Program.

17 MR. WOLFF: You done? Okay, just as a little
18 heads up, at 1:00 we will take a break and we owe
19 this to you because I see your fingers are starting
20 to cramp there, and also I think that everybody needs
21 a break.

22 So we will break at 1:00 for one hour and
23 reconvene at 2:00. So, Ms. Cervantez, please proceed.

24 MS. CERVANTEZ: Yes, I just had a brief question
25 regarding the cost of sampling and also the kind of

1 As the effluent comes out of those ports,
2 there's turbulent mixing. That's what the 93 to 1
3 dilution zone is applied to.

4 That is a small area, in my understanding, not a
5 150 feet, maybe on the order, 10 feet. Um, we did assume
6 in this civil model that we ran, again, just really trying
7 to put this into perspective, we weren't running a full
8 blown fate and transport complicated model.

9 We were just trying to use simple tools to
10 understand this. We applied it in a very conservative
11 way to understand from that 93 to 1 dilution and then
12 what happens, Craig pointed out, maybe it's two feet
13 plus 10 feet, I acknowledged that. But again, that
14 initial zone of dilution that applies the 93 to 1 factor
15 is very small around the initial outfall.

16 Um, the dilution that happens in a coastal zone
17 is significant. Um, we underestimated that dilution
18 substantially with our current term.

19 I can't comment on the diffusion term. It's
20 different than the diffusion term that applies to an
21 effluent coming out of a port and a diffuser. That's
22 not the same thing; that's not what this model does.

23 You'd correctly stated that this model is simple.
24 It assumes something like coming out the end of a pipe.
25 That was meant to make a demonstration that this stuff

1 sampling you described, Mr. Murray, and I'm wondering
2 if what you described is an example of what you would
3 do under regular -- sort of day-to-day operations to
4 monitor the receiving waters or, if in this
5 situation, I'm also asking about would it prompt a
6 different kind of sampling and monitoring if as in the
7 situation you have a discharge of untreated material?

8 MR. MURRAY: Um, well, it is a little different
9 than what we do normally. We do collect ocean samples,
10 we collect dilution water that goes along with our
11 toxicity analysis that occurs periodically, we do some
12 surf zone monitoring periodically.

13 The surf zone monitoring in this case would have
14 been conducted by my operators from the shore. The
15 offshore monitoring, which is a thousand feet offshore,
16 we would have had to figure out how to collect those, but
17 the process really is take a jar, collect seawater, you
18 know, jar on a stick, essentially, collect seawater and
19 return it to our lab.

20 So it's a matter of getting out there, getting
21 back to our lab with proper preservation and, um,
22 control.

23 MS. CERVANTEZ: But you've also mentioned
24 that there isn't capacity in your own lab for sampling
25 for some of the human pathogens, and I'm trying to get

1 clarification on that, where -- in which permits, I know
2 it's a heavily permitted industry, and so just wondering
3 sort of where specifically it is outlined the kind of
4 human pathogen that you would need capacity for.

5 MR. MURRAY: I can respond to that.

6 The normal sampling that we do every day, or --
7 for bacteria every other day of our effluent is for fecal
8 coliform and total coliform. That's what our permit
9 requires. That's what our lab is certified to perform,
10 that analysis.

11 We're certified by the state, it's an ELAP
12 certification for our lab. Because we don't routinely
13 -- we're not routinely required to sample for
14 enterococcus, which is also an indicator species, we
15 don't have that certification. We don't perform that in
16 our lab, so that's just the one analyte that would have
17 to go outside to a contract laboratory.

18 MS. CERVANTEZ: And I imagine that you're
19 certified to do that kind of testing and analysis
20 because that's part of your day-to-day operation.

21 So the other piece of my question is, this
22 wasn't obviously a part of the day-to-day normal
23 operation of the facility. So in that situation,
24 recognizing that there was untreated effluent that was
25 discharged, what would your protocol be in that

1 theme is and I'll try to make it short for lunch, I know
2 everybody is starving. The safeguards.

3 Now, in process control, no matter what
4 production you're in whether it's wastewater, food,
5 drink, et cetera, you have process control, and you
6 have safeguards that you take in any process control.

7 So now I was -- I continue to read through and
8 through the sequence of events, starting at it's 4:08
9 A.M. that there was this 0 chlorine residual right? 0.

10 So then I looked at -- I'm looking on page 7 of
11 the sequence of timing. So at 9:30 I'm assuming the
12 safety meeting was finished, the guys finished their
13 coffee and their donut and now they're gonna do the
14 rounds, or I don't know what their standard operating
15 procedure is in that wastewater plant. Our wastewater
16 plant was different that I worked in.

17 Anyhow, so I'm trying to figure out what -- why,
18 and I know there was urgency once it was determined at
19 9:30 A.M., right? Then it was determined the pump was
20 working, but there's no chlorine in there.

21 So then I'm looking at the start time, 4:00, and
22 I'm just reading this starting to panic and going, okay,
23 what safeguards need to be taken? And first thing that
24 seems to me that's deficit is it's listed in your NPDES
25 permit for sampling, even if you didn't have a kayak to

1 situation? Who would you contract with or which labs
2 would you send out to and then how would that change the
3 cost of what you initially had described, which was
4 about, you know, \$3,000?

5 MR. MURRAY: Well, as I mentioned, I mean, the
6 low end of the spectrum would be that we would do all of
7 the sample collection in-house. Our operators would do
8 the sample collection, we would run two out of the three
9 samples in our lab, that work is already happening every
10 day. The third sample would go out to Fruit Growers
11 Laboratory in Santa Paula, the cost per analysis I would
12 gather it to be \$50 or no more than a hundred dollars
13 per analysis over that seven-day period times, you know,
14 the number of sampling locations.

15 MR. WOLFF: Do you have any more questions,
16 Ms. Cervantez?

17 MS. CERVANTEZ: No.

18 MR. WOLFF: Ms. Thomasberg?

19 MS. THOMASBERG: Um, Kathleen Thomasberg.

20 There are so many questions that have been asked
21 and so many answers. I'm trying to sift through all of
22 the questions I have that have already been answered,
23 especially Dr. Hunter, she hit the nail on the head for
24 my questions.

25 However, I do have, uh, I think the focus for my

1 go out there a thousand feet, just a sample at shore to
2 see what's coming in if people are on the beach.

3 So, um, and then by 10:00 the sample analysis
4 indicates still 0 even after the tank was filled, and you
5 said it was 6500 gallon tank, right? For your sodium
6 hyperchloride?

7 MR. MURRAY: That's correct.

8 MS. THOMASBERG: And then finally at 11:00 A.M.,
9 I mean, quite a few hours have passed, that was another
10 hour. Finally, it reads 8.8 milligrams per liter.

11 So wouldn't a safeguard in the big category of
12 "safeguard" be, to go "Gosh, we'd better check that water
13 sample, even if it's at shore to see what we're getting
14 as part of the NPDES permit.

15 So that seems logical to me. Did that ever
16 occur to you folks at the wastewater treatment plant?

17 MR. MURRAY: Well, we did collect a sample
18 during the time when this pump was out of service. We
19 collected a sample--

20 MS. THOMASBERG: Where did you collect that?

21 MR. MURRAY: It was from the effluent point in
22 the tank.

23 MS. THOMASBERG: In the tank?

24 MR. MURRAY: But it wasn't as a result of
25 identifying this problem; it was just our normal sample.

1 So we have a lot of information to characterize
2 the quality of water that was going out and it was very
3 high quality, it just hadn't been disinfected. It looked
4 like a glass of water, you know.

5 MS. THOMASBERG: So it didn't occur to you as a
6 category or safeguard to go out and at least collect a
7 beach sample knowing that it had not had chlorine for that
8 period of record?

9 MR. MURRAY: I can't say that it occurred to us,
10 because we basically had remedied the problem as soon as
11 we identified it. It was corrected. And I guess our
12 assessment was that this was not a significant event;
13 this was not -- there was not likely to be harm
14 associated with it to receiving waters, whether it be
15 recreational contact or shellfish harvesting.

16 That was just based on our experience operating
17 the facility, our understanding of treatment plants
18 throughout this region and throughout California. We
19 didn't see it as an emergency kind of crisis situation,
20 and that was confirmed when we, you know, notified the
21 Public Health Department and the shellfish harvesters
22 and the Regional Board. Nobody said "Go out and take
23 samples," "post the beaches," you know.

24 I think, my take on the whole situation is that
25 there's really divergent perspectives on whether this

1 before, when there was a loss of disinfection there at
2 the sample.

3 It also mentions after that, that the discharge
4 -- the discharger shall determine in its sole discretion,
5 whether an event has occurred, talking about an event of
6 inadequate disinfected effluent.

7 So really it's -- I will agree we could improve
8 this language, and we will take a look at it for the next
9 time.

10 And I would agree with Mr. Murray, if we had
11 been aware of this requirement, I think we would have
12 asked them to sample, and they would have sampled had
13 they been aware of it, also.

14 But getting back to what Dr. Hunter said
15 earlier, the permit, the discharger is required to
16 comply with the permit. We don't specify how they're
17 going to do it.

18 MS. THOMASBERG: Right.

19 MR. PACKARD: We have two basic expectations.
20 Comply with the effluent limitations and provide safeguards.
21 Those are both in the permit. I think, you know, they --
22 the District has testified that there's 150 alarm points
23 in this system. I think it's unreasonable to expect the
24 Regional Board Staff to know all of those alarm points
25 and to evaluate if that's adequate or not.

1 was a significant event or whether it was a one-time
2 equipment failure that was properly responded to.

3 MS. THOMASBERG: So then the next question
4 arises and this was on my list, too, is what constitutes
5 a short duration? Is it one hour at such-and-such a
6 flow? Is it one minute at such-and-such a flow? Are
7 there two variables in here? Is it the flow of
8 disinfected -- or of effluent?

9 So what is your definition of a short duration?

10 MR. MURRAY: Well, I've asked that question of
11 the Regional Board Staff and haven't gotten--

12 MS. THOMASBERG: I'm asking Carpinteria. You
13 just made that statement --

14 MR. MURRAY: I'll be just perfectly frank with
15 you. If I had been aware of this requirement to sample
16 on that day to start a seven-day sampling program, I would
17 have done it.

18 MS. THOMASBERG: So excuse me, let me go back
19 to the Prosecution Team.

20 What constitutes the trigger in the NPDES permit
21 for the sampling? It says, "Thou shalt use safeguards."
22 And so what constitutes a duration that would trigger
23 sampling, that's my question -- a duration and flow?

24 MR. PACKARD: Harvey Packard. The permit does
25 not specifically say. It says exactly what I read

1 The basic determination of whether their alarm
2 system is adequate is whether they have violations in
3 the permit, and they did in this instance, and I think
4 that's why we view it as significant and are taking
5 enforcement actions here.

6 MS. THOMASBERG: Thank you.

7 One more minor question on this, and I kept
8 listening and listening and the statement was made that
9 the equipment was faulty, the pump was faulty, when in
10 fact according to this description, it was not. It was
11 operating, but there was nothing coming through it.

12 Now, one thing I did note on that same page of
13 the sequence of the time, and the key burden here is at
14 the 9:30 A.M., Mr. Rogers, let's see, the plant rounds and
15 notifies Mr. Rogers that the dose analyzer, the dose
16 analyzer, detected 0. So as a safeguard, wouldn't that
17 be the most critical point to have a safeguard,
18 whatever that is to notify staff?

19 So it wasn't the pump; it was the dose analyzer.
20 What goes to 0, then who's gonna know? Not necessarily
21 the pump because the pump was operating. So do you now
22 have a dose analyzer alarm and if you do now, what did
23 you use as a safeguard before this occurrence for the
24 dose analyzer reading 0?

25 MR. MURRAY: We do have a safeguard, an alarm

1 now --

2 MS. THOMASBERG: Yes, but what about before?

3 MR. MURRAY: I think before, we acknowledged
4 that this particular safeguard we did not have. And
5 I -- you know, I think that's why we felt this is a
6 reportable violation. We did everything that we knew to
7 do to report it as a violation and we've -- we're
8 willing to accept, you know, some reasonable penalty
9 associated with that violation.

10 We did within one week, as I mentioned,
11 engineered that safeguard in. And whether it's the most
12 critical safeguard in our treatment plant, I don't
13 believe that to be the case, but it is. I acknowledged
14 we should, you know, hindsight's 20/20. Should we have
15 had that? Perhaps.

16 MS. THOMASBERG: Well, I also think that -- I
17 congratulate Regional Board Staff for not specifying
18 what safeguards you shall have because that's not their
19 job. So even if you did get awards and you've been a
20 pretty darn good treatment plant, this was one that fell
21 through the cracks and, to me, it's significant. It's
22 a significant discharge and there were other questions
23 that I can ask, but I don't think they're important at
24 this point having to do with when you had prearranged the
25 delivery of the sodium hydrochloride.

1 it's hard for me to accept an \$80,000 penalty from my rate
2 payers. I just don't find that to be consistent enforcement.
3 We've admitted to the violation, we've negotiated in good
4 faith, on our opinion, to pay a reasonable penalty that is
5 consistent.

6 We're here today because we disagree on whether
7 this is significant in respect to other events.

8 MS. THOMASBERG: I would like to also mention
9 on the list in the back of this binder, it states many
10 of the treatment plants and what their dilution ratios
11 are, the distance of the outfall, the depth of the
12 outfall, what that water is combined with, if it's not
13 disinfected, and it's apples, oranges and pears here, and
14 if you're comparing yourself to a 10,000-foot discharge
15 at hundred feet versus 1,025 feet and oh, this one has
16 brine with it, that's to me, totally different.

17 So I think -- I still feel that it is a
18 substantial discharge in the amount of water.

19 Thank you.

20 MR. WOLFF: Okay, thank you.

21 So it's past 1:00 o'clock. I'll round it to
22 10 past 1:00. We will now take a one-hour break. We will
23 reconvene at 10 past 2:00 and, Counsel, would you please
24 make a statement?

25 MS. OKUN: And just to recap where we are when we

1 So anyhow, long story short, there was a
2 discharge that would have been a safeguard that could
3 have been implemented before this discharge, and so
4 that's where I'm at.

5 MR. MURRAY: Should I respond?

6 MS. THOMASBERG: Sure.

7 MR. MURRAY: I -- you know, I don't disagree
8 with you and I think part of our position has been that,
9 um, there needs to be fair and firm and consistent
10 enforcement and that's the main tenet of the State
11 Board's Enforcement Policy. And so I mentioned I looked
12 at the history of violations since 2010 in this region,
13 and I identified at least nine other instances that were
14 very, very similar in the terms of loss of disinfection.

15 In one case it was nearly a million gallons of
16 undisinfected effluent discharged and a similar
17 enforcement response did not happen in any of those
18 instances. It fact, there was no enforcement that I
19 could find, at the time I looked, on any of those losses
20 of disinfection in this region.

21 And, you know, I'm not using that as an excuse
22 for what happened at my facility. I'm just asking that,
23 um, if this has happened nine other times including during
24 the course of this inspection, and the only response from
25 Regional Board staff is "Put that in your monthly report,"

1 come back from lunch, the Board will complete its
2 questions, the Advisory Team may have some questions and
3 then the Prosecution Team will have the opportunity to do
4 cross-examination, and then we'll move into closing
5 statements.

6 Once the evidence is completed, the Board will
7 at that point adjourn to closed session to deliberate on
8 the evidence. We're taking a lunch break, but the Board
9 will not be deliberating over lunch.

10 However, we will be addressing a personnel
11 matter in closed session over the lunch break and just
12 to give the parties a time check, Mr. Harris will let
13 you know how much time you have left.

14 MR. HARRIS: So the Defense has used 61 minutes,
15 so they're -- even with the extension, you have used
16 your time, and the Prosecution has used 38 minutes.
17 They have roughly 23 minutes left.

18 MS. OKUN: And in addition to that, each side
19 has five minutes to close.

20 MR. HARRIS: Plus your five minutes; correct.

21 MR. WOLFF: Okay, so we're in break time.

22 (Wherein a lunch recess was taken until 2:10 P.M.)

23 MR. WOLFF: All right. Okay, now, we do have all
24 our Board members back, so we are now back in session at
25 2:15 P.M. and now it is myself, will ask a few questions,

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1 and the questions are to the District. And one of the
2 questions is, we talked about the model you used, you
3 refer to as a simplified model. And I wonder what was
4 the rationale of using the simplified model versus the
5 disposal model knowing that this would certainly be a
6 key part of, you know, the overall evaluation of the
7 impact from the water construction?
8 MR. HENNESSY: Certainly. Dan Hennessy, by the
9 way. I have neglected to mention my name several times.
10 So basically, I approached this primarily from a
11 question of whether there was harm or not. And as a
12 risk assessor, um, typically try and do things starting
13 simply and then doing it more complicated as you need to
14 do to answer the question.
15 Again, as I had mentioned my model, um, model
16 that we prepared, um, was parameterized to be very
17 conservative, which is very consistent with the way this
18 is typically approached.
19 So based on that, simple model outcome where we
20 saw that there was very little impact, we expected the
21 standards to be met within a near close vicinity to the
22 outfall. We didn't really feel there was a need to do a
23 more elaborate and complicated model that would involve
24 a lot more cost, a lot more effort, a lot more specific
25 data -- not just the data we have available from the

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1 Sanitary District, but also the chemistry when with
2 motions, current, things like that. It becomes quite
3 complicated to do something like that.
4 There are available packages. For example, the
5 Army Corps has prepared that are steps above this simple
6 model that is in their test drive. So the model that we
7 applied, it's a very, very, generally simple mathematical
8 model that takes into account the flow, the turbulence
9 that you would expect in the system.
10 Um, and look at the -- you know, really a simple
11 framework, not something that takes into two or three
12 dimensional transports. It's really just try and get an
13 understanding in a conservative simple framework about
14 what we would expect under some very conservative worst
15 case conditions. And so when we saw that we were able
16 to make a case, a very strong case, that our standards
17 were being met, very near the point of discharge where
18 the standards were being met. We didn't really see a
19 need to do more than that at this point for this
20 demonstration.
21 MR. WOLFF: Okay, thank you. And my next
22 question is for Carollo Engineer.
23 And how many years has Carollo been providing
24 engineering design?
25 MS. HANN: That's a good question. I believe

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1 it's been quite a few years.
2 MR. WOLFF: 20 years? 25?
3 MS. HANN: At least 10. I haven't ever
4 personally worked for the District. This is my first
5 encounter with them.
6 MR. WOLFF: Um, the question was for, in terms
7 of Carollo Engineers, you know, how many years that
8 company has been in business.
9 MR. MURRAY: Not serving my agency -- business,
10 in general?
11 MR. WOLFF: In general, yes.
12 MS. HANN: Oh, I'm sorry. I thought you meant
13 with the District.
14 Probably almost 80 years, if not a little bit
15 more.
16 MR. WOLFF: That's what I thought. I knew it was
17 over half a century.
18 MS. HANN: Yeah, it's been quite a long time.
19 MR. WOLFF: And then -- thank you. And my next
20 question with the District, approximately how many
21 years?
22 MS. HANN: And that's -- I'm not really sure of
23 that number.
24 MR. MURRAY: Since around 2005.
25 MR. WOLFF: Okay. So Carollo Engineering, it's

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1 a company that's designed new wastewater treatment
2 facilities throughout California and probably other
3 states?
4 MS. HANN: Yeah.
5 MR. WOLFF: Okay. And Carollo Engineers also does
6 design upgrades of existing wastewater treatment
7 facilities?
8 MS. HANN: Yes.
9 MR. WOLFF: And that includes disinfection
10 systems using chlorination techniques?
11 MS. HANN: Yeah.
12 MR. WOLFF: So in the designs that are
13 currently applied by the Carollo Engineers, when the
14 Carollo Engineers and its design, do you use alarm
15 systems for low-chlorination levels?
16 MS. HANN: I think for a new facility or an
17 upgrade that we are asked to design, we would typically
18 recommend an alarm system.
19 MR. WOLFF: So you would recommend if you saw a
20 facility that did not have an alarm system, you would
21 recommend to have one installed?
22 MS. HANN: Yes.
23 MR. WOLFF: Okay. And so my -- thank you.
24 My next set of questions is for the District, and
25 earlier on with the opening comments from your legal

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1 counsel, the lack of alarm in the low chlorination part
2 of the system was characterized as being really a small
3 item, but I forgot how it was quoted, but it was sort of
4 this is and how much, if I understand correctly, the
5 District spent 1.1 million in upgrading its system and a
6 lot of the local upgrades, I believe you quoted yourself,
7 "State of the art" technology or state of the art
8 industry technology with a very robust supervised
9 control acquisition system.

10 So I guess I see a little bit of a paradox
11 where the District was willing to spend a significant
12 amount of money in upgrades, realizing the criticality
13 and importance of the disinfection system; yet, it was
14 characterized in terms of the alarms, alarm as being a
15 relatively small element. So I commend the District for,
16 you know, the -- the capital equipment upgrades that
17 were made, and also recognizing the importance of having
18 a good overall system.

19 So if we get to the root cause of the event
20 that took place, a lot of it revolves around the pump.
21 And so this particular pump, I forgot the model --
22 model 200 TW, or something like that.

23 MR. MURRAY: Encore 700.

24 MR. WOLFF: See, I'm off by 500. So -- but some
25 of the numbers before were off by 10,000, so I guess

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1 I'm still in good territory.

2 That particular pump, is it a self-priming pump?

3 MS. MURRAY: It's a diaphragm pump.

4 MR. WOLFF: Okay. Which kind?

5 MS. MURRAY: Yeah --

6 MR. WOLFF: Yes or no.

7 MS. MURRAY: I'd say it's not a self- -- it --

8 I'm sorry, I can't answer that in definitive terms.

9 I don't know if it's characterized itself priming or
10 not. It doesn't have a lot of suction head.

11 MR. WOLFF: Could you answer that question?

12 MS. HANN: They certainly work better if they do
13 have a positive head available for the suction side. I
14 mean, they can prime themselves if they --

15 MR. WOLFF: But, you know, it's usually a pump,
16 it's mechanical whether it's self-prime or not. So
17 that's why I was asking that question.

18 So because it is relied -- oh, have any of you
19 read the manufacturer's manual, the pump manual?

20 MR. MURRAY: I've read the manual.

21 MR. WOLFF: Okay. So in the pump manual, is
22 there a section called troubleshooting?

23 MR. MURRAY: Yes, there is.

24 MR. WOLFF: And -- and in the troubleshooting
25 section, is there a description of what some of the

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1 causes of pump malfunction could be?

2 MR. MURRAY: I believe there is. I don't have
3 it right in front of me, but I believe I remember seeing
4 that.

5 MR. WOLFF: Okay. And does the manual have
6 schematics about elevation of the holding tank versus
7 the pump, since the pump is not inherently designed to be
8 necessarily self-priming?

9 MR. MURRAY: I don't believe it has a graphical
10 representation of that, but as I mentioned, I'm trying to
11 put it in front of me, and I don't -- don't have it.

12 MR. WOLFF: Well, you can go online and look for
13 it.

14 MR. MURRAY: Oh, we provided it with our
15 original response. The entire manual for this pump.

16 MR. WOLFF: All right.

17 So refresh my memory. The holding tank, is it
18 above or below the pump or is it at about the same
19 elevation as the pump? So if we take gravity flow, is
20 it above, below, or at the same level?

21 MR. MURRAY: I'd say it's relatively the same
22 level.

23 MR. WOLFF: By the way, would have helped, you
24 know, we talked about this pump over and over and I
25 haven't seen a single schematic. I think that could have

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1 been enhancing a little bit or understanding.

2 MS. HANN: I was just gonna say that when I was
3 on site that is one thing -- that is one thing that I
4 observed. The bottom of the tank appeared to be at very
5 similar height as the inlet to the pump, which is why we
6 had mentioned that the priming issue could have caused,
7 had the chemical in the tank been low. But with the
8 chemical at an elevation that it was, that shouldn't have
9 been the case.

10 MR. WOLFF: But because the pump is not a
11 self-priming pump, the proper design of the elevation of
12 the tank would be critical, I would assume.

13 Did your piping system from the holding tank to
14 the pump include backflow preventers?

15 MS. HANN: I didn't observe any backflow
16 preventers.

17 MR. MURRAY: You mean, like a check valve that
18 would go --

19 MR. WOLFF: Like a check valve, yes.

20 MR. MURRAY: I don't think that was part of the
21 design of the system that existed in 2012.

22 MR. WOLFF: So have you compared that to the
23 manufacturer's recommendation in their schematics, in
24 their manual?

25 MR. MURRAY: I'm -- if you give me one second,

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1 I have the manual now on my computer. I can look at it
2 and see if there is a schematic to compare to.
3 MR. WOLFF: Yeah, you will find three schematics.
4 MR. MURRAY: You're not looking at the pump
5 cutaways, are you?
6 MR. WOLFF: Well, I guess I can help a little
7 bit, but there is one set of installation recommendation
8 where you do have actually three figures of installation
9 recommendation, and you will find check valves between
10 the holding tank and the pump.
11 And you know, the reason I ask this question is
12 because there appears to be some question marks about
13 why this particular pump did not function properly, and I
14 agree the terminology should not be "failed," because it
15 did not fail.
16 So, you know, trying to address the part of root
17 cause, you know, air lock was certainly one -- one of
18 the concerns. But I think when performing, for instance,
19 evaluation of the system failure, you have to look at the
20 manufacturer recommended practices versus the actual
21 design installation.
22 Um, we -- and we do not have -- I haven't seen
23 in record, your actually as-built schematic design.
24 Does that make sense? I mean, I tried to be diligent in
25 reading everything, but --

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1 MR. MURRAY: We have that, um, even though that
2 system doesn't exist anymore, we have that information.
3 It was not requested of us. We didn't provide it, nor
4 did we really expect to get into this level of discussion.
5 MR. WOLFF: Well --
6 MR. MURRAY: We're here, so let's talk about it.
7 MR. WOLFF: And I think we all agree that the
8 root cause, why we're all here today is because of the
9 lack of chlorination at the end, and the root cause of
10 that was because the -- the pump delivery system did not
11 operate as intended.
12 So I think it is important to focus on that
13 particular aspect of the design of the system.
14 MR. MURRAY: I can acknowledge that, but I would
15 say that that pump system worked perfectly for 14 years
16 continuously. Um, aside from this one failure, if you
17 want to call it that, it worked after the case until we
18 took it out of service. So I would struggle to say, to
19 point to a design flaw or some problem in the piping
20 that contributed to this one-time event.
21 MR. WOLFF: So back to the troubleshooting
22 portion of the manual.
23 Does the manual provide various scenarios of
24 failure mode of the pumping system, either the pump
25 itself or the function of the pump system to properly

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1 deliver the chlorine? And specifically, addressing
2 causes of air loss.
3 MR. MURRAY: I know in our response, Carollo
4 Engineers pointed to certain conditions that could
5 contribute to an air lock. Um, I'm trying to get to
6 the page, the troubleshooting page that you're referring
7 to and that might help me.
8 I can tell you that my operation staff is
9 the one that would be most familiar with this manual.
10 They're the ones that have -- they have this on an iPad.
11 They are able to pull it up in the field whenever they
12 need to, um, so I apologize for not being able to
13 answer these right off the cuff.
14 MS. HANN: If you don't mind, I'd like to make a
15 correction to the statement that I made.
16 I mean, this manual actually has two examples.
17 One that is a flooded suction installation and one that
18 is not where you could actually have the pump at a
19 higher level than the tank.
20 So our statement in the report that that could
21 be a cause in noting that the elevations are supported
22 is just a theoretical cause that we had dismissed based
23 on the knowledge that there was chemical in the tank at
24 that time.
25 So I'm not sure exactly what the setup is of

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1 that pump, whether or not it's meant to be -- whether or
2 not it was designed to be a flooded suction pump or not.
3 MR. WOLFF: Well, I suggest that the time is
4 being spent with the District bringing your experts, and
5 I'm a little bit troubled by the fact that, you know,
6 some of these, um, fundamental aspects of the manufacturer
7 recommended practices and design, you know, we -- if it's
8 not very clear. So --
9 MR. JOHNSTON: If we're gonna go into the manual,
10 where is it in the documents? Is it in the record?
11 MR. CARTER: It should be Exhibit 8.
12 MR. JOHNSTON: Thank you very much.
13 MR. CARTER: It should be the technical support.
14 MR. WOLFF: All right, thanks.
15 So you know, basically, I think you will find in
16 your manual, since it's in the book here, that one of
17 the other possibilities of air locks is because of air
18 leaks in the lines. And I haven't heard part of the
19 testimony, any discussion when you did the evaluation of
20 why did it -- why did it not function properly to have
21 had a variation of any air leaks in some of the piping
22 joints? Because I would submit that most likely you did
23 have various mechanical connectors between the piping
24 system, and it was not a continuous supply.
25 MR. MURRAY: I'm very familiar with sodium

1 hyperchloride. It's a very aggressive product. In PVC
 2 piping systems, it will attack the glue joints and it can
 3 cause leaks. But they're typically not air leaks.
 4 They're typically liquid leaks that we repair on a
 5 periodic basis.

6 After this event my staff did a very thorough
 7 inspection of the entire system, and I'm certain that
 8 they looked for leaks and did not find any. Um, we had
 9 an expert come in and do an independent assessment of the
 10 system, and I don't believe they identified any smoking
 11 gun-type issues there.

12 MR. WOLFF: Then my last quick question. Did you
 13 do a Google search to see if that particular model had
 14 any other failure in other facilities?

15 MR. MURRAY: I did not do a Google search.

16 MR. WOLFF: I'm not saying because it's on
 17 Google, it's right, but it's --

18 MR. MURRAY: I mentioned this. I think maybe
 19 this was mentioned in our brief.

20 When we were to redesign the new disinfection
 21 system, we intentionally chose to use this same model,
 22 Wallace Interior Encore 700, for the new installation
 23 because of their reliability. I can't believe that one
 24 indeterminate failure over a 14-year service life points
 25 to anything other than a very reliable piece of

1 MR. HARRIS: Yes, thank you. Um, and I'm not
 2 gonna ask questions about the pump. Talked about the
 3 pump enough.

4 The, um -- Mr. Murray, you're the general manager
 5 of the facility and the permit is addressed -- the letter
 6 from Mr. Briggs was addressed to you.

7 Are you ultimately responsible for insuring that
 8 the provisions of the permit are carried out?

9 MR. MURRAY: I think that responsibility falls
 10 on our chief plant operator.

11 MR. HARRIS: Oh, okay. You said that you were
 12 familiar with the permit?

13 MR. MURRAY: Yes.

14 MR. HARRIS: And, um -- so in the permit the
 15 discharger must comply with all the conditions of this
 16 permit, and I realize there are some areas that are not
 17 specified which we have talked about that we did that
 18 on purpose.

19 Any noncompliance constitutes a violation of the
 20 Clean Water Act in the California Water Enforcement
 21 Action, plus some additional comments. Um, and then at
 22 the same time you said you thought the requirement to
 23 the offshore or the post spill event monitoring was
 24 buried in the document, and it's right in the monitoring
 25 receiving plan portion under, you know, receiving

1 mechanical equipment.

2 MR. WOLFF: Yeah. Although -- and, you know,
 3 this my last comment and maybe it's me looking at things
 4 differently, but if you give an analogy because quite
 5 often people -- with the concept of NPDES meantime
 6 between failure and system reliability, and when someone
 7 says "Well, this is the first time in 14 years that it
 8 failed," I would not get on an airplane if that was the
 9 type of reliability, you know, that was being quoted to me.

10 So my last point is that I think the District
 11 recognized the importance and the criticality of having
 12 continuous chlorination because, otherwise, we would not
 13 have had a plus 1 design, meaning a backup pump with a
 14 switch over.

15 I think you recognized this after the event
 16 took place and certainly corrected that and then, you
 17 know, that situation to also further it meant how robust
 18 your supervisory system is. But the fact of the matter
 19 is, you know, you're only strongest at your weakest link,
 20 and I think that's what -- that's my questions -- my
 21 questions.

22 I thank both of you for helping me understand
 23 and clarify -- all three of you, I'm sorry -- for
 24 clarifying my questions.

25 So, Mr. Harris, um, you had some questions?

1 monitoring, where all the locations are located for
 2 you to monitor, including -- including where you must
 3 monitor in the event of disinfection failure. Even
 4 tells you where you have to go and monitor.

5 So I think I was a little confused by your
 6 statement that you were familiar, in your comment, with
 7 which portion of the permit is buried. I don't think
 8 it's any more buried than any other aspect of the --
 9 of any other requirement that's in the permit. You
 10 want to respond to that? My comments?

11 MR. MURRAY: I will agree with you. I didn't
 12 mean to characterize that that had been intentionally
 13 buried. I just was going to the point that at that
 14 time, it didn't jump out at us. And the way that that
 15 particular paragraph is written, to me, it just seems
 16 odd where you do all this in the event of loss of
 17 disinfection. But my takeaway, still, at that is
 18 strangely constructed, but I will concede that that --
 19 it was in there, in the MRP. We should have -- we
 20 should have at least known about it.

21 MR. HARRIS: Okay. I think that's all. Thank
 22 you.

23 MR. WOLFF: So Prosecution Team?

24 MR. BOYERS: Thank you, Mr. Chair.
 25 I have a few questions for Mrs. Hann,

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1 unfortunately, about the pump. I will try to be brief
2 and quick. I know that we spent a lot of time on that.
3 I'll start just by noting that, as Mr. Carter
4 indicated, the District's Exhibit C specifies that the
5 District had said to the Regional Board after the event
6 that the cause was suspected to be an air bound chemical
7 feed pump. And, Mrs. Hann, in your report on page 6,
8 you reference an air locking situation.
9 Is air locking the same as air bound? Do you
10 recognize those to be the same thing?
11 MR. HANN: Yes.
12 MR. BOYERS: Thank you.
13 And in your document, the same document on
14 page 6, you recognize that air locking is a common
15 problem for sodium hyperchloride systems; is that
16 correct?
17 MS. HANN: Yes.
18 MR. BOYERS: All right, and that's due to the
19 off gassing?
20 MS. HANN: Yeah.
21 MR. BOYERS: And when you say it's a common
22 problem, do you mean that it's commonly known in the
23 wastewater industry?
24 MS. HANN: I mean that it does occur on
25 occasion.

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1 MR. BOYERS: Do you believe that it is a problem
2 known to wastewater operators and general managers and
3 folks in the wastewater industry?
4 MS. HANN: I can't speak for operators or
5 general managers, but I know that engineers do believe
6 that it is an occurrence that can occur.
7 MR. BOYERS: And when air locking occurs, that
8 can result in the failure of the pump to deliver
9 chemical?
10 MS. HANN: Yes, that can occur.
11 MR. BOYERS: Even if the pump is still working?
12 MS. HANN: The pump can still be in operation,
13 but chemicals can cease to be delivered by definition.
14 MR. BOYERS: So then it can still be a reliable
15 pump that's functioning properly, but this air lock
16 situation could cause the chemical not to be delivered;
17 correct?
18 MS. HANN: Yes, that's true.
19 MR. BOYERS: Okay. And if that's the case and if
20 it's a common problem, I'm gonna ask just the question,
21 wouldn't you agree that because it's common, that it is
22 important to have an alarm that would notify an operator
23 in that situation?
24 MS. HANN: Yeah, and I think I mentioned that.
25 On new designs and upgraded facilities, that is something

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1 that we considered an important feature. It definitely
2 is a recommendation for those situations that are operated.
3 There are many situations that it doesn't occur
4 at this point and, um, so I mean -- guess back to your
5 main question, do I think they are important? Yes.
6 MR. BOYERS: Okay. Thank you. I have no
7 further questions for you. I do have a few for
8 Mr. Hennessy.
9 MR. HENNESSY: Yeah.
10 MR. BOYERS: Okay, the report that you prepared,
11 and we'll refer to this as the ABCL report that is
12 District's Exhibit G.
13 Based on certain data that was taken in January,
14 taken on January -- I'm sorry, samples that were
15 collected on January 6, 2014; correct?
16 MR. HENNESSY: Correct.
17 MR. BOYERS: Okay. And basically the sample the
18 total coliform was found to be at a level 160,000 MPN
19 per 100 milliliters; is that correct?
20 MR. HENNESSY: That's correct.
21 MR. BOYERS: Okay. And would you agree that
22 there's a high variability, um, in that number? So in
23 other words, it could have been 300 high in; is that
24 correct?
25 MR. HENNESSY: I would need to look at that data,

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1 and I believe that's in there, um, if you can give me a
2 second.
3 I do not believe that the data I was provided
4 provides any competent intervals around that estimate.
5 The most probable number, and my -- no, just a result
6 MPN is what was presented there.
7 MR. BOYERS: So you have no knowledge as to the
8 variability with which that result indicates to us --
9 MR. HENNESSY: Well, variability is gonna occur
10 in any measurements. For example, um, chemical
11 instruments might typically have a quality standard
12 where it's got to be within 75 to 125 percent recovery
13 for a surrogate if that makes sense. I can't comment
14 directly on what the variability for this result is,
15 though.
16 MR. BOYERS: I guess my question is, could it be
17 higher?
18 MR. HENNESSY: It could be somewhat higher, it
19 could be somewhat lower. And I think there's an equal
20 probability that it could be either higher or lower.
21 MR. BOYERS: And I think you testified prior
22 that, um, if you had had data from the actual event,
23 your report could have been even more refined; is that
24 correct?
25 MR. HENNESSY: Yes, that's correct.

1 MR. BOYERS: Would you agree that enterococcus
 2 is a more accurate indicator of a risk or harm -- I'm
 3 sorry, to human health than either total coliform or
 4 fecal coliform?
 5 MR. HENNESSY: Based on what I know from --
 6 yes, from the literature and EPA guidance.
 7 MR. BOYERS: You had no such data on
 8 enterococcus when you prepared your report?
 9 MR. HENNESSY: No, that's correct. We had total
 10 coliform and fecal coliform accounts.
 11 MR. BOYERS: In your prior testimony, you stated
 12 that your conclusions were determined in part on
 13 consideration of the permit standards for effluent
 14 location; is that correct?
 15 MR. HENNESSY: Yes, that is correct with regards
 16 to the implementation of the permit with consideration
 17 of an average in time. For example, a single maximum
 18 sample or median concentration that's been collected over
 19 a long period of time, which is consistent with EPA
 20 water quality standards. For example, acute and chronic
 21 system criteria.
 22 MR. BOYERS: And I think your report, um, and
 23 I'm looking on -- it's 13 of 13 for reference. This
 24 is Exhibit G. It's the first, sort of top paragraph.
 25 Um, your conclusion is that the CSD permit limit

1 MR. HENNESSY: I do see that.
 2 MR. BOYERS: Do you know where monitoring
 3 location EFF-001 is located?
 4 MR. HENNESSY: I do not right now. I believe
 5 that I was -- may I clarify that my, um, evaluation was
 6 for what was happening in the environment, not within the
 7 plant. If that is a within plant standard, um --
 8 MR. BOYERS: So would that change the
 9 conclusion in your report that I just referenced, that
 10 there was no effluent condition violation?
 11 MR. HENNESSY: I don't know the answer to that
 12 right now.
 13 MR. BOYERS: Okay.
 14 MR. HENNESSY: Sorry, I was -- if you will give
 15 me one second here.
 16 MR. BOYERS: I'd be happy to.
 17 MR. HENNESSY: No. I stand by that the -- I
 18 believe that the 93 to 1 dilution applied to that sample
 19 point.
 20 MR. BOYERS: Okay. I'm gonna direct you to the
 21 same exhibit. This is attachment E of the MRP, page E3,
 22 and I'm gonna read -- this is where the monitored
 23 locations are specified.
 24 "Discharge .001 effluent monitoring location in
 25 EFF-001 monitoring location description." Do you see

1 for total coliform at 2300 MPN per 100 milliliters, the
 2 daily maximum was not exceeded by basically the
 3 representative sample; is that correct?
 4 MR. HENNESSY: Was, um, by the 93 to 1 ocean
 5 spiked sample, yes.
 6 MR. BOYERS: Okay, um --
 7 So then is it your understanding that the CSD
 8 permit limit of 2300 MPN is an after dilution standard?
 9 MR. HENNESSY: I would need to revisit the
 10 permit.
 11 MR. BOYERS: Okay, we can do that.
 12 MR. HENNESSY: Yes, thank you.
 13 MR. BOYERS: So the permit -- if you look
 14 at -- this is Prosecution Team Exhibit 1, page 10 of
 15 the permit.
 16 MR. HENNESSY: I'm sorry. I will need a
 17 second to get that.
 18 MR. BOYERS: Sure.
 19 MR. HENNESSY: Can you repeat the page, please?
 20 MR. BOYERS: Yeah, it's page 10. This is under
 21 heading 4A 1 conventional pollutants that I'm looking at,
 22 and it says conventional pollutants, "The discharger
 23 shall maintain compliance of all effluent limitations at
 24 discharge .001 with compliance measured at monitoring
 25 location EFF-001." Do you see that?

1 where I'm reading?
 2 MR. HENNESSY: Yes, I do.
 3 MR. BOYERS: Can you please read the monitoring
 4 location description for us?
 5 MR. HENNESSY: "In Table E1 location where
 6 representative sample of effluent discharge through the
 7 ocean outfall can be collected after treatment and
 8 before contact with the additional wastewaters or the
 9 receiving water."
 10 MR. BOYERS: Does that inform you as to where
 11 the monitoring location is required in the permit?
 12 MR. HENNESSY: Yes, that does.
 13 MR. BOYERS: Does that then change your
 14 conclusion that there was no effluent limitation
 15 violation that would be calculated from this
 16 representative sample?
 17 MR. HENNESSY: In this specific case, I believe
 18 that, um, that that .001 and the 9200, um, or the total
 19 coliform would have exceeded that. That's correct.
 20 MR. BOYERS: Okay. Thank you. I have no
 21 further questions for Mr. Hennessy.
 22 Um, I do have a few for Mr. Von Langen.
 23 MR. VON LANGEN: Peter Von Langen, Central Coast
 24 Water Board Staff.
 25 MR. BOYERS: Good afternoon.

1 How many facilities, roughly, do you deal with
2 in your employment at the Regional Water Board?

3 MR. VON LANGEN: Probably enrollments plus
4 individual permits, over a hundred.

5 MR. BOYERS: Over a hundred. Um, and so you're
6 involved with the drafting of permit provisions; is that
7 correct?

8 MR. VON LANGEN: Yes. I'm involved in the
9 review of the draft permit provisions.

10 MR. BOYERS: Do you know every provision in
11 every one of those permits?

12 MR. VON LANGEN: No, I don't.

13 MR. BOYERS: Okay. Let me take you to your
14 communications with the District related to the
15 indication that there was no need to sample.

16 Can you please give us a recollection of your
17 first communication with the District?

18 MR. VON LANGEN: The first communication I would
19 have had with the District, based on my phone log, was
20 on the 4th. They contacted me and left voice messages
21 on the 3rd. We had a hearing in this room at that date
22 and on the 4th, they sent me the E-mail under Exhibit C,
23 saying that they were reconfirming that there was a
24 violation.

25 MR. BOYERS: Okay. And at that time, do you

1 of your communication with the District on this issue?

2 MR. VON LANGEN: Um, it's going back two and a
3 half years, but I remember first noticing in the permit
4 while -- a year later with Leo Sarmiento and Jim Fisher,
5 that there was this -- remembered that and then later on,
6 I recognized at some point I had a conversation with the
7 Carpinteria Sanitary District about the beach sampling
8 and the vague language in the permit about how long the
9 disinfection meant each monitoring.

10 MR. BOYERS: And is it possible that that
11 conversation took place weeks after the event?

12 MR. VON LANGEN: It's possible.

13 MR. BOYERS: And is it possible that your
14 indication not to sample was a result of there not
15 being a need?

16 MR. VON LANGEN: Yes, I would have based that
17 on, basically, that there wouldn't have been anything
18 to really measure at that point.

19 MR. BOYERS: So to the best of your
20 recollection, um, is it your testimony that you more
21 likely than not did not indicate to the District that
22 they did not have to sample? That was a bad question,
23 let me re-ask that question.

24 Is it your testimony that you did not inform the
25 District that they did not have to sample until weeks

1 recall indicating to them that there was no need to
2 perform monitoring?

3 MR. VON LANGEN: No, not at that point.

4 MR. BOYERS: Okay, when was your next
5 communication, that you recall?

6 MR. VON LANGEN: Um, based on my phone log, I
7 got a call from them -- from Mark Bennett later that
8 day, and I have a phone log from Craig Murray on, I
9 believe, the 22nd of October.

10 MR. BOYERS: And what did your phone log
11 indicate?

12 MR. VON LANGEN: Um, the one with Mark Bennett
13 was mainly just the report of the disinfection loss with
14 the 201,000 false gallons of non-disinfected effluent
15 that applied to shellfish parties, that they left
16 messages for them and that they contacted other
17 agencies.

18 MR. BOYERS: Did your notes indicate that you
19 informed them that there was no need to perform
20 monitoring?

21 MR. VON LANGEN: No.

22 MR. BOYERS: Is it your practice to make a
23 notation of the extent of your communication?

24 MR. VON LANGEN: To some degree, yes.

25 MR. BOYERS: Okay, what's your next recollection

1 after the event?

2 MR. VON LANGEN: It may have been. It may have
3 been sometime that week later, but it was after -- I
4 would believe that it was after the fact that there
5 wasn't anything to collect right upstream this charge
6 had occurred previous days.

7 MR. BOYERS: Thank you, I have no further
8 questions for you.

9 Um, I do have just one or maybe two questions
10 for Mr. Murray.

11 Mr. Murray, um, you testified that you
12 surveyed five or six of the wastewater facilities in the
13 region and asked them whether they had this low-chlorine
14 dosage; is that correct?

15 MR. MURRAY: That's correct.

16 MR. BOYERS: And that the majority of those did
17 not have such an alarm?

18 MR. MURRAY: That's correct.

19 MR. BOYERS: Can you -- are you aware of how
20 many wastewater facilities that have disinfection lie
21 within this region?

22 MR. MURRAY: I should be, because I've looked at
23 the record, the file for every one of them, um, here.
24 It's well north of 2,000, I would say.

25 MR. BOYERS: Okay. Did you contact any -- well,

1 let me ask it this way: How did you come across -- how
2 did you decide on the wastewater facilities that you
3 would contact, out of those 2,000? How did you decide
4 that?

5 MR. MURRAY: Well, I participate in a group
6 meeting with agency managers from throughout
7 Santa Barbara County, maybe once a month. Sometimes it
8 involves managers from Ventura County, sometimes from
9 San Luis Obispo County.

10 So I just have a network of colleagues, and I
11 called those ones that I felt had similar situations to
12 us in terms of ocean outfall or --

13 MR. BOYERS: Did you have any knowledge before
14 you made the contact, whether they had a low chlorine
15 alarm or not?

16 MR. MURRAY: I did not.

17 MR. BOYERS: Thank you. I have no further
18 questions.

19 MR. CARTER: If I may, given the fact that --
20 if I -- if I may, given the fact that the Prosecution
21 stipulated as to certain facts regarding Mr. Von Langen,
22 may I be allowed to ask Mr. Von Langen a few questions
23 in light of the fact that the Prosecution attempted to
24 violate that stipulation?

25 MR. WOLFF: Violating is a heavy word, so let me

1 conversation after the e-mails were sent, I believe on
2 the 4th, but I don't recall at that point talking about
3 the beach sampling. But this is going back two and a
4 half years. But at that point, it wasn't right after
5 the event.

6 MR. CARTER: A day or two later?

7 MR. VON LANGEN: Yeah.

8 MR. CARTER: Okay. No further questions. Thank
9 you. Thank you for the indulgence.

10 MR. WOLFF: No problem.

11 MR. HARRIS: So I have a question, and maybe it
12 will help all of us in terms of relevance, of Mr. --
13 Dr. Von Langen whatever he said, whether he did or not,
14 and that is -- I'll direct it to Mr. Murray.

15 There's language in here that says the operator's
16 responsible for understanding the content of the permit.
17 Um, this is a federal -- federal permit that the state
18 administers and, um, given, I'm sure, your experience
19 with contracts and the like, what, um, which one is
20 enforceable, something a staff tells you over the
21 phone about a particular permit or the permit itself?

22 MS. OKUN: The stipulation obligation to comply
23 with the permit notwithstanding staff direction, to the
24 contrary, I don't think we need to pursue this line.
25 The Board can consider all the evidence applying the

1 go across to our Counsel.

2 MR. OKUN: The proposed order does include the
3 stipulated language. I agree that the discharger should
4 have the opportunity at this point to ask Dr. Von Langen
5 a few questions.

6 It won't really matter either way, unless the
7 Board is proposing to reject the stipulation as to that
8 paragraph and change.

9 MR. WOLFF: Okay. And we'll restrict that to
10 the testimony that was just presented.

11 MR. CARTER: Correct. Just redirect on those.

12 MR. WOLFF: Okay.

13 MR. CARTER: Doctor, may I ask you a question?
14 We'll share the microphone.

15 MR. WOLFF: Okay, not too close.

16 MR. CARTER: Um, are you saying you did not have
17 a conversation?

18 MR. HARRIS: You're gonna have to get closer.

19 MR. CARTER: I apologize.

20 Are you saying that you did not have a
21 conversation with Mark Bennett or anyone with the
22 Carpinteria Sanitary District about sampling or not
23 sampling within the days -- the first few days
24 following the incident?

25 MR. VON LANGEN: I'm saying I may have had a

1 factors.

2 We've had enough testimony on who remembers
3 what.

4 MR. HARRIS: Okay. I agree, and my only point
5 was I don't think in my own personal opinion, and
6 Dr. Von Langen said, I don't think this is what the
7 permit -- what matters. And it says in the permit you
8 shall monitor if you have a disinfection upset or a
9 spill.

10 MR. WOLFF: Okay. So Prosecution, please
11 continue.

12 MR. BOYERS: I have no further cross.

13 MR. WOLFF: Okay. So then we move to closing
14 arguments, but I do not have any testimony card, so I
15 just want to make sure there was not an oversight from
16 anyone in the audience.

17 Okay. So therefore, please proceed, and
18 five minutes. Thank you.

19 MR. BOYERS: Thank you, again, Mr. Chair.

20 So in his opening statement, Mr. Carter asked
21 this Board, "Why are we here?" Well, I'm gonna tell
22 you why we're here. We're here because there was a
23 violation of the District's NPDES permit, a significant
24 violation.

25 They agree there was a violation. The violation

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1 was a 300,000 gallons of undisinfected secondary that,
2 in our opinion, caused a reasonable amount of harm and
3 was something that they could have controlled, and
4 probably should have controlled, that we thought
5 warranted a penalty in this case.
6 And when you're deliberating, I ask you to ask
7 yourselves, what's the message that we want to send to
8 the regulation committee? Is this a violation that we
9 want to turn our heads to and say, "Yeah, this type of
10 action in our region is fine." I don't think you do.
11 I think you ought to look at the facts, look at
12 the harm, look at the culpability and ask yourself, you
13 know, what is the right penalty? And the penalty on the
14 table is 96,775, which sounds like a big number, but,
15 of that, keep in mind that 15,000 is for MMPs. There
16 were five events. The parties even stipulated to that,
17 and 22,000 is for the staff costs, so we have just under
18 \$60,000 the Prosecution Team is proposing as a penalty
19 for this violation.
20 Now, the statute, as we've talked about prior
21 to considering a number of factors -- figuring out what
22 the right penalty for this violation is, the extent of
23 harm, the gravity, the ability to pay -- they are all
24 filled out in the statute. And the Enforcement Policy
25 does a nice job of calculating certain multipliers

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1 you need to go through in coming up with the right
2 penalty amount. There was really two of those
3 multipliers that are really the cause of this issue,
4 and those are harm and culpability.
5 How much did this discharge harm or potential
6 for harm -- it's important to catch that description.
7 It's not actual harm that we have to prove. We have to
8 consider it's also the potential for harm. How much
9 harm or potential for harm was there to the beneficial
10 uses? And the beneficial uses need protection whether
11 they are being used or not; right?
12 So it doesn't matter if somebody is actually
13 swimming or actually harvesting shellfish. Those
14 benefits need to be protected whether somebody's
15 using them or not. So how much harm with beneficial
16 use?
17 And then second, how much blame should the
18 District bear for this incident? Those are kind of
19 the two issues.
20 So with respect to harm, as we just talked
21 about, it has its own representative sample of what was
22 discharged is 68 times the effluent limitation for total
23 coliform. Okay?
24 Even after dilution, as you heard Mr. Buffleben,
25 the discharge would have violated the team water limit,

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1 certainly for shellfish and probably for Rec 1 as well.
2 We talked a lot about fate and transport. In
3 our opinion, the fate and transport model that was used
4 by the District was flawed, and it assumed that the plume
5 had diluted the safe levels much more quickly than what
6 had actually occurred.
7 Now, given those facts, the Prosecution Team
8 recommended a conservative factor of 2 for harm or
9 potential for harm. This is a below moderate
10 consideration, and it basically means that the impacts
11 would be reasonably expected and harms of beneficial
12 uses would be minor.
13 So turning to culpability. Let's remember that
14 this is a discharge that could have been prevented --
15 certainly, if not prevented entirely mitigated to a
16 certain degree. A very large degree. There should
17 have been a low chlorine dosage alarm.
18 You know, um, you heard from our expert
19 Mr. Sarmiento, that that is the industry standard and
20 whether the wastewater manual applies directly or not
21 certainly is analogous in informing the discharger
22 whether they should be concerned about this process;
23 right?
24 The permit also says to have safeguards, take
25 all reasonable steps to minimize discharges. We can't

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1 publicize that for them. They've got to look at that
2 them themselves. And as Board Member Counselor talked
3 about, you got to look at the processes, the protective
4 measures that need to be taken to prevent this. This is
5 an important process. This chlorination is an important
6 wastewater process. And it should have been better.
7 So given that this was a preventable discharge
8 that likely caused the income minor amount of harm, the
9 prosecution is recommending your approval of the
10 \$60,000 penalty we're recommending. Thank you.
11 MR. WOLFF: Thank you.
12 MR. CARTER: If I may, we have a PowerPoint
13 presentation, if we can?
14 MR. WOLFF: Yes.
15 MR. CARTER: If I may approach, I have additional
16 copies.
17 MS. OKUN: While you're getting those passed out,
18 I just wanted to ask whether all the PowerPoint
19 presentations today are someplace where the advisory
20 team can have access to them for the record. Are they
21 all on a shared drive?
22 MR. CARTER: I can leave my thumb drive. It was
23 loaded onto the laptop.
24 MR. OKUN: Thanks.
25 MR. WOLFF: Okay, please proceed.

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1 MR. CARTER: Thank you very much for the
2 opportunity, I appreciate it. I'll try to be brief, but
3 five minutes is brief enough. I apologize for some of
4 the delay we've had.
5 Again, I still ask the question, it's still a
6 valid question, why are we here? And it has not been
7 answered. Not by the Prosecution. Not by anyone.
8 I'm not trying to minimize this violation.
9 There was a violation. It's just that why are we here
10 when all the factors, when you look at the State
11 Enforcement Program, when I tried to minimize the
12 300,000 gallon event.
13 However, in every MMP there's a discharge
14 violation. You could have an MMP where there's a
15 million gallons of discharge.
16 We're not dealing with secondary sewer overflow.
17 We're dealing with non-disinfected secondary. We're not
18 trying to minimize that, but the Prosecution's case rests
19 on two things: One is harm and two is failure to have
20 an alarm was a major deviation. We would submit that
21 the region has not proven that there was any potential
22 harm or actual harm just to the area. We see a lot of
23 evidence to the contrary.
24 Go to the next slide, please.
25 One of the primary things that we have to look

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1 at is the Enforcement Policy. The Enforcement Policy
2 would show that you would have to establish the distance
3 prior to violation or not. This would be one of the
4 first cases this Board has seen where this type of
5 violation has been brought as an ACL discretionary
6 penalty. I cannot think of one. Prosecution has not
7 identified one. Mr. Murray has identified this would
8 be the very first time this Board would assess a
9 discretionary ACL against a violation that is typically
10 viewed as either no violation or as an MMP.
11 We find that this is an extraordinary event and
12 we ask you to reconsider and, in fact, we ask you to
13 dismiss the ACL proposal and rather impose an MMP as
14 the District is stipulating to that.
15 We can move to the next slide, please.
16 Looking at the enforcement factor, you look at
17 the class of the violation -- you've never heard what
18 the class of violation has been. No one ever
19 identified the history of the District extent history.
20 Next slide, please.
21 You can see the history of the District. Look at
22 that slide. Look where the District is on the far right
23 in comparison to these other violators extent history of
24 violation. When you compare it to other loss of
25 disinfection events, you can see all these other,

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1 um, operators public penalties that have had similar
2 violations that received either no violation or no
3 enforcement taken, or they would be MMP.
4 Next slide, please.
5 We -- next slide, please. These are the slides
6 that we indicated from Mr. Hennessy, which is the no
7 harm or potential harm indicator.
8 Next slide, please.
9 With respect to sentencing factors, I think the
10 important parts with respect to harm. We indicated
11 that the score of harm related 0 or no more than 1.
12 With respect to the physical chemical, we posed a
13 negligible threat or at most, a minimal threat.
14 Going to the issue of an alarm. We believe
15 that the testimony or the suggestion that this is
16 standard industry program, certainly for a facility
17 of this age, is not -- is not accurate. The line on
18 1981 study for protocol is not how you establish
19 Industry Standard.
20 It -- and we also pointed out nowhere there's
21 been no NOVs, no suggestions that the District's
22 monitoring or chemical disinfection system was in
23 anyway deficient. Not at all.
24 Next slide side, please.
25 With respect to the other factors dealing with

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1 cost of investigation, we're not sure what the District
2 was doing over these number of years, since we
3 established in Exhibit J within a matter of days -- in
4 fact, a matter of hours, what the violations consisted
5 of was well-known to the District, whether it was just
6 the pump or other parts of the pump. It was clear that
7 the pump was the problem, and there was a certain amount
8 of -- certain amount of discharge involved.
9 Not a lot of mystery here. The District has
10 never denied that, and I don't think -- we're prepared
11 to pay reasonable cost, but we don't think the District
12 should have to pay the amount of cost that has been
13 suggested. Not for an event like this. That normally
14 would be handled as an MMP.
15 With respect to economic benefits, Step 8,
16 we believe as accurately pointed out by Board Member
17 Johnston, you would not impose an economic benefit,
18 unless you relate it to the violation. The failure to
19 sample was not charged as a violation, and regardless
20 of what the Prosecution Team says that they included a
21 mention of it as "res judicata," it's just not carried
22 out in water and no pun is intended.
23 That is not the situation here. Economic
24 beneficial should not be applied to a situation that
25 has not been charged as a violation. It's specifically

1 cited in the enforcement policy; therefore, we don't
 2 believe any economic benefit should be applied.
 3 MR. WOLFF: Could you wrap up your -- we are at
 4 five minutes and 25 seconds.
 5 MR. CARTER: I will, thank you.
 6 So in addition to not being applicable, even
 7 assuming the Board would apply economic benefit, I think
 8 Ms. Cervantez asked some questions about what would it
 9 have cost if they would have sent some samples out, maybe
 10 a hundred dollars given the high end of it -- a hundred
 11 dollars a sample, we're looking at 3,000 or \$4,000 tops.
 12 Next slide, please.
 13 We've got our own internal -- our own
 14 calculations based on those factors, you can look at
 15 those. We believe if the Board were to impose a ACL,
 16 it would be on the low end. It would be in the \$1600
 17 range or at the most, in the \$3,000 range and, therefore,
 18 would impose costs that are very reasonable, as what
 19 would be necessary to investigate this kind of violation.
 20 It is well-known within days.
 21 Last slide please, next slide.
 22 Therefore, our initial proposal. These should be
 23 MMPs, all of them or, rather, the Board has the discretion
 24 to go do that.
 25 Next slide.

1 for the Board to consider at the July meeting. We will
 2 send that out with the meeting notice as soon as we can
 3 get it drafted, and this Matter will be continued.
 4 MR. WOLFF: So this will then close today's
 5 hearing on the Carpinteria Sanitary District ACLC
 6 No. R3-2015-0011.
 7 And Counsel, anything else you'd like to
 8 add?
 9 MS. OKUN: Nope.
 10 MR. WOLFF: Okay. So we'd like to thank all of
 11 you for this late Friday afternoon and appreciate
 12 everyone's contribution to the meeting.
 13 MR. MURRAY: May I ask a question? I'm just
 14 gonna be responsible to report back to my Board of
 15 Directors. Is there sort of a process or a sequence
 16 that I can tell? Are we expected to attend that
 17 meeting? Will there be more testimony?
 18 MS. OKUN: The Advisory Team will make some
 19 changes to the proposed order that was in the agenda and
 20 we'll circulate that, again. You will get notice of that
 21 that you can bring to your Board.
 22 I don't know at this point if we're going to
 23 allow any additional written comment. I don't think
 24 it's gonna be necessary, but there will be a short
 25 opportunity to address the Board at the July meeting.

1 Assuming where the Board were to impose an ACL
 2 as we pointed out, we think it should be no more than
 3 \$3,000, based on factors and the economic benefit as we
 4 submit, as well as the \$15,000 MMP that we've
 5 stipulated to.
 6 We believe that's appropriate given the nature
 7 of this case, given the nature of this violation and
 8 humbly and respectfully ask you to intercede in this
 9 Matter, which should have been resolved a long time ago,
 10 just like every other type violations has been before.
 11 Not with an ACL, but with an MMP.
 12 MR. WOLFF: Thank you.
 13 MR. CARTER: Thank you, very much.
 14 MR. WOLFF: So at this time we will have a
 15 closed hearing session, and I'll have my colleagues
 16 come upstairs and we will have deliberation.
 17 MS. OKUN: And, Doctor, we'll be closing the
 18 hearing now.
 19 MR. WOLFF: Thank you. And at this time, the
 20 hearing is closed as well. I thank you.
 21 (Wherein deliberation was held in closed session)
 22 MS. OKUN: So thank you, everyone, for waiting.
 23 The Board has concluded its deliberations. We're going
 24 to continue this Matter until the July Board meeting, so
 25 that we can send out a draft, um, a revised draft order

1 If you're satisfied with the order, obviously,
 2 you don't have to attend.
 3 MR. MURRAY: Okay, thank you.
 4 MR. TREMBLEY: And what is the date of the
 5 trial?
 6 THE CLERK: July 30, 31.
 7 MR. WOLFF: It will be July 30th and 31st here
 8 in San Luis Obispo, on Thursday and Friday.
 9 And any question on the Prosecution side?
 10 MR. TREMBLEY: Do you have any indication, 30 or
 11 31?
 12 MR. HARRIS: I don't know. It depends on what
 13 the agenda looks like.
 14 MS. OKUN: If anybody does have schedule
 15 conflicts, though, that you know about, if you could
 16 let Mr. Harris know that, it would be helpful for
 17 agenda planning.
 18 MR. WOLFF: Yeah, good point.
 19 MR. TREMBLEY: Thank you. Thank you very much.
 20 MR. WOLFF: Thank you. I appreciate it.
 21 (Meeting concluded at 5:35 p.m.)
 22
 23
 24
 25

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