1	correct?	11:01:04
2	MR. CARRIGAN: Vague.	11:01:05
3	THE WITNESS: Yes.	11:01:05
4	BY MR. BENSHOOF:	11:01:06
5	Q. That's correct, did you say?	11:01:07
6	A. We not no. I we did a some years	11:01:09
7	prior to the sediment investigation, we did an analysis	11:01:17
· 8	of the various operations at NASSCO and Southwest Marine,	11:01:22
9	what kind of activities the took place at the	11:01:29
10	shipyards, what type of wastes were generated. And	11:01:35
11	and so the board relied on that information in developing	11:01:37
12	the allegations on the two shipyard facilities.	11:01:43
13	Q. And that information amongst other things	11:01:53
14	reflected, your experience, that these kinds of machinery	11:01:56
15	were typically sources of releases from of chemicals	11:01:58
16	of concern including PCBs to the environment; correct?	11:02:03
17	A. Any any of the activities we analyzed are	11:02:12
18	described in the DTR. I I don't know if winches were	11:02:17
19	described in there or not.	11:02:22
20	Q. Actually, the DTR doesn't associate PCBs with	11:02:30
21	any of the facilities at the shipyard. That was a course	11:02:33
22	of several questions I had with Mr. Carlisle to ask why	11:02:38
23	that was the case. And I still don't understand it.	11:02:42
24	But, I mean, you you know, for example, that that	11:02:44
25	PCBs were associated with all of the operations that	11:02:49

1	were or most all of the operations that we're looking	11:02:53
2	at on this particular exhibit.	11:02:55
3	MR. DART: Lacks foundation.	11:02:57
4	BY MR. BENSHOOF:	11:02:57
5	Q. Do you want to go into we can go into the DTR	11:02:58
6	right now. We can see that there's plenty of	11:03:00
7	descriptions of the shipyard operations. But there's no	11:03:06
8	mention that PCBs are associated with any of them. So	11:03:10
9	let's just start.	11:03:15
10	A. Okay.	11:03:17
11	Q. I'll turn you to your attention to	11:03:23
12	Section 9-3 excuse me 3-3 in the DTR. This is the	11:03:25
13	description of BAE.	11:03:32
14	MR. DART: Page 3-3?	11:03:41
15	MR. BENSHOOF: It begins, yes.	11:03:42
16	BY MR. BENSHOOF:	11:03:58
17	Q. Now turn the page, there's a number of different	11:03:59
18	operations discussed; correct?	11:04:03
19	A. Yes, uh-huh.	11:04:08
20	BY MR. BENSHOOF:	11:04:10
21	Q. And, for example, you're aware from the from	11:04:11
22	your research and work in the past that PCBs are	11:04:21
23	typically associated with electrical systems; correct?	11:04:28
24	A. Yes.	11:04:31
25	Q. And you would agree that nowhere in the	11:04:32

mr. Carrigan: Document speaks for itself. mr. Dart: Join. the Witness: There's description of hydraulic livels. But I as far as transformer oils. livels. By Mr. Benshoof: livels. Dart is a description of the electrical system operations livels. put the shipyards, whether it's BAE or any of the other operators, is there any reference to the fact that those livels. were likely sources of PCB release. livels. Mr. Dart: Same objection. livels. Mr. Carrigan: Document speaks for itself. livels. The Witness: Yeah. We we made a broad livels. The Witness: Yeah. We we made a broad livels. BAE Systems, and that metals, PCBs, and PAHs and other constituents were generated as a result of activities at livels. BAE Systems, and that many of those same constituents livels. immediately offshore. livels. BY Mr. BENSHOOF: livels. Q. Okay. A. And that that was our that was the extent livels.			
MR. CARRIGAN: Document speaks for itself. MR. DART: Join. THE WITNESS: There's description of hydraulic il:04:4 by MR. BENSHOOF: Q. And so we agree in your that nowhere in the DTR is a description of the electrical system operations at the shipyards, whether it's BAE or any of the other perators, is there any reference to the fact that those you would agree with that? MR. DART: Same objection. MR. CARRIGAN: Document speaks for itself. THE WITNESS: Yeah. We we made a broad THE WITNESS: Yeah. We we made a bro	1	description of the shipyard's electrical system is that	11:04:36
MR. DART: Join. THE WITNESS: There's description of hydraulic li:04:4 DIR: But I as far as transformer oils. Q. And so we agree in your that nowhere in the DTR is a description of the electrical system operations at the shipyards, whether it's BAE or any of the other operators, is there any reference to the fact that those were likely sources of PCB release. You would agree with that? MR. DART: Same objection. MR. CARRIGAN: Document speaks for itself. THE WITNESS: Yeah. We we made a broad THE WITNESS: Yeah. We we made a broad THE WITNESS: Yeah. We we made a broad Sweeping statement that metals, PCBs, and PAHs and other constituents were generated as a result of activities at BAE Systems, and that many of those same constituents were present in elevated levels in the sediments immediately offshore. BY MR. BENSHOOF: Q. Okay. A. And that that was our that was the extent 11:06:0	2	referenced; correct?	11:04:39
THE WITNESS: There's description of hydraulic oils. But I as far as transformer oils. BY MR. BENSHOOF: Q. And so we agree in your that nowhere in the DTR is a description of the electrical system operations at the shipyards, whether it's EAE or any of the other operators, is there any reference to the fact that those were likely sources of PCB release. You would agree with that? MR. DART: Same objection. MR. CARRIGAN: Document speaks for itself. THE WITNESS: Yeah. We we made a broad THE WITNESS: Yeah. We we made a broad sweeping statement that metals, PCBs, and PAHs and other constituents were generated as a result of activities at page 11:05:1 BAE Systems, and that many of those same constituents immediately offshore. BY MR. BENSHOOF: Q. Okay. A. And that that was our that was the extent 11:06:0	3	MR. CARRIGAN: Document speaks for itself.	11:04:41
oils. But I as far as transformer oils. BY MR. BENSHOOF: Q. And so we agree in your that nowhere in the DTR is a description of the electrical system operations at the shipyards, whether it's BAE or any of the other operators, is there any reference to the fact that those were likely sources of PCB release. You would agree with that? MR. DART: Same objection. MR. CARRIGAN: Document speaks for itself. THE WITNESS: Yeah. We we made a broad 11:05:14 sweeping statement that metals, PCBs, and PAHs and other constituents were generated as a result of activities at 11:05:5 BAE Systems, and that many of those same constituents 11:06:05 were present in elevated levels in the sediments 11:06:05 BY MR. BENSHOOF: 11:06:12 Q. Okay. 11:06:12 A. And that that was our that was the extent 11:06:13	4	MR. DART: Join.	11:04:42
PY MR. BENSHOOF: Q. And so we agree in your that nowhere in the DTR is a description of the electrical system operations the shippards, whether it's BAE or any of the other operators, is there any reference to the fact that those were likely sources of PCB release. You would agree with that? MR. DART: Same objection. MR. CARRIGAN: Document speaks for itself. THE WITNESS: Yeah. We we made a broad THE WITNESS: Yeah. We we made a broad sweeping statement that metals, PCBs, and PAHs and other constituents were generated as a result of activities at ensured as a result of activities at mediately offshore. BY MR. BENSHOOF: Q. Okay. A. And that that was our that was the extent 11:06:0	5	THE WITNESS: There's description of hydraulic	11:04:46
Q. And so we agree in your that nowhere in the DTR is a description of the electrical system operations at the shipyards, whether it's BAE or any of the other operators, is there any reference to the fact that those were likely sources of PCB release. You would agree with that? MR. DART: Same objection. MR. CARRIGAN: Document speaks for itself. THE WITNESS: Yeah. We we made a broad sweeping statement that metals, PCBs, and PAHs and other constituents were generated as a result of activities at constituents were generated as a result of activities at seeping statement in elevated levels in the sediments immediately offshore. BY MR. BENSHOOF: Q. Okay. A. And that that was our that was the extent 11:06:0	.6	oils. But I as far as transformer oils.	11:04:48
DTR is a description of the electrical system operations at the shipyards, whether it's BAE or any of the other operators, is there any reference to the fact that those operators, is there any reference to the fact that those operators, is there any reference to the fact that those operators, is there any reference to the fact that those operators, is there any reference to the fact that those operators. It were likely sources of PCB release. It would agree with that? It w	7	BY MR. BENSHOOF:	11:04:56
at the shipyards, whether it's BAE or any of the other operators, is there any reference to the fact that those 11:05:1 were likely sources of PCB release. 11:05:1 You would agree with that? 11:05:1 MR. DART: Same objection. 11:05:2 MR. CARRIGAN: Document speaks for itself. 11:05:2 THE WITNESS: Yeah. We we made a broad 11:05:3 sweeping statement that metals, PCBs, and PAHs and other constituents were generated as a result of activities at 11:05:5 BAE Systems, and that many of those same constituents 11:06:0 were present in elevated levels in the sediments 11:06:0 immediately offshore. 11:06:1 Q. Okay. 11:06:1 A. And that that was our that was the extent 11:06:1	8	Q. And so we agree in your that nowhere in the	11:05:01
operators, is there any reference to the fact that those 11:05:1 Were likely sources of PCB release. 11:05:1 MR. DART: Same objection. MR. CARRIGAN: Document speaks for itself. THE WITNESS: Yeah. We we made a broad sweeping statement that metals, PCBs, and PAHs and other constituents were generated as a result of activities at BAE Systems, and that many of those same constituents were present in elevated levels in the sediments immediately offshore. BY MR. BENSHOOF: Q. Okay. A. And that that was our that was the extent 11:06:1	9	DTR is a description of the electrical system operations	11:05:06
were likely sources of PCB release. 11:05:1 12 You would agree with that? 11:05:1 14 MR. DART: Same objection. 11:05:2 15 MR. CARRIGAN: Document speaks for itself. 11:05:2 16 THE WITNESS: Yeah. We we made a broad 11:05:3 17 sweeping statement that metals, PCBs, and PAHs and other 18 constituents were generated as a result of activities at 11:05:4 19 BAE Systems, and that many of those same constituents 20 were present in elevated levels in the sediments 21 immediately offshore. 22 BY MR. BENSHOOF: 23 Q. Okay. 24 A. And that that was our that was the extent 11:05:1 11:05:2 11:05:2 11:05:2 11:05:2 11:05:2 11:05:2 11:06:1 11:05:2 11:06:1 11:05:2 11:06:1 11:05:2 11:06:1 11:06:1	10	at the shipyards, whether it's BAE or any of the other	11:05:08
You would agree with that? 11:05:1 14 MR. DART: Same objection. 11:05:2 15 MR. CARRIGAN: Document speaks for itself. 11:05:2 16 THE WITNESS: Yeah. We we made a broad 11:05:3 17 sweeping statement that metals, PCBs, and PAHs and other 18 constituents were generated as a result of activities at 19 BAE Systems, and that many of those same constituents 20 were present in elevated levels in the sediments 21 immediately offshore. 22 BY MR. BENSHOOF: 23 Q. Okay. 24 A. And that that was our that was the extent 11:06:1	11	operators, is there any reference to the fact that those	11:05:12
MR. DART: Same objection. 11:05:2 15 MR. CARRIGAN: Document speaks for itself. 11:05:2 16 THE WITNESS: Yeah. We we made a broad 11:05:3 17 sweeping statement that metals, PCBs, and PAHs and other 18 constituents were generated as a result of activities at 19 BAE Systems, and that many of those same constituents 20 were present in elevated levels in the sediments 21 immediately offshore. 22 BY MR. BENSHOOF: 23 Q. Okay. 24 A. And that that was our that was the extent 11:06:1	12	were likely sources of PCB release.	11:05:15
MR. CARRIGAN: Document speaks for itself. 11:05:2 16 THE WITNESS: Yeah. We we made a broad 11:05:3 17 sweeping statement that metals, PCBs, and PAHs and other 11:05:4 18 constituents were generated as a result of activities at 11:05:5 19 BAE Systems, and that many of those same constituents 11:06:0 20 were present in elevated levels in the sediments 11:06:0 21 immediately offshore. 11:06:1 22 BY MR. BENSHOOF: 11:06:1 23 Q. Okay. 11:06:1	13	You would agree with that?	11:05:19
THE WITNESS: Yeah. We we made a broad 11:05:3 17 sweeping statement that metals, PCBs, and PAHs and other 18 constituents were generated as a result of activities at 19 BAE Systems, and that many of those same constituents 20 were present in elevated levels in the sediments 21 immediately offshore. 22 BY MR. BENSHOOF: 23 Q. Okay. 24 A. And that that was our that was the extent 11:06:1	14	MR. DART: Same objection.	11:05:20
sweeping statement that metals, PCBs, and PAHs and other 11:05:4 18 constituents were generated as a result of activities at 11:05:5 19 BAE Systems, and that many of those same constituents 11:06:0 20 were present in elevated levels in the sediments 11:06:0 21 immediately offshore. 11:06:1 22 BY MR. BENSHOOF: 11:06:1 23 Q. Okay. 11:06:1 24 A. And that that was our that was the extent 11:06:1	15	MR. CARRIGAN: Document speaks for itself.	11:05:21
constituents were generated as a result of activities at 11:05:5 BAE Systems, and that many of those same constituents 11:06:0 were present in elevated levels in the sediments 11:06:0 immediately offshore. 11:06:1 BY MR. BENSHOOF: 11:06:1 A. And that that was our that was the extent 11:06:1	16	THE WITNESS: Yeah. We we made a broad	11:05:39
BAE Systems, and that many of those same constituents 11:06:0 20 were present in elevated levels in the sediments 11:06:0 21 immediately offshore. 22 BY MR. BENSHOOF: 23 Q. Okay. 24 A. And that that was our that was the extent 11:06:1	17	sweeping statement that metals, PCBs, and PAHs and other	11:05:42
were present in elevated levels in the sediments 11:06:0 21 immediately offshore. 22 BY MR. BENSHOOF: 23 Q. Okay. 24 A. And that that was our that was the extent 11:06:1	18	constituents were generated as a result of activities at	11:05:55
21 immediately offshore. 11:06:0 22 BY MR. BENSHOOF: 11:06:1 23 Q. Okay. 11:06:1 24 A. And that that was our that was the extent 11:06:1	19	BAE Systems, and that many of those same constituents	11:06:00
22 BY MR. BENSHOOF: 11:06:1 23 Q. Okay. 11:06:1 24 A. And that that was our that was the extent 11:06:1	20	were present in elevated levels in the sediments	11:06:05
23 Q. Okay. 24 A. And that that was our that was the extent 11:06:1	21	immediately offshore.	11:06:09
A. And that that was our that was the extent 11:06:1	22	BY MR. BENSHOOF:	11:06:10
A. And that that was out that was the extent	23	Q. Okay.	11:06:10
25 of it.	24	A. And that that was our that was the extent	11:06:10
	25	of it.	11:06:14

1	Q. Okay. And that's at page you were reading	11:06:15
2	from page 3-9; correct?	11:06:20
3	A. Yes.	11:06:22
4	Q. But I want to talk about the description of the	11:06:23
5	operations. And let's just complete that. You're aware	11:06:26
6	that the PCBs were associated with the electrical systems	11:06:31
. 7	maintained by the shipyards; correct?	11:06:35
8	A. Are you asking did the DTR state that?	11:06:47
9	Q. No. I know the DTR doesn't. And I'm just	11:06:49
10	we're just now covering the fact that based upon your	11:06:51
11	prior experience, you were aware that PCBs were	11:06:54
12	associated with the electrical systems utilized in	11:06:58
13	shipyards.	11:07:01
14	A. Yeah, potentially could be, yes.	11:07:01
15	Q. And likewise, you were aware, based upon your	11:07:03
16	experience, that PCBs were associated with hydraulic	11:07:07
17	oils.	11:07:12
18	A. Yes.	11:07:13
19	Q. You were aware that, based upon your experience,	11:07:13
20	that PCBs were associated with marine paints?	11:07:16
21	A. Yes.	11:07:21
22	Q. You were aware that that PCBs were associated	11:07:27
23	with the cutting oils used in the machine shops in	11:07:34
24	shipyards; correct?	11:07:42
25	A. I guess I would say potentially so, yes.	11:07:49

1	Q. Okay.	11:07:55
2	And so when we go back to looking at	11:07:56
3	Exhibit 1263, you would agree that the facilities marked	11:08:05
4	as machine shop, electrical shop, were all sources of the	11:08:17
5	potential release of chemicals of concern including PCBs	11:08:26
6	to the bay; correct?	11:08:29
7	MR. DART: Lacks foundation. Document speaks	11:08:33
8	for itself. Calls for speculation.	11:08:34
9	THE WITNESS: Yes. We we made the sweeping	11:08:38
10	statement that I referenced earlier that linked the	11:08:42
11	sediments offshore to the totality of the all their	11:08:49
12	operations there.	11:08:53
13	BY MR. BENSHOOF:	11:08:54
14	Q. And now I'm getting a little bit more specific.	11:08:55
15	Because to to specific facilities on the	11:08:58
16	shipyard. And if you don't know, Mr. Barker, I guess you	11:09:07
17	don't know whether or not releases of chemicals of	11:09:10
18	concern are commonly associated with such operations as	11:09:12
19	electrical shops. But I take it you know that from your	11:09:15
20	experience.	11:09:19
21	A. Potentially, could be.	11:09:19
22	Q. And that's because metals and PCBs are contained	11:09:20
23	in, amongst other things, electrical systems and are	11:09:25
24	contained in cutting fluids that are used in different	11:09:28
25	types of machine shops and electrical shops; correct?	11:09:31

MR. CARRIGAN: May lack foundation.	11:09:41
THE WITNESS: Potentially so with cutting oils,	11:09:44
yeah.	11:09:46
BY MR. BENSHOOF:	11:09:46
Q. The and no attempt was made to relate those	11:09:47
facilities that existed in at the shipyard in 1950, as	11:09:55
illustrated on Exhibit 1263, to locations of contaminated	11:10:02
sediments; correct?	11:10:09
A. Yes. We at the DTR just discussed operations	11:10:14
that are current that were currently conducted at the	11:10:19
time the DTR was prepared.	11:10:22
Q. But you would agree that knowing that these	11:10:26
different winches, electrical shops, and machine shops	11:10:29
were potential sources of the release of chemicals of	11:10:32
concern to the bay sediment, those the juxtaposition	11:10:36
of those facilities to areas of contamination would be	11:10:44
relevant to assessing the likely source of environmental	11:10:47
impacts, would you not?	11:10:52
A. Yes. If the board wanted to pursue that with a	11:10:57
finer lens, they we would get into detailed source	11:11:01
analysis of the operation.	11:11:05
Q. And we'll mark as exhibit let's just see if	11:11:12
we can go through these rather expeditiously because my	11:11:19
questions are really going to be the same, as they just	11:11:23
were. We're going to mark a 1956 certified Sanborn map	11:11:26
	yeah. BY MR. BENSHOOF: Q. The and no attempt was made to relate those facilities that existed in at the shipyard in 1950, as illustrated on Exhibit 1263, to locations of contaminated sediments; correct? A. Yes. We at the DTR just discussed operations that are current that were currently conducted at the time the DTR was prepared. Q. But you would agree that knowing that these different winches, electrical shops, and machine shops were potential sources of the release of chemicals of concern to the bay sediment, those the juxtaposition of those facilities to areas of contamination would be relevant to assessing the likely source of environmental impacts, would you not? A. Yes. If the board wanted to pursue that with a finer lens, they we would get into detailed source analysis of the operation. Q. And we'll mark as exhibit let's just see if we can go through these rather expeditiously because my questions are really going to be the same, as they just

1	as exhibit next in order.	11:11:30
2	(Exhibit 1264 was marked.)	11:11:31
3	MR. CARRIGAN: Ward, are you going to mark	11:11:42
4	your	11:11:44
5	THE COURT REPORTER: Go ahead.	11:11:44
6	MR. CARRIGAN: highlighted versions?	11:11:44
7.	MR. BENSHOOF: I don't think we're going to need	11:11:46
8	to.	11:11:48
9	MR. CARRIGAN: Okay. Very good.	11:11:48
10	MR. BENSHOOF: Because the questions are going	11:11:49
11	to be general, Mr. Barker.	11:11:50
12	BY MR. BENSHOOF:	11:11:52
13	Q. And am I we'll just looking at 1264, this	11:11:55
14	is another representation of facilities existing in the	11:12:00
15	shipyards during a period when, for example, you're aware	11:12:07
16	that PCBs were in common use in industrial operations,	11:12:10
17	including shipyard operations; correct? The 1950s?	11:12:15
18	A. Yes.	11:12:19
19	Q. And if the board wanted to use a finer lens to	11:12:20
20	attempt to attribute areas of contamination in the bay	11:12:24
21	sediments to specific sources within the shipyards, you	11:12:28
22	agree that, as with the 1950 location of facilities, the	11:12:33
23	board would want to consider the facilities described:	11:12:37
24	Shops, electrical shops, winches, et cetera, on this	11:12:40
25	document in making that finer lens examination; correct?	11:12:46

1	A. Yes.	11:12:56
.2	Q. And again, 1959 was a period in which PCBs were	11:12:57
3	commonly used in industrial operations including	11:13:05
4	shipyards; correct?	11:13:07
5	A. Yes.	11:13:08
6 [.]	Q. And you would agree let me mark as 1265 a	11:13:09
7	1959 certified Sanborn map.	11:13:14
8	(Exhibit 1265 was marked.)	11:13:16
9	BY MR. BENSHOOF:	11:13:23
10	Q. And the questions will be the same.	11:13:23
11	If the board were interested in examining with a	11:13:25
12	finer lens the facilities that were in operation at the	11:13:30
13	shipyards, in inquiring whether or not those facilities	11:13:38
14	were the source of contaminants now found in the bay,	11:13:43
15	this 1959 exhibit would be amongst the information that	11:13:47
16	the board would also want to consider; correct?	11:13:58
17	A. Yes.	11:14:04
18	Q. And now let's move to the post-1962 time frame.	11:14:05
19	And we'll look at exhibit, what we'll mark Exhibit 1266,	11:14:09
20	a 1965 Sanborn map.	11:14:17
21	(Exhibit 1266 was marked.)	11:14:21
22	BY MR. BENSHOOF:	11:14:28
23	Q. And we the facilities stay very similar in	11:14:38
24	these various maps, Mr. Barker. 1265 shows, in addition	11:14:43
25	to the winches and electrical shops and machine shops	11:14:51

1	that we've discussed from the other exhibit, during this	11:14:54
2	time period of 1965, we see that the the right-hand	11:14:57
3	portion of the property on the east has been developed	11:15:02
4	with a large electrical repair shop and parts, electrical	11:15:06
5	equipment storage, and those sorts of facilities, a	11:15:11
6	marine shop. That all appears on the right of the	11:15:16
7	exhibit.	11:15:19
8	MR. DART: Document speaks for itself. Lacks	11:15:20
9, .	foundation.	11:15:21
10	BY MR. BENSHOOF:	11:15:21
11	Q. Yes, on the on the eastern portion of the	11:15:24
12	property?	11:15:26
13	A. Yeah.	11:15:27
14	MR. DART: Same.	11:15:27
15	MR. CARRIGAN: Join.	11:15:28
16	THE WITNESS: Yes, I I see that there's	11:15:28
17	electrical shop.	11:15:30
18	BY MR. BENSHOOF:	11:15:30
19	Q. Okay. And again, same question. If the board	11:15:32
20	wishes to use a finer lens to attempt to determine	11:15:36
21	whether or not the shipyards facilities were the source	11:15:41
22	of contaminants currently found in the bay, this would be	11:15:44
23	useful information to attempt to consider; correct?	11:15:48
24	A. Yeah. With a finer lens. Again, the board has	11:15:58
25	already analyzed information and named the shipyard in	11:16:02

1	the tentative cleanup order.	11:16:08
2	Q. Right. But if the board wanted to put a finer	11:16:11
3	lens on the allegation that SDG&E contributed, for	11:16:14
4	example, to conditions of contamination located in the	11:16:18
5	vicinity of storm drain Outfall No. 4, the board would	11:16:23
6	want to know what facilities did the shipyards have that	11:16:28
7	were located directly adjacent to that. Would you agree,	11:16:33
8	if they wanted to put that finer lens on it?	11:16:37
9	MR. CARRIGAN: Incomplete hypothetical.	11:16:40
10	MR. DART: Join.	11:16:42
11	THE WITNESS: Yes. The board would consider any	11:16:44
12	relevant information on pollutant sources that would have	11:16:46
13	discharged into that storm drain.	11:16:52
14	BY MR. BENSHOOF:	11:16:54
15	Q. And that was that was the purpose of the	11:16:55
16	question. It's not would they need any of this to add	11:16:56
17	the shipyards, because we've agreed that there's plenty	11:17:00
18	of evidence; it's just putting a finer lens on the source	11:17:03
19	of contaminants in particular areas. I take it you would	11:17:07
20	agree it would be helpful if somebody wanted to do that,	11:17:11
21	to look at what facilities existed in those areas;	11:17:14
22	correct?	11:17:18
23	MR CARRIGAN: Incomplete hypothetical.	11:17:19
24	THE WITNESS: Yes.	11:17:23

1	BY MR. BENSHOOF:	11:17:23
2	Q. Then finally let's just look at one final	11:17:25
3	exhibit from the '70s. This is 1976 Sanborn map. And	11:17:27
4	this will be next in order.	11:17:34
5	(Exhibit 1267 was marked.)	11:17:35
6	BY MR. BENSHOOF:	11:17:45
7	Q. Now moving to the time period of 1976, where	11:17:58
8	which this Sanborn map is illustrates. Again, we	11:18:03
9	won't go through each of these facilities in detail,	11:18:08
10	Mr. Barker. Because you see that there are similar shops	11:18:11
11	and winches and storage areas to the facilities we	11:18:14
12	earlier discussed.	11:18:18
13	So my question is, once again, if the board	11:18:19
14	wanted to put a finer lens on what facility is owned by	11:18:22
15.	whom were the source of contaminants to specific areas of	11:18:26
16	the bay, Exhibit 1267 would be amongst the information it	11:18:32
17	could consider.	11:18:36
18	MR. DART: Document speaks for itself. Lacks	11:18:38
19	foundation.	11:18:39
20	MR. CARRIGAN: Incomplete hypothetical. Join.	11:18:40
21	THE WITNESS: Yes.	11:18:49
22	BY MR. BENSHOOF:	11:18:50
23	Q. Now I want to next move to other information	11:18:50
24	that is in the record. We'll begin with 1260	11:18:54
25	THE COURT REPORTER: Eight. Sixty-eight.	11:19:02

		4
1	MR. BENSHOOF: SAR document 163094, SAR document	11:19:04
2	163118, SAR document 163121, SAR document 163129. We've	11:19:11
3	stapled them into one exhibit, Mr. Barker, just for	11:19:20
4	convenience. They're not they're separate documents	11:19:24
5	in the record.	11:19:27
6	(Exhibit 1268 was marked.)	11:19:28
7	BY MR. BENSHOOF:	11:19:35
8	Q. Actually, the first question I wanted to address	11:19:48
9	yourself to was page the second page of the exhibit,	11:19:50
10	3118. And you'll see that's a a map of the shipyard	11:19:56
11	facility, the Southwest Marine shipyard facility. And	11:20:11
12	it's a little bit indistinct in the corner, right-hand	11:20:14
13	corner, Mr. Barker. But the date is year date is '54.	11:20:18
14	But I agree it's relatively hard to read.	11:20:24
15	The now, one of the aspects of this exhibit	11:20:34
16	that I wanted to direct your attention to, Mr. Barker, is	11:20:41
17	in the upper portion of the exhibit, there's something	11:20:47
18	that reads "Transformer Slab," right adjacent to the	11:20:50
19	water. Do you see that? It's it's kind of hard to	11:20:55
20	make out some of these handwritten notations.	11:21:08
21	A. Yes. I see "Transf", T-r-a-n-s-f, "slab."	11:21:10
22	Q. Okay. And then do you see in the following	11:21:17
23	pages that the shipyard is now describing it as a	11:21:20
24	transformer, page 121 and 129, for example. Yard plot	11:21:24
25	plans from 1956 and 1959.	11:21:36

. 1	A. Yes.	11:21:40
2	Q. And you agree that that's a transformer that's	11:21:41
3	located directly adjacent to the water; correct?	11:21:51
. 4	MR. CARRIGAN: Document speaks for itself.	11:21:54
5	THE WITNESS: Yes. The document indicates that.	11:22:00
6	BY MR. BENSHOOF:	11:22:02
7	Q. And you would agree that if the board were	11:22:02
8	interested in putting a finer lens on what was the likely	11:22:04
9	source for PCB impacts in that vicinity, that it might	11:22:09
10	want to look at evidence that there was a transformer	11:22:13
11	located exactly there; correct?	11:22:17
12	MR. CARRIGAN: Incomplete hypothetical.	11:22:18
13	THE WITNESS: Yes.	11:22:21
14	BY MR. BENSHOOF:	11:22:22
15	Q. And you would agree that so far in the process	11:22:24
16	in the DTR, that hasn't been done; correct?	11:22:26
17	MR. CARRIGAN: Asked and answered.	11:22:31
18	THE WITNESS: Yes.	11:22:31
19	BY MR. BENSHOOF:	11:22:31
20	Q. And the same is true for the same question	11:22:34
21	for you'll see that, for example, let's look at	11:22:36
22	page 121. You'll see that directly over the water,	11:22:49
23	that that particular exhibit shows on Pier 2, towards	11:22:55
24	the end of Pier 2, it shows a 5-ton crane. And on	11:23:01
25	Pier 3, it shows a 15-ton crane.	11:23:06

	\cdot	
1	Do you see that both of these are directly over	.11:23:09
2	the water?	11:23:11
3	A. Okay. Yes, I see the crane on Pier 2. And you	11:23:20
4	mentioned another crane.	11:23:26
5	Q. A 5-ton crane on Pier 1.	11:23:28
6	A. Okay. Yes, I see that.	11:23:30
7.	Q. And again, same question. If the board were	11:23:35
8	interested in putting a finer lens on the likely source	11:23:37
9	for contamination to the sediments in the vicinity of	11:23:40
10	those cranes, you would agree that they might want to	11:23:44
11	consider the fact that as to where the shipyards had	11:23:48
12	those cranes located?	11:23:52
13	A. Yes.	11:23:56
14	Q. Next let's mark as 1269 a Bechtel report from	11:24:09
15	November of 1993. SAR 050541.	11:24:20
16	(Exhibit 1269 was marked.)	11:24:21
17	BY MR. BENSHOOF:	11:24:29
18	Q. And I want to just address your attention to	11:24:34
19	page 545. It's a site facility layout. And this, again,	11:24:42
20	it's this report is captioned "A preliminary	11:24:52
21	assessment of the Southwest Marine facility."	11:25:01
22	Do you see that on the first page?	11:25:03
23	A. Yes.	11:25:08
24	Q. And do you see that this report was prepared at	11:25:09
25	the direction of the United States Environmental	11:25:12

1 .	Protection Agency? Do you see that in the introduction?	11:25:15
2	A. Yes.	11:25:20
3	Q. And there's a description in the first page of	11:25:23
4	the report of the apparent problem. Do you see that?	11:25:29
5	A. Yes.	11:25:41
6	Q. And do you did you recognize this Bechtel	11:25:46
7	report at all, Mr. Barker? It does indicate it's stamped	11:25:50
8	received by your agency in 1994.	11:25:55
9	Is this part of what you recollect receiving,	11:26:01
10	the information you recollect receiving describing the	11:26:06
11	extent of environmental impacts caused by the shipyard	11:26:08
12	operation?	11:26:12
13	A. Periodically, we would get these inspection	11:26:14
14	reports, yeah.	11:26:17
15	Q. And you recognize that the Environmental	11:26:22
16	Protection Agency asked for Bechtel to prepare this	11:26:27
17	report to evaluate the extent of the environmental	11:26:32
18	impacts associated with the Southwest Marine shipyard	11:26:37
19	operation?	11:26:40
20	MR. CARRIGAN: Document speaks for itself.	11:26:41
21	Lacks foundation.	11:26:43
22	MR. DART: Join.	11:26:44
23	THE WITNESS: Yes. This was a I understood	11:26:47
24	this these were preliminary assessment reports, yes.	11:26:49
25		

. 1	BY MR. BENSHOOF:	11:26:54
2	Q. And the and the information let's turn to	11:26:56
3	Figure 2-2, "Site Layout." And I'm particularly	11:27:27
4	interested, Mr. Barker, this is this is dated this	11:27:46
5	particular figure, the report is is dated in 1993.	11:27:55
6	But this particular figure illustrates does appear to	11:27:59
, 7	illustrate or the source of it is Southwest Marine's	11:28:03
8	BMP practices plan 1983. Do you see that at the bottom?	11:28:07
9	A. Yes.	11:28:15
10	Q. In any event, the it you see that the	11:28:15
11	report illustrates, beginning at the top, such facilities	11:28:23
12	of concern that as a waste oil waste oil storage	11:28:32
13	yard?	11:28:37
14	MR. CARRIGAN: Document speaks for itself.	11:28:38
15	MR. DART: Join.	11:28:40
16	THE WITNESS: I see a hazardous waste storage	11:28:47
17	yard.	11:28:50
18	BY MR. BENSHOOF:	11:28:50
19	Q. No, I'm just under parking lot?	11:28:51
20	A. Oh, parking lot. I see it.	11:28:53
21	Q. Aboveground waste oil storage tank.	11:28:53
22	A. Yeah, I see that.	11:28:57
23	Q. And you know that that's or do you know that	11:28:58
24	that Southwest Marine facility is on the property	11:29:04
25	subleased from San Diego Gas & Electric?	11:29:07

1,	A. No. I mean, I I understand that there are	11:29:17
2	that there are operations alleged where where BAE's	11:29:24
3	alleged to have had operations on SDG&E's leasehold.	11:29:33
4	Q. Right.	11:29:37
5	A. But that's the extent of my knowledge.	11:29:38
6	Q. All right. Would in terms of we've	11:29:43
7	asked we've covered a number of questions regarding	11:29:45
8	the section that alleged a wastewater pond, SDG&E	11:29:48
9	wastewater pond contributions to sediment contamination.	11:29:54
10	But I take it we had talked about shipyard	11:29:58
11	operations in that area and features on the aerial	11:30:01
12	photographs. I take it you would want to consider the	11:30:04
13	extent to which Southwest Marine wastewater oil storage	11:30:07
14	and steam cleaning wash racks in the vicinity may have	11:30:11
15	contributed to the contamination which the DTR attributes	11:30:15
16	to SDG&E?	11:30:20
17	MR. DART: Document speaks for itself. Assumes	11:30:23
18	facts.	11:30:24
19	MR. CARRIGAN: Same objections. And incomplete	11:30:25
20	hypothetical.	11:30:27
21	THE WITNESS: If we wanted to document in	11:30:31
22	greater detail releases, we would analyze operations in	11:30:32
23	more detail that were held in the vicinity, yes.	11:30:40
24	BY MR. BENSHOOF:	11:30:42
25	Q. There's a do you see that Southwest Marine	11:30:49

1	site layout includes the illustrations of its Marine	11:30:52
2	Railway Operations 1, 2, and 3? Do you see that?	11:30:57
3	A. Yes.	11:31:00
4	Q. And once again, if the board wanted to put a	11:31:01
5	finer lens on the likely source of contaminants to the	11:31:04
6	sediment, it might want to look at the location of the	11:31:08
7	marine railways and where they were in in relationship	11:31:10
8	to areas of sediment contamination; correct?	11:31:15
9	MR. CARRIGAN: Same objection.	11:31:19
10	MR. DART: Join.	11:31:20
11	THE WITNESS: Yes. In a way, the board	11:31:26
12	considered some of these operations and their proximity	11:31:29
13	to the bay and named BAE in the cleanup order on that	11:31:37
14	basis.	11:31:41
15	BY MR. BENSHOOF:	11:31:41
16	Q. You say they were you believe it was	11:31:43
17	generally considered?	11:31:46
18	A. Yeah. Like the marine railways was there	11:31:47
19	were activities on on removing the marine railways	11:31:51
20	that occurred, I believe, during the 1990s. So the I	11:31:57
21	believe the marine railways were discussed in the DTR	11:32:09
22	when we were describing the types of operations	11:32:13
23	Q. Okay.	11:32:18
24	A conducted there. So from that sense, a	11:32:18
25	general sense.	11:32:20

1	Q. Now, let's go and remember I asked you, what was	11:32:21
2	likely if if PCB concentrations were found on the roof	11:32:25
3	of SDG&E's Silvergate facility, what would the likely	11:32:30
4	source be? I asked you some of those questions.	11:32:35
5	A. Yes.	11:32:38
6	Q. So with that in mind, let's look at this	11:32:38
7	exhibit, and let's look at the location of	11:32:40
8	Southwest Marine's blast media waste storage silo.	11:32:43
9	Do you see that?	11:32:52
10	MR. CARRIGAN: Give us a hint.	11:32:56
11	MR. BENSHOOF: Excuse me.	11:32:57
12	MR. CARRIGAN: Got it.	11:32:58
13	BY MR. BENSHOOF:	11:32:59
14	Q. It's near Sampson Street.	11:33:01
15	A. Yes.	11:33:03
16	Q. And you see that that's located actually very	11:33:03
17	close to the SDG&E facility?	11:33:06
18	A. Yes.	11:33:16
19	Q. And you see that that turning at page 557, do	11:33:16
20	you see there's a photograph of, looks like, just piles,	11:33:23
21	open piles, of blast media waste?	11:33:30
22	MR. DART: If that was the question, lacks	11:33:42
23	foundation. The document speaks for itself.	11:33:43
24	MR. CARRIGAN: Join.	11:33:47
25	THE WITNESS: The question was?	11:33:52

1	BY MR. BENSHOOF:	11:33:52
2	Q. Do you see that the photograph that that	11:33:53
3	shows piles of blast media waste, Photograph No. 6?	11:33:57
4	A. Yes, I see that.	11:34:01
5	Q. And you see that by looking at page 545, how	11:34:03
6	close that area is to both SDG&E's facility and	11:34:09
7	Catch Basin No. 1?	11:34:13
8	MR. DART: Same objection. Lacks foundation.	11:34:16
9	Calls for speculation.	11:34:18
10	THE WITNESS: I see a proximity to SDG&E but not	11:34:18
11	Catch Basin 1.	11:34:25
12	BY MR. BENSHOOF:	11:34:26
13	Q. Let's then try to reconstruct where was	11:34:29
14	Catch Basin 1 located off of Sampson Street, do you know?	11:34:34
15	A. I I've not visited that site. So I don't	11:34:42
16	have I can't I'd have to look in the DTR to see if	11:34:45
17	there is a detailed description.	11:34:50
18	Q. Well, there isn't. But let's just use the	11:34:51
19	board's own document. Let's mark as 12 next in order?	11:34:55
20	THE COURT REPORTER: 1270.	11:35:09
21	MR. BENSHOOF: 1270. That wasn't even close to	11:35:09
22	what I was going to say.	11:35:09
23	(Exhibit 1270 was marked.)	11:35:09
24	BY MR. BENSHOOF:	11:35:16
25	Q. This is SAR document 280508. And it's actually	11:35:18

1	the I had marked before, sort of the hand-drawn map	11:35:28
2	that showed the location of Catch Basin 1.	11:35:33
3	And let's this is a fax from Ms. Ruth Kolb to	11:35:35
4	Craig Carlisle which is in the administrative record. It	11:35:39
5	says "Hi, Craig, here are some maps." And it's	11:35:43
6	titled, "Subject: Sampson Street investigation."	11:35:50
7	And the next page, Mr. Barker, 509, is a map;	11:35:54
8	correct?	11:35:58
9	MR. DART: Document speaks for itself. Lacks	11:35:59
10	foundation. He hasn't even been to the site.	11:36:00
11	BY MR. BENSHOOF:	11:36:02
12	Q. Do you recognize that as a map?	11:36:03
13	A. Yes, yes.	11:36:04
14	Q. And that map shows the location on Sampson at	11:36:05
15	the foot of Sampson Street of Catch Basin No. 1; correct?	11:36:10
16	MR. DART: Same objection.	11:36:14
17	MR. CARRIGAN: Speaks for itself.	11:36:15
18	BY MR. BENSHOOF:	11:36:16
19	Q. Now, with that information, Mr. Barker, in	11:36:16
20	looking at the foot of Sampson Street on the previous	11:36:25
21	exhibit, page 50545, and the juxtaposition to that area	11:36:30
22	at the foot of Sampson Street to those piles of	11:36:39
23	Southwest Marine waste that are illustrated on the	11:36:46
24	photograph at 557, do you think the board would want to	11:36:50
25	consider, in terms of attributing a source to the	11:36:53

		11 26 56
1	sediment contaminants in Catch Basin 1, do you think the	11:36:56
2	board would want to consider the piles of waste that are	11:37:00
3	illustrated on the photograph at page 557 of the prior	11:37:04
4	exhibit?	11:37:10
5	MR. CARRIGAN: Incomplete hypothetical.	11:37:11
6	Document speaks for itself.	11:37:12
7,	MR. DART: Join. Lacks foundation. Calls for	11:37:14
8	speculation. Assumes facts not in evidence.	11:37:16
ġ	THE WITNESS: It looks like it's in proximity to	11:37:25
10	it, yes.	11:37:28
11	BY MR. BENSHOOF:	11:37:28
12	Q. I mean, as a fair-minded investigator,	11:37:29
13	somebody's piled a bunch of hazardous waste next to a	11:37:31
14	catch basin, and somebody tells you that contaminants in	11:37:35
15	that catch basin are really from somebody else, you'd	11:37:39
16	want to at least ask yourself, Hmm, maybe we should look	11:37:41
17	at another source, Mr. Halvax's employer; right?	11:37:44
18	MR. DART: Same objections.	11:37:48
19	BY MR. BENSHOOF:	11:37:48
20	Q. And Mr. Halvax was pointing your agency to SDG&E	11:37:49
21	as the source for the contaminants in Catch Basin 1.	11:37:54
22	We've already seen that.	11:38:00
23	My question, Mr. Barker, is, now knowing that	11:38:01
24	BAE had a hazardous waste or had a blast waste storage	11:38:03
25	facility located in the proximity, you'd want to	11:38:05

1	consider, wouldn't you, whether or not the likely source	11:38:10
2	for what's in the catch basin are the piles of waste	11:38:13
3	shown on that Photograph No. 6?	11:38:18
4	MR. CARRIGAN: Incomplete hypothetical.	11:38:20
5	MR. DART: Same objections. Join. Misstates	11:38:21
6	testimony.	11:38:23
7	THE WITNESS: The the order the DTR	11:38:25
8	already alleges that BAE discharged pollutants into the	11:38:27
9	bay through several pathways including SW4 so	11:38:34
10	BY MR. BENSHOOF:	11:38:38
11	Q. Right. But that wasn't my question.	11:38:39
12	My question was let's take a look at the	11:38:41
13	photograph of piles of BAE's waste, Photograph No. 6.	11:38:44
14	It's SAR 5057.	11:38:47
15	A. Okay. 5057.	11:38:52
16	Q. Five yeah, 50557.	11:38:54
17	A. Got it.	11:38:57
18	Q. We've got piles of waste shown. And this is	11:38:59
19	this is its EPA's report showing piles of waste on that	11:39:01
20	property of BAE.	11:39:06
21	A. Yeah.	11:39:07
22	Q. That you've agreed is located in proximity to	11:39:08
23	Catch Basin 1; correct?	11:39:11
24	MR. DART: Same objections.	11:39:14
25	THE WITNESS: Yes.	11:39:15

. 1	BY MR. BENSHOOF:	11:39:15
2	Q. Okay. Or we can go through the maps again, but	11:39:15
3	you've agreed to that.	11:39:19
4	So my question is, as a fair investigation of	11:39:20
5	who caused the contaminated sediments in CB1, wouldn't	11:39:22
6	you want to at least consider whether or not it was the	11:39:26
7	source for	11:39:29
8	A. Yeah. This yeah.	11:39:31
. _, 9	MR. CARRIGAN: Incomplete hypothetical. Go	11:39:32
10	ahead.	11:39:34
11	MR. DART: Same objections.	11:39:34
12	THE WITNESS: The the information in this	11:39:35
13	report is relevant. The operations conducted near that	11:39:37
14	SW1 that were conducted by BAE would all be relevant	11:39:42
15	considerations, yes.	11:39:48
16	BY MR. BENSHOOF:	11:39:49
17	Q. To why there's contamination in Catch Basin 1;	11:39:50
18	correct?	11:39:53
19	MR. DART: Same objections.	11:39:53
20	THE WITNESS: Yes.	11:39:55
21	MR. BENSHOOF: I'm at a breaking point. Should	11:39:57
22	we I can go until noon, or we can it's been	11:39:58
23	MR. CARRIGAN: I know you don't need a break.	11:40:02
24	But this is fine.	11:40:04
25	THE COURT REPORTER: Off the record?	11:40:07

1	MR. CARRIGAN: Yeah, please.	11:40:08
2	THE VIDEOGRAPHER: Time now is 11:40 a.m. Off	11:40:09
3	the record.	11:40:11
4	(A recess was taken.)	11:40:12
5	THE VIDEOGRAPHER: The time now is 12:46 p.m.	12:46:02
6	On the record.	12:46:04
7	BY MR. BENSHOOF:	12:46:04
8	Q. Good afternoon, Mr. Barker. I want to next turn	12:46:07
9	to Section 3.9.2 of the DTR. Would you go to that,	12:46:11
10	please? It's this is in the BAE shipyard section.	12:46:17
11	And it refers to a lawsuit that was brought by the	12:46:23
12	Natural Resource Defense Council against BAE in 1996, and	12:46:26
13	pages pages 3-51.	12:46:32
14	Now, the you see the section, "Court findings	12:46:39
15	and judgments against BAE Systems"?	12:46:42
16	A. Yes.	12:46:45
17	Q. And it refers to a lawsuit that was filed by the	12:46:47
18	Natural Resource Defense Council in 1996 under the Clean	12:46:51
19	Water Act against BAE, charging BAE with violating its	12:46:57
20	NPDES permit requirements. Do you see that?	12:47:01
21	A. Yes.	12:47:05
22	Q. And and the Water Board noted that lawsuit in	12:47:06
23	the DTR. It also went on to describe the conclusions	12:47:12
24	that the judge arrived at after trial; correct?	12:47:14
25	A. Yes.	12:47:18

1	Q. And I I'm so at least those conclusions	12:47:18
2	were deemed significant enough regarding BAE's liability	12:47:24
3	in this instance to quote in the DTR. Is that accurate?	12:47:30
4	A. Yes.	12:47:36
5	Q. And and did you or anybody on your staff look	12:47:37
6	at the evidence underlying the conclusions that the judge	12:47:42
7	reached in 1999 after trial of the case?	12:47:46
8	A. I believe I skimmed over some of the documents.	12:47:51
9.	They and I believe they are in the administrative	12:47:58
10	record, if I'm not mistaken.	12:48:00
11	Q. Okay. Let me ask on some of the specific	12:48:02
12	findings of the judge. And you go on to note that his	12:48:05
13	ruling was appealed all the way to the U.S. Supreme Court	12:48:08
14	by BAE and affirmed.	12:48:14
15	A. Yes.	12:48:16
16	Q. The the court first found that or as you	12:48:20
17	quote, "The plaintiffs had presented convincing evidence	12:48:23
18	that defendant BAE had not made the required inspections	12:48:26
19	that it had claimed to have been made."	12:48:29
20	I take it you regarded that finding of the court	12:48:33
21	with some seriousness in terms of the trustworthiness of	12:48:36
22	the information provided by BAE?	12:48:41
23	A. We we looked at it, that paragraph overall,	12:48:43
24	as just evidence of poor housekeeping. And and I I	12:48:51
25	didn't really look at it in terms of truthfulness of	12:48:57

1	BAE's submittals. We get all kinds of submittals from	12:49:05
2	them.	12:49:10
3	Q. Right.	12:49:11
4	A. We we were we were always concerned with	12:49:12
5	analyzing the submittals and and we the board never	12:49:17
6	got into alleging a dishonest submittal, that kind of	12:49:23
7	thing.	12:49:31
8	Q. Okay. Well, yeah, and I don't want to get into	12:49:31
9	moral terms necessarily. But it struck me that with a	12:49:34
10	judge finding that apparently BAE had not made	12:49:41
11	inspections they claimed to have made, that that would	12:49:44
12	have some significance in terms of the trustworthiness of	12:49:47
13	their information.	12:49:50
14	MR. DART: Asked and answered.	12:49:51
15	BY MR. BENSHOOF:	12:49:51
16	Q. Did it did it not to you, Mr. Barker?	12:49:52
17	MR. DART: Asked and answered.	12:49:55
18	THE WITNESS: Not I the I didn't or	12:49:57
19	the word "trustworthiness" didn't come to mind when I	12:50:03
20	read that. It was more sloppy housekeeping, maybe not	12:50:07
21	even knowing how many inspections that they had actually	12:50:10
22	made, that kind of thing.	12:50:14
23	BY MR. BENSHOOF:	12:50:15
24	Q. Okay.	12:50:15
. 25	The court then went on to find that BAE Systems	12:50:20

1	had not maintained adequate records of the inspections it	12:50:35
2	claimed to have been made with, quote, The result that a	12:50:42
3	large number of inspection reports were missing, closed	12:50:45
4	quote.	12:50:48
5	Did you find that also to be true in your review	12:50:49
6	of BAE's reporting to the board?	12:50:53
7	A. That's not a theme that I'm familiar with, with	12:51:02
8	BAE, as far as I think we had various requirements	12:51:06
9	that they make periodic submittals with various	12:51:14
10	information. And as far as I know, the submittals were	12:51:17
11	made.	12:51:24
12	Q. Okay. But did you look at all into what was the	12:51:25
13	basis for the judge to conclude that BAE had not main	12:51:30
14	maintained adequate records of its inspections, with the	12:51:35
. 15	result that a large number of inspection reports were	12:51:38
16	missing?	12:51:40
17	MR. DART: Asked and answered.	12:51:41
18	MR. CARRIGAN: Join.	12:51:43
19	THE WITNESS: Just did a cursory scan of the	12:51:44
20	court's the the documents where the court's	12:51:48
21	decision was written up but didn't didn't analyze it	12:51:53
22	in detail.	12:51:57
23	BY MR. BENSHOOF:	12:51:58
24	Q. All right.	12:51:58
25	Do you know if that I take it you don't know	12:51:59

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1	whether or not the evidence presented to the court called	12:52:02
2	into question the trustworthiness of individuals at BAE	12:52:07
3	that you were dealing with to provide you information.	12:52:11
4	A. No. I don't I don't remember seeing names in	12:52:14
5	the in the court document.	12:52:17
6	Q. The you see the judge concluded that	12:52:27
7	BAE Systems, the evidence showed that, quote, When	12:52:30
8	violations were reported, they were not always remedied	12:52:38
9	in a timely manner.	12:52:41
10	Do you see that?	12:52:44
11	MR. DART: Where are you referencing, Counsel.	12:52:46
12	MR. BENSHOOF: I'm referencing about the middle	12:52:47
13	portion of that paragraph, where the DTR is summarizing	12:52:49
14	the court's findings.	12:52:53
15	MR. DART: Is that in one of the numbered?	12:52:55
16	MR. BENSHOOF: Three, yeah.	12:52:56
17	MR. DART: Thank you.	12:52:57
18	MR. BENSHOOF: Yeah, "The reports demonstrated a	12:52:58
19	pattern of poor housekeeping and showed that violations	12:52:59
20	when reported were not always remedied in a timely	12:53:03
21	manner."	12:53:07
22	BY MR. BENSHOOF:	12:53:07
23	Q. Do you know what that refers to, Mr. Barker?	12:53:08
24	MR. DART: Vague. Asked and answered.	12:53:11
25	THE WITNESS: Hmm-mm. No. I I wasn't I	12:53:12

1	don't remember correlating those violations with	12:53:26
2	and and cross-checking them with violation or	12:53:31
3	reports submitted to the Water Board, doing that kind of	12:53:35
4	analysis.	12:53:39
5	BY MR. BENSHOOF:	12:53:39
6	Q. Okay.	12:53:40
7	Is it important to the Water Board's	12:53:41
8	implementation of its responsibilities that permit	12:53:43
9	holders remedy violations in a timely matter? I assume	12:53:46
10	it is.	12:53:50
11	A. Yes.	12:53:51
12	Q. And but you don't recall reviewing either the	12:53:51
13	specific evidence that the judge relied upon for finding	12:53:57
14	that they had not done that or, otherwise, looking at the	12:54:00
15	timeliness of BAE's actions and remedying their	12:54:03
16	violations.	12:54:09
17	MR. CARRIGAN: Asked and answered.	12:54:09
18	MR. DART: Joined.	12:54:10
19	THE WITNESS: No. No, we did not get into	12:54:11
20	analyzing how quickly BAE remedied violations that they	12:54:15
21	became aware of.	12:54:25
22	BY MR. BENSHOOF:	12:54:26
23	Q. Now, BAE had provided to the board in connection	12:54:27
24	with the NPDES permitting process plans to or various	12:54:33
25	plans and practices that it represented it would follow	12:54:43

1	to minimize discharges; correct? And comply with the	12:54:46
2	permits?	12:54:50
3	A. Yes.	12:54:51
4	Q. Now, the federal court found that BAE Systems	12:54:52
5	implementation of those plans was inadequate. And that	12:54:55
6	led to significant contributions of pollutants to the	12:54:58
7	BAE Systems leasehold. Do you see that?	12:55:02
8	A. Yes.	12:55:04
9	Q. And did you ever investigate what the federal	12:55:05
10	judge based that conclusion on?	12:55:07
11	MR. DART: Asked and answered.	12:55:15
12	THE WITNESS: Not not not in detail.	12:55:17
13	BY MR. BENSHOOF:	12:55:22
14	Q. And I take it in terms of trying to explain or	12:55:29
15	attribute the contaminants presently found in the bay	12:55:31
16	sediment at that site, I take it you haven't tried to	12:55:36
17 :	review the extent to which BAE's inadequate	12:55:39
18	implementation of its plans led to that led to that	12:55:43
19	contamination; correct?	12:55:46
20	A. I I believe there's statements in the chapter	12:55:47
21	that that quote particular provisions of the permit	12:55:58
22	that BAE was required to implement. For example, best	12:56:05
23	management practices to prevent or reduce discharges.	12:56:11
24	And I can't remember exactly what we commented on, on	12:56:19
25	that. I we we tabulated instances of discharges in	12:56:23

1	one of the tables.	12:56:36
2	Q. Correct. I know that. But at least I didn't	12:56:40
3	find anything in the DTR that was similar to what the	12:56:43
4	federal court found, including I didn't find any	12:56:47
5	observation that BAE had been inadequate in the	12:56:51
6	implementation of its plans. But I just may have missed	12:56:54
7	it.	12:56:57
8	A. No. We we were alleging at one time, not	12:56:58
9	necessarily this version of the DTR, that there had been	12:57:14
10	permit violations by BAE at the site.	12:57:18
11	Q. And do you know if those those allegations	12:57:24
12	were taken out at the request of BA BAE?	12:57:25
13	A. Is that	12:57:33
14	MR. CARRIGAN: I can't tell don't answer the	12:57:34
15	question to the extent it involves a communication from	12:57:36
16	me. If I've told you did B I guess	12:57:40
17	MR. DART: Or in mediation.	12:57:43
18	MR. CARRIGAN: I mean, there's no I don't	12:57:46
19	know if there's anything like that.	12:57:46
20	MR. BENSHOOF: I'll withdraw it.	12:57:48
21	MR. CARRIGAN: I guess	12:57:50
22	MR. BENSHOOF: I don't want to invade any	12:57:51
23	privileges or anything.	12:57:53
24	MR. CARRIGAN: Okay. Yeah.	12:57:54
25	THE WITNESS: Yeah.	12:57:54

1	MR. CARRIGAN: All right. He's withdrawn the	12:57:56
2	question.	12:57:57
3	THE WITNESS: Okay.	12:57:58
4	BY MR. BENSHOOF:	12:57:58
5	Q. Now, the federal court went on to find, quote,	12:58:02
6.	That BAE Systems leasehold within the bay was devoid of	12:58:04
7	life.	12:58:08
8	A. Yes. I I remember that.	12:58:10
9	Q. I take it that's a rather significant finding to	12:58:13
10	make, is it not?	12:58:18
11	A. Yes.	12:58:22
12	Q. And that is that the leasehold, an area of the	12:58:23
13	bay, was devoid of life was something of particular	12:58:27
14	concern to the your board?	12:58:31
15	A. Yes.	12:58:32
16	Q. Now, did you but I take it you didn't look at	12:58:32
17	any of evidence that the judge relied upon to in	12:58:37
18	arriving at conclusion.	12:58:41
19	MR. CARRIGAN: Asked and answered.	12:58:44
20	MR. DART: Join.	12:58:44
-21	THE WITNESS: By the time the answer is no.	12:58:46
22	The at at the time we were summarizing the	12:58:55
23	conclusions of the court, the board had developed its own	12:58:59
24	evidence through the sediment quality investigation about	12:59:03
25	what the status of marine life was at the site and and	12:59:11

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1	what risks to marine life were or public health were	12:59:18
2	posed by the contaminants in the sediments.	12:59:22
3	BY MR. BENSHOOF:	12:59:25
4	Q. Now, the court went on to find, as you've	12:59:26
5	summarized in the DTR, quote, That the evidence	12:59:28
6	conclusively demonstrated that substantial quantities of	12:59:33
7	pollutants from BAE Systems paint blasting operations had	12:59:35
8	entered San Diego Bay in BAE Systems' storm water	12:59:39
9	discharges.	12:59:43
10	Do you see that, Item No. 6?	12:59:44
11	A. Yes.	12:59:55
12	Q. And amongst other places that BAE storm water is	12:59:56
13	discharged to the bay is in Outfall No. 4; correct?	01:00:00
14	A. Yes.	01:00:08
15	Q. And is it fair to say that you didn't look at	01:00:08
16	any of that evidence that the court relied upon to the	01:00:10
17	extent that it would explain some or all of the	01:00:13
18	contaminated conditions in the sediment in the vicinity	01:00:16
19	of Outfall No. 4; correct?	01:00:19
20	A. No, we did not look at what evidence the the	01:00:23
21	court was relying on when they reached these conclusions.	01:00:28
22	Q. You were subpoenaed to appear at that trial; am	01:00:40
23	I correct?	01:00:43
24	A. I don't believe I was, no.	01:00:45
25	Q. Actually, there is in the record a subpoena.	01:00:50

1	But I take it you don't you didn't appear.	01:00:53
2	A. I don't recall appearing.	01:00:57
3	Q. Okay. And you didn't to your and you	01:00:58
4	didn't give any testimony whether by deposition or live	01:01:03
5	appearance in that case?	01:01:06
6	A. I I I don't I don't recall that, no.	01:01:08
7	Q. Okay. I take it nobody from the board has	01:01:18
8	interviewed the witnesses to that that trial that	01:01:23
9	witnessed the different activities of BAE that the judge	01:01:31
10	summarized?	01:01:34
11	A. No. The board has not interviewed any	01:01:35
12	Q. And by board I mean staff.	01:01:39
13	A. Staff. No, the staff has not interviewed any	01:01:41
14	witnesses, with the exception of a phone conversation I	01:01:51
15	had with one of the environmental groups that had filed	01:02:00
16	the lawsuit.	01:02:06
17	Q. And what was that conversation, if you can just	01:02:08
18	summarize it?	01:02:10
19	A. Just just trying to figure out, determine	01:02:11
20	what occurred.	01:02:16
21	Q. In the trial?	01:02:18
22	A. In the trial. It was not an in-depth	01:02:19
23	conversation.	01:02:23
24	Q. I take it you would agree that if the board	01:02:26
25	wants to put a finer lens on the operations of BAE and	01:02:28

1	its predecessors that caused the contamination to the bay	01:02:35
2	sediments, a closer examination of the evidence in the	01:02:41
3	federal case, including interviews with the witnesses,	01:02:44
4	would be something the board could do?	01:02:49
5	MR. CARRIGAN: Incomplete hypothetical.	01:02:50
6	MR. DART: Join.	01:02:52
7	THE WITNESS: Yes. The board could could	01:02:53
8	choose to delve into the details of why the court reached	01:02:55
9	its decision.	01:03:00
10	BY MR. BENSHOOF:	01:03:01
11	Q. And would you agree that that would probably be	01:03:01
12	valuable to understanding the true scale of impacts	01:03:06
13	caused by BAE and its predecessors to the bay sediments?	01:03:09
14	MR. CARRIGAN: Incomplete hypothetical.	01:03:13
15	MR. DART: Join.	01:03:15
16	MR. CARRIGAN: Calls for a legal conclusion.	01:03:15
17	MR. DART: Join.	01:03:17
18	THE WITNESS: The the board in the DTR was	01:03:18
19	only interested in developing evidence to satisfy the	01:03:22
20	requirements of Water Code Section 13304. And and	01:03:26
21	and that was it with with respect to BAE.	01:03:35
22	BY MR. BENSHOOF:	01:03:38
23	Q. And understood. But if the if the anyone	01:03:39
24	was interested and I realize the board wasn't in	01:03:46
25	understanding the true scale of what BAE did to the bay	01:03:51
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1	sediment through its operations, one place to start would	01:03:55
2	be the federal court evidence and the witnesses that	01:04:00
3	testified to the actions of BAE.	01:04:02
4	A. It's one source.	01:04:03
5	MR. DART: Assumes facts.	01:04:04
6	MR. CARRIGAN: Incomplete hypothetical.	01:04:05
7	MR. DART: Lacks foundation. And join.	01:04:07
8	THE WITNESS: That would be one source of	01:04:09
9	information.	01:04:10
10	BY MR. BENSHOOF:	01:04:10
11	Q. Now, let me mark as exhibit next in order 1271 a	01:04:16
12	fact sheet that the board developed in 1997. And I want	01:04:22
13	to just ask if you recognize this. It's SAR No. 50438.	01:04:26
14	(Exhibit 1271 was marked.)	01:04:32
15	THE WITNESS: I I see that this is a fact	01:05:01
16	sheet for a NPDS permit.	01:05:04
17	BY MR. BENSHOOF:	01:05:10
18	Q. And were you involved, Mr. Barker, in the	01:05:11
19	preparation of this document?	01:05:13
20	A. No, I was not.	01:05:14
21	Q. Would you describe just generally what you	01:05:15
22	recognize it as?	01:05:17
23	A. It's a it is one of the elements of an	01:05:18
24	NPDS permit is is a document called the "Fact Sheet,"	01:05:23
25	which is meant to summarize the basis for requirements in	01:05:31

1	the permit and the legal authority, that type of thing.	01:05:35
2	Q. And excuse me do you recognize this as a	01:05:39
3	sheet that was generated by the regional water quality	01:05:41
4	control board to set forth the facts underlying the	01:05:48
, 5	requirements for discharge permits to be imposed on the	01:05:53
6	Southwest Marine and NASSCO ship shipyards?	01:05:57
7	MR. CARRIGAN: Document speaks for itself.	01:06:01
8	THE WITNESS: Yes.	01:06:04
9	BY MR. BENSHOOF:	01:06:05
10	Q. And and I realize that and part of the	01:06:05
11	purpose of this document, is it not, Mr. Barker, to	01:06:11
12	basically explain why the board is making the	01:06:19
13	requirements in the permit that it is regarding a	01:06:21
14	particular discharger?	01:06:25
15	A. Yes.	01:06:26
16	Q. And so in that instance in this fact sheet and	01:06:28
17	in others that support discharge permits, part of the	01:06:32
18	procedure of the board is to attempt thoroughly to	01:06:36
19	describe the operations and the discharges associated	01:06:41
20	with those operations; is that a fair statement?	01:06:44
21	A. Yes.	01:06:47
22	Q. And is that your understanding of what this	01:06:47
23	particular exhibit does with respect to both the	01:06:49
24	Southwest Marine and the NASSCO shipyard operations?	01:06:52
25	A. Yes. That's one of the goals of the documents.	01:06:56

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1	Q. Okay. And pardon me and would it be an	01:06:59
2	accurate source of information today for someone to refer	01:07:10
3	to and rely on for a description of the BAE and NASSCO	01:07:14
4	shipyard operations and the discharges associated there	01:07:20
5	with?	01:07:25
6	MR. DART: Vague as to time. May lack	01:07:26
7	foundation.	01:07:28
8	MR. CARRIGAN: Join the time Objection.	01:07:30
9	THE WITNESS: Since the time of this fact sheet,	01:07:37
10	another at least two more NPDS permits have been reissued	01:07:40
11	to the BAE facility. These permits have a have an	01:07:46
12	effective term of five years. And they are reissued	01:07:54
13	approximately every five years. And the fact sheets are	01:07:58
14	updated as as operations change and that kind of	01:08:01
15	thing. So I there could have could well have been	01:08:05
16	differences in current today's operation versus what	01:08:09
17	was going on in 1997.	01:08:14
18	BY MR. BENSHOOF:	01:08:16
19	Q. Okay.	01:08:16
20	Offhand, do you know of any significant ones	01:08:19
21	that would that would affect the types and nature of	01:08:21
22	discharges from either shipyard?	01:08:25
23	A. Well, one major change has been in the how	01:08:30
24	the facilities deal with storm runoff from the facilities	01:08:39
25	from the first flush, which is a run runoff that	01:08:45

1 .	comes its initial runoff from a rainstorm where it's	01:08:53
2	usually assumed to have the maximum pollutant loading in	01:08:58
3	that is, I believe NASSCO and BAE divert that runoff and	01:09:03
4	send it to the sewer system currently, whereas back in	01:09:10
5	1990s and before, that wasn't done.	01:09:14
6	Q. Okay. It just went into the storm water system?	01:09:17
7	A. Yes.	01:09:20
8	Q. Any other significant difference between today	01:09:23
9	and the 1997 period that you can recall offhand?	01:09:26
10	A. I would imagine, especially since that federal	01:09:31
11	lawsuit that we discussed earlier, that the BMPs have	01:09:34
12	been reviewed and updated and implementation has been	01:09:42
13	tightened.	01:09:47
14	Q. And any others that you would recall offhand	01:09:51
15	that might be different from those reviewed in the fact	01:09:54
16	sheet?	01:09:57
17	A. I can't think of any right now, no.	01:10:11
18	Q. Okay. Now, I want to next move, Mr. Barker, to	01:10:13
19	a report submitted by Environ to the to the your	01:10:22
20	office in February of 2011.	01:10:27
21	Do you recall receiving through San Diego Gas &	01:10:33
22	Electric a report from the Environ firm in about that	01:10:38
23	time frame?	01:10:44
24	A. Yes.	01:10:45
25	Q. And I want to ask you a few questions about	01:10:47

1	that. And let's just mark the text of that document, and	01:10:51
2	then we'll get to the figures separately. But let's mark	01:10:58
3	the text as 1272.	01:11:01
4	(Exhibit 1272 was marked.)	01:11:03
5	MR. BENSHOOF: And you might want to refer to	01:11:16
6	figures for my questions. So let's mark those as	01:11:18
7	collectively as the figures to the Environ report as	01:11:22
8	1273.	01:11:26
9	(Exhibit 1273 was marked.)	01:11:26
10	BY MR. BENSHOOF:	01:11:27
11	Q. And if you need look at the full document,	01:11:36
12	that's here, too.	01:11:38
13	Now, let's let me ask you preliminarily,	01:11:42
14	Mr. Barker, you understood that I take it the Environ	01:11:46
15	report communicated to the board the results of certain	01:11:55
16	soil sampling conducted by the environmental consultant	01:11:58
17	to the Port of San Diego in December of 2010 on the	01:12:03
18	portion of the that portion of property that we talked	01:12:08
19	about before that BAE was subleasing from San Diego Gas &	01:12:12
20	Electric.	01:12:16
21	MR. DART: Document speaks for itself.	01:12:19
22	THE WITNESS: I'm I'm sorry. Could you	01:12:20
23	repeat that question?	01:12:24
24	BY MR. BENSHOOF:	01:12:24
25	Q. Did you well, let's just look at the	01:12:25

1	Exhibit 1272. You see that it begins the report	01:12:28
2	begins, "At the request of San Diego Gas & Electric,	01:12:32
3	SDG&E, Environ International Corporation has prepared	01:12:38
4	this summary letter to present the analytic chemistry	01:12:41
5	results of soil and cooling water solids samples	01:12:45
6	collected in December 2010 from the BAE subleasehold site	01:12:49
7	located in the City of San Diego, California." And	01:12:56
8	referring to the site as Figure 1.	01:13:00
9	Now, had you known that the Port had previous	01:13:07
10	to getting this data, Mr. Barker, that the Port had	01:13:12
11	conducted an investigation of that property with its	01:13:16
12	consultant Ninyo & Moore in December of 2010?	01:13:21
13	A. Was I aware of that investigation?	01:13:27
14	Q. Correct.	01:13:29
15	A. I yeah. I believe I was aware of some	01:13:34
16	investigations the Port was doing. But I didn't have	01:13:36
17	detailed knowledge of them.	01:13:38
18	Q. Okay. Did did the Port ever report to the	01:13:41
19	board what that investigation concluded?	01:13:45
20	A. I as as I recall, I heard well, I might	01:13:48
21	be broaching mediation.	01:13:57
22	Q. Okay. Outside of any attorney-client	01:13:59
23	conversation or mediation conversation, did the report	01:14:02
24	did the Port ever is that all right?	01:14:06
25 ⁻	MR. CARRIGAN: Yeah. I think you can qualify	01:14:08

1	the this is really fresh information. I'm not sure	01:14:10
2	the staff has had time to review or digest this	01:14:14
3	information, as we've been sitting in depositions since	01:14:17
4	this time. But it's so and the same would be true	01:14:19
5	for any report we may have received from the Port. We	01:14:25
6	so you can ask Dave what he recalls about it. But that's	01:14:28
, 7	kind of the status of where we are on catching up on	01:14:35
8	things that are submitted to us.	01:14:38
9	MR. BENSHOOF: Right.	01:14:40
10	MR. CARRIGAN: Anyway, so	01:14:41
11	MR. BENSHOOF: I realize there's been a few	01:14:42
12	things going on since February 10th, 2011.	01:14:45
13	BY MR. BENSHOOF:	.01:14:47
14	Q. But did the outside of the mediation context	01:14:48
15	and any information you received from your counsel, did	01:14:51
16	the Port communicate to you that they had conducted this	01:14:57
17	investigation or any results of the investigation?	01:15:00
18	A. I was aware of an investigation. I've not seen	01:15:05
19	results or reviewed them or anything like that.	01:15:09
20	Q. Okay. So you've received, best you can recall,	01:15:13
21	no written report yet from the Port on their	01:15:18
22	investigation?	01:15:20
23	A. No. I personally have not. I guess it's always	01:15:20
24	possible some submittal was made to the executive officer	01:15:23
25	that I haven't seen. But I'm not aware.	01:15:26

1	Q. Okay. And let me ask, have you had a chance to	01:15:30
2	review the Environ report, Exhibit 1272?	01:15:34
3	A. No.	01:15:38
4	Q. Let me simply go to a couple portions of it.	01:15:45
5	And understanding that you haven't had a chance to	01:15:49
6	thoroughly review it, I think we'll still want to ask you	01:15:53
7	some questions.	01:15:58
8	There is a on the second page, there's a	01:16:00
9	description of the at the top, sample analysis, soil	01:16:09
10	sampling. And there's both a description of the number	01:16:15
11	of soil samples analyzed, 54. And you see Figure 2 on	01:16:21
12	Exhibit 1273, Mr. Barker, you might just open up that and	01:16:30
13	have it alongside. It's a separate exhibit.	01:16:34
14	MR. CARRIGAN: It's the next here we go.	01:16:42
15	THE WITNESS: I see.	01:16:43
16	BY MR. BENSHOOF:	01:16:43
17	Q. Just have that open, if you would. And that	01:16:44
18	exhibit, Figure 2, shows the soil sample locations that	01:16:51
19	the Port chose. And then you see the next page, Figure 3	01:16:55
20	shows that in its investigation the Port also took	01:17:04
21	samples of sediments found in the intake cooling water	01:17:08
22	line and the outfall cooling water lines.	01:17:14
23	Do you see that illustrated?	01:17:17
24	A. Yes.	01:17:19
25	Q. And the I take it you would agree that	01:17:24

of concern to the board for having been the source of contaminants to the bay is something the board would want to do; correct? A. Yeah. If if the Port's data was available, we would want to look at it, yes. Q. Okay. And and you understand that that the Environ report is a communication of that data to the water Board? A. You're you're asking if if I'm aware that Q. The Environ report, 1272 and 1273, figures, constitutes the report to the board of SDGGE's analysis of the split samples taken during the course of that investigation. A. Oh. MR. DART: Lacks foundation. THE WITNESS: I haven't seen the Port's data, I don't know where they collected samples. But this document seems to be indicating let's I'll just have to read it. MR. BENSHCOF: Go right ahead and do that. THE WITNESS: Okay. Figure 2. Okay. I'm reading the paragraph, and I see that 01:19:			
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to do; correct? A. Yeah. If if the Port's data was available, we would want to look at it, yes. Q. Okay. And and you understand that that the Environ report is a communication of that data to the Water Board? A. You're you're asking if if I'm aware that Q. The Environ report, 1272 and 1273, figures, constitutes the report to the board of SDG&E's analysis of the split samples taken during the course of that investigation. A. Oh. MR. DART: Lacks foundation. THE WITNESS: I haven't seen the Port's data, I don't know where they collected samples. But this document seems to be indicating let's I'll just have to read it. MR. BENSHOOF: Go right ahead and do that. THE WITNESS: Okay. Figure 2. Okay. I'm reading the paragraph, and I see that 01:19:	2	of concern to the board for having been the source of	01:17:38
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6 we would want to look at it, yes. 01:17: 7 Q. Okay. And and you understand that that 01:18: 8 the Environ report is a communication of that data to the 01:18: 9 Water Board? 01:18: 10 A. You're you're asking if if I'm aware 01:18: 11 that 01:18: 12 Q. The Environ report, 1272 and 1273, figures, 01:18: 13 constitutes the report to the board of SDG&E's analysis 01:18: 14 of the split samples taken during the course of that 01:18: 15 investigation. 01:18: 16 A. Oh. 01:18: 17 MR. DART: Lacks foundation. 01:18: 18 THE WITNESS: I haven't seen the Port's data, I 01:18: 20 don't know where they collected samples. But this 01:18: 21 have to read it. 01:19: 22 MR. BENSHOOF: Go right ahead and do that. 01:19: 23 THE WITNESS: Okay. Figure 2. 01:19: 24 Okay. I'm reading the paragraph, and I see that 01:19:	4	to do; correct?	01:17:46
Q. Okay. And and you understand that that 01:17: the Environ report is a communication of that data to the 01:18: Water Board? 01:18: A. You're you're asking if if I'm aware 01:18: that 01:18: Q. The Environ report, 1272 and 1273, figures, 01:18: constitutes the report to the board of SDG&E's analysis 01:18: of the split samples taken during the course of that 01:18: investigation. 01:18: A. Oh. 01:18: MR. DART: Lacks foundation. 01:18: don't know where they collected samples. But this 01:18: don't know where they collected samples. But this 01:18: document seems to be indicating let's I'll just 01:19: ANDERSHOOF: Go right ahead and do that. 01:19: THE WITNESS: Okay. Figure 2. 01:19:	5	A. Yeah. If if the Port's data was available,	01:17:50
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10 A. You're you're asking if if I'm aware 01:18: 11 that 01:18: 12 Q. The Environ report, 1272 and 1273, figures, 01:18: 13 constitutes the report to the board of SDG&E's analysis 01:18: 14 of the split samples taken during the course of that 01:18: 15 investigation. 01:18: 16 A. Oh. 01:18: 17 MR. DART: Lacks foundation. 01:18: 18 THE WITNESS: I haven't seen the Port's data, I 01:18: 19 don't know where they collected samples. But this 01:18: 20 document seems to be indicating let's I'll just 01:19: 21 have to read it. 01:19: 22 MR. BENSHOOF: Go right ahead and do that. 01:19: 23 THE WITNESS: Okay. Figure 2. 01:19: 24 Okay. I'm reading the paragraph, and I see that 01:19:	8	the Environ report is a communication of that data to the	01:18:02
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16 A. Oh. 01:18: 17 MR. DART: Lacks foundation. 01:18: 18 THE WITNESS: I haven't seen the Port's data, I 01:18: 19 don't know where they collected samples. But this 01:18: 20 document seems to be indicating let's I'll just 01:19: 21 have to read it. 01:19: 22 MR. BENSHOOF: Go right ahead and do that. 01:19: 23 THE WITNESS: Okay. Figure 2. 01:19: 24 Okay. I'm reading the paragraph, and I see that 01:19:	14	of the split samples taken during the course of that	01:18:34
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THE WITNESS: Okay. Figure 2. Okay. I'm reading the paragraph, and I see that 01:19:	21	have to read it.	01:19:06
Okay. I'm reading the paragraph, and I see that 01:19:	22	MR. BENSHOOF: Go right ahead and do that.	01:19:07
oray. I m reduring one paragraph, and r bee ones	23	THE WITNESS: Okay. Figure 2.	01:19:17
01.10	24	Okay. I'm reading the paragraph, and I see that	01:19:47
25 Environ split the samples with the samples that were 01:19:	25	Environ split the samples with the samples that were	01:19:50

1	collected by Ninyo & Moore and the Port District, yes.	01:19:56
2	BY MR. BENSHOOF:	01:20:01
3	Q. And you see that at Figure 2, there's an	01:20:04
4	illustration set forth of the sample locations.	01:20:14
5	A. Yes.	01:20:17
6	Q. Now, there's keep those open, Mr. Barker.	01:20:18
7	But I want you to refer to a section we discussed before	01:20:28
8	of the DTR, 9.10, at page 9-16. This is the this is	01:20:35
9	the portion of the DTR where the board is reviewing soil	01:20:43
10	sampling data conducted on this property by EMB America	01:20:48
11	in 2004. Do you see that?	01:20:59
12	A. In nine dash excuse me, what section?	01:21:01
13	Q. Section 9.10, and specifically Table 9-7.	01:21:06
14	A. Yes. I see that.	01:21:11
15	Q. And the and it was partly we'd talked	01:21:17
16	before about that the board took note in the earlier	01:21:29
17	sampling work done by ENV America of the chemicals of	01:21:38
18	concern, specifically PCBs and metals. And that's	01:21:45
19	summarized in 9-7; correct?	01:21:49
20	A. Oh, yes.	01:21:54
21	Q. And and then we we see that in work that	01:21:57
22	the Port did in December 2010, at least as reported to	01:22:09
23	you by Environ, there are a significantly larger array of	01:22:13
24	samples conducted over a larger area of that property;	01:22:19
25	correct? It's not just focused on the wastewater pond	01:22:22

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1	area; it's focused on the whole sublease area.	01:22:26
2	MR. DART: Lacks foundation. Document speaks	01:22:30
3	for itself.	01:22:31
4	MR. CARRIGAN: Document speaks for itself.	01:22:33
5	THE WITNESS: Yes. It seems to be in a more	01:22:34
6	expanded area, I guess.	01:22:36
7	BY MR. BENSHOOF:	01:22:36
8	Q. Now, would you agree that with a with a	01:22:37
9	that generally, if the wastewater ponds that are	01:22:43
10	discussed in Section 9.10 were a source of PCB	01:22:47
11	contamination to the bay, that PCB would be appearing in	01:22:53
12	the samples taken by the Port?	01:22:59
13	MR. CARRIGAN: Calls for expert testimony.	01:23:02
14	Incomplete hypothetical.	01:23:04
15	MR. DART: Join.	01:23:06
16	THE WITNESS: I guess I would expect that, but	01:23:20
17	it's not necessarily an an outcome. The soil sampling	01:23:28
18	in the environment can be very transitory as far as the	01:23:42
19	levels found, particularly in areas where land use	01:23:46
20	patterns are changing or activities are changing, which	01:23:49
21	the board wouldn't have knowledge of, which could affect	01:23:53
22	the levels. But	01:23:56
23	BY MR. BENSHOOF:	01:23:57
24	Q. Let me ask but you generally would have	01:23:59
25	expected it to show up. But there are reasons why it	01:24:01

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1	might not. Is that a fair statement?	01:24:05
2	A. PCBs, one of the properties is they're very	01:24:07
3	persistent in the environment.	01:24:10
4	Q. So you would expect them to be there?	01:24:12
5	A. Yes.	01:24:14
6	Q. And I want you to and obviously, the one	01:24:15
7	surmises that the Port expected them to be there, too,	01:24:20
8	because that's why they went to all that effort.	01:24:24
9	Would one	01:24:26
10	MR. BROWN: Objection. Calls for speculation.	01:24:27
11	MR. BENSHOOF: Would that well, that's	01:24:28
12	probably true. I'll withdraw the question.	01:24:29
13	BY MR. BENSHOOF:	01:24:36
14	Q. Let me ask you to look at Table 2 of the I'm	01:24:37
15	sorry. I'm now back on the Environ report, Table 2, not	01:24:40
16	Figure 2.	01:24:45
17	MR. CARRIGAN: Oh, I'm sorry.	01:24:46
18	MR. BENSHOOF: Five minutes left on the tape.	01:24:58
19	But I'll just try to complete a couple of these	01:25:00
20	questions.	01:25:03
21	BY MR. BENSHOOF:	01:25:03
22	Q. You see that Table 2 sets forth the results for	01:25:04
23	PCBs, as at least as recorded by Environ and the split	01:25:09
24	samples it took from the Port's investigation?	01:25:15
25	MR. DART: Lacks foundation. The document	01:25:18

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1	speaks for itself.	01:25:19
2	THE WITNESS: Yes.	01:25:22
3	BY MR. BENSHOOF:	01:25:22
4	Q. And I take it that in your consideration as to	01:25:23
5	whether or not any ponds maintained by SDG&E on this	01:25:27
6	property contributed PCB contamination to the bay, you	01:25:32
7	would want to consider this information, would you not?	01:25:36
8	A. Yes. It's relevant information.	01:25:41
9	Q. And I'll read what Environ how Environ	01:25:44
10	describes this data. And let me just you you go	01:25:57
11	ahead and continue to look at it. I want to know if you	01:25:58
12	would concur with Environ's observation.	01:26:02
13	And they describe, referring to this table, they	01:26:06
14	state, "Average concentrations of total PCB aroclors and	01:26:08
15	total PAHs in soils in the 2010 investigation were an	01:26:13
16	order of magnitude lower than average concentrations in	01:26:20
17	soils measured previously by ENV America, 2004, and were	01:26:23
18	one to two orders of magnitude lower than average	01:26:28
19	concentrations measured in San Diego Bay sediment within	01:26:32
20	the 'inside SWM' area."	01:26:36
21	Would you agree with that general statement,	01:26:42
22	Mr. Barker, looking at Table 2?	01:26:43
23	MR. CARRIGAN: Document speaks for itself.	01:26:47
24	MR. DART: Join. Lacks foundation.	01:26:49
25	THE WITNESS: To me, it's like comparing apples	01:27:09

1	and oranges. This is one sample survey had a larger	01:27:13
2	number of samples to to average over.	01:27:26
3	And so to compare the average from however many	01:27:29
4	samples this was was it 32, 31 to a to the	01:27:36
5	average value attained from a fewer sampling points, and	01:27:42
6	pointing out that the average from the larger group is	01:27:49
7	smaller than the other, I don't know that I could I	01:27:54
8	would take note of that but want to do more comparisons.	01:27:59
9	BY MR. BENSHOOF:	01:28:06
10	Q. Okay. And you would want to look at the not	01:28:09
11	just the average but the individual results; correct?	01:28:11
12	A. Yes. I'd like to would like to correlate	01:28:14
13	particular points where samples were collected and try to	01:28:18
14	correlate that with where the other samples were	01:28:21
15	collected.	01:28:26
16	Q. Disregarding the the average, why don't you	01:28:28
17	just look at the far right column, "Total Aroclors",	01:28:31
18	Total PCB Aroclors" on Table 2.	01:28:36
19	Wouldn't you agree that the concentrations	01:28:40
20	detected are, for the most part, beneath the cleanup	01:28:42
21	values that have been set for this site?	01:28:47
22	MR. CARRIGAN: Document speaks for itself.	01:28:51
23	MR. DART: Join. Lacks foundation.	01:28:52
24	MR. BENSHOOF: I only see, like, two instances	01:28:57
25	where it's not. But perhaps I'm just misreading it.	01:28:59

1	THE WITNESS: I I need to look at the cleanup	01:29:03
2	order just to get in mind what the cleanup value was.	01:29:05
. 3	MR. BENSHOOF: Okay.	01:29:09
4	MR. CARRIGAN: But we'll take your	01:29:09
5	representation as accurate, Counsel, if you have a	01:29:11
6	counsel for the witness.	01:29:15
7	BY MR. BENSHOOF:	01:29:16
8	Q. Yeah. Page 32-12 indicates that the PCBs, the	01:29:17
9	post post remedial SWAC value is 194 parts per billion	01:29:22
10	or .194 parts per million. Do you want to just verify	01:29:30
11	that?	01:29:35
12	A. Yeah. 194 parts per billion, yes.	01:29:41
13	Q. And I if you look at the data, doesn't it	01:29:46
14	indicate that in the 41 samples there are three instances	01:29:49
15	where the values are higher than that?	01:29:59
16	MR. CARRIGAN: Document speaks for itself.	01:30:01
17	MR. DART: Join.	01:30:03
18	THE WITNESS: Let's see. I see one, two, three,	01:30:12
19	four	01:30:20
20	MR. BENSHOOF: Should we change tapes?	01:30:36
21	THE WITNESS: Five.	01:30:38
22	MR. BENSHOOF: Five. We'll change types.	01:30:39
23	MR. CARRIGAN: We'll go off the record. Five is	01:30:40
24	the answer, though.	01:30:42
25	THE VIDEOGRAPHER: This ends Videotape No. 2 in	01:30:43

1	the deposition of David Barker, Volume No. 4. Today's	01:30:44
2	date is March 10th, 2011. The time is now 1:31 p.m.	01:30:48
3,	Off the record.	01:30:53
4	(A recess was taken.)	01:30:55
5	THE VIDEOGRAPHER: This begins Videotape No. 3	01:41:00
6	in the deposition of David Barker, Volume No. 4. Today's	01:41:02
7	date is March 10th, 2011. The time is 1:41 p.m. On	01:41:07
8	the record.	01:41:13
9	BY MR. BENSHOOF:	01:41:13
10	Q. Mr. Barker, I wanted to ask you some further	01:41:17
11	questions on Table 2, so you've got the exhibit open to	01:41:19
12	that table.	01:41:24
13	A. Yes.	01:41:25
14	Q. In the far right column, total PCB aroclors, a	01:41:25
15	number of the entries have a less than particular number.	01:41:29
16	And is that your understanding that that's generally an	01:41:33
17	entry that reflects that the well, what does it	01:41:36
18	reflect in your understanding? Let me just have you	01:41:44
19	express it in your words.	01:41:46
20	A. It that the level has been quantified to	01:41:48
21	the within the level of detection of the test method	01:41:53
22	employed.	01:41:56
23	Q. So it's when it's a less than symbol there,	01:41:57
24	it's, basically, whatever's there is less than what the	01:42:01
25	instrument can detect?	01:42:06

1	A. Yes.	01:42:07
2	Q. So it's either nothing or at least it's nothing	01:42:07
3	than what it could detect?	01:42:12
4	A. Yes.	01:42:14
5	Q. Okay. Now, you'll notice that let's go to	01:42:16
6	Figure 4. Could you open that up? And let's look at	01:42:19
7	where the Port chose to do its sampling.	01:42:22
8	The Port had a or there was a there is in	01:42:33
9	the record an aerial photograph, and I believe it's	01:42:36
10	referred to in the DTR, in the 1950s, '53 period, that	01:42:40
11	shows the cooling water pond utilized by SDG&E in the	01:42:45
12	upper right of the property, if you will.	01:42:50
13	Do you see that pond?	01:42:53
14	A. Just to make sure we're looking at the same	01:43:01
15	thing.	01:43:02
16	Q. Yes. Yes. And you see that the Port chose to	01:43:03
17 .	put a number of borings either in or in the immediate	01:43:06
18	vicinity of that area?	01:43:10
19	A. Yes.	01:43:11
20	Q. And it it's sort of hard to read against the	01:43:12
21	background of that print. But looking at Figure 2,	01:43:16
22	turning to Figure 2, Mr. Barker, I think you will agree	01:43:24
23	that the borings the Port's borings, SB15, 16, 13, and	01:43:32
24	11, were all intended to target the pond area. And for	01:43:39
25	that matter, ten.	01:43:47

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1	MR. DART: Lacks foundation.	01:43:51
2	THE WITNESS: I yeah. The only thing I could	01:43:56
3	agree on is they are look like they're in the vicinity	01:43:59
4	of the pond. But I was not involved with the Port's	01:44:02
5	MR. BENSHOOF: Choices?	01:44:08
6	THE WITNESS: choices of sites or the details	01:44:09
7	of their investigation. And this is really the first day	01:44:11
8	I've even looked at this document we're referring to.	01:44:15
9	BY MR. BENSHOOF:	01:44:18
10	Q. Fair enough. And I just want to just ask,	01:44:19
11	looking at the locations chosen by the Port and and	01:44:24
12	then looking at the results for those borings, 16, 15,	01:44:30
13	13, 11, you see that all of those were basically	01:44:37
14	nondetect, correct, for PCBs? If you look at Table 2.	01:44:43
15	MR. DART: Document speaks for itself.	01:44:48
16	MR. CARRIGAN: I'll join that.	01:44:50
17	MR. BENSHOOF: I'm looking at ten, 11, 13, 14,	01:44:56
18	15.	01:45:00
19	MR. CARRIGAN: Okay. Your list is growing.	01:45:03
20	We'll look at ten, 11, 13, 15, 16.	01:45:05
21	THE WITNESS: Ten. Okay. Ten was below the	01:45:11
22	limit of detection. Well, there's there was one value	01:45:12
23	at 11 that was above the limit of detection. Thirteen.	01:45:20
24	MR. CARRIGAN: Thirteen.	01:45:33
25	THE WITNESS: Thirteen was all three values	01:45:34

1	were excuse me four values were below the limit of	01:45:36
2	detection.	01:45:41
3	MR. CARRIGAN: Fifteen.	01:45:45
4	THE WITNESS: And then 15, two looks like two	01:45:46
5	sample results. One was above the limit of detection,	01:45:53
6	and one was below the limit of detection.	01:45:57
7 .	MR. CARRIGAN: And 16.	01:46:02
8	THE WITNESS: Sixteen, both values were below	01:46:07
9	the limit of detection.	01:46:10
10	BY MR. BENSHOOF:	01:46:11
11	Q. Now, would you agree that if that if, in	01:46:12
12	fact, the wastewater ponds was the source of any	01:46:19
13	significant PCB contribution to the bay, the Port should	01:46:29
14	have found evidence of that in those borings that we've	01:46:34
15	just looked at?	01:46:37
16	MR. CARRIGAN: Incomplete hypothetical. Calls	01:46:38
17	for expert testimony. Lacks foundation.	01:46:40
18	MR. DART: Join. And it's vague.	01:46:44
19	THE WITNESS: No. I I since I wasn't	01:46:47
20	involved in the design of the investigation or privy to	01:46:51
21	the considerations that were made in the design, I	01:46:56
22	I I can't conclude that one way or the other.	01:47:00
23	BY MR. BENSHOOF:	01:47:07
24	Q. Okay. I take it you would agree that you would	01:47:08
25	want to consider this additional data in reconsidering	01:47:11

1	Section 9.10 of the DTR; correct?	01:47:20
2	A. Yes. I would want to consider this information,	01:47:24
3	yes.	01:47:27
4	Q. And if you were to confirm that the borings we	01:47:28
5	just looked at by virtue of aerial photograph or talking	01:47:34
6	with the Port, if you were to confirm that those borings	01:47:38
7	were selected in order to try to detect PCB in the area	01:47:43
8	of the former wastewater pond, would you agree that the	01:47:46
9	results tend to indicate the opposite?	01:47:50
10	MR. CARRIGAN: Same objections.	01:47:53
11	MR. DART: Join.	01:47:54
12	THE WITNESS: I would it's not conclusive one	01:47:57
13	way or the other. It's the larger number of samples	01:48:07
14	were below the limit of detection. I think it was two	01:48:11
15	samples were above.	01:48:16
16	BY MR. BENSHOOF:	01:48:19
17	Q. Okay. And I take it you would you would	01:48:20
18	agree that that that tends that data tends to put a	01:48:23
19	different characterization on the constituents in this	01:48:30
20	area than Table 9-7 does.	01:48:34
21	MR. CARRIGAN: Calls for expert opinion. Vague.	01:48:37
22	Lacks foundation.	01:48:41
23	MR. DART: Join.	01:48:42
24	THE WITNESS: I would I would just I would	01:48:44
25	want to correlate the sample results with the sample	01:48:46

1	locations used for 9-7 and and just consider how the	01:48:50
2	sample values may or how the PCB levels may have been	01:49:04
3	influenced over time at that site. It's just, like, more	01:49:08
4	information to consider and weigh and factor in.	01:49:14
5	BY MR. BENSHOOF:	01:49:17
6	Q. And in that process would you also want to	01:49:20
7	consider that one of the highest readings let's look	01:49:31
8	at sample result reported for SB32 of point of .415.	01:49:42
9	A. Okay. I see that. Now let me see where that	01:49:57
10	was collected. Okay. I've got it.	01:50:00
11	Q. Do you see that if you look at Figure 5, the	01:50:07
12	area of one of the highest PCB hits during the Port's	01:50:10
13	investigation was collected from an area on the property	01:50:14
14	that's immediately adjacent to the the outline of one	01:50:18
15	of the ships that was on the property during the period	01:50:22
16	it was used by Southwest Marine. Do you see that?	01:50:25
17	MR. CARRIGAN: Vague. Document speaks for	01:50:29
18	itself.	01:50:30
19	MR. DART: Join. No foundation.	01:50:32
20	THE WITNESS: I I see that the samples have	01:50:38
21	been overlaid with the 1958 photograph, yes.	01:50:39
22	BY MR. BENSHOOF:	01:50:43
23	Q. And you see this area which one of where one	01:50:43
24	of the highest reported results was on the leasehold is	01:50:47
25	not in the area north of the pond or north in the	01:50:52

1	pond area but, in fact, is adjacent to the figure of a	01:50:53
2	ship that sits on the site, correct, in this photograph?	01:50:56
3	MR. CARRIGAN: Document speaks for itself.	01:51:02
4	MR. DART: Same objections.	01:51:04
5	THE WITNESS: Yeah. I I would agree that the	01:51:05
6	sample location I mean, it's in this picture it's	01:51:07
7	closer to the ship that's been overlaid on the	01:51:20
8	photograph.	01:51:22
9	Q. And that would be information you would want to	01:51:23
10	consider in determining whether and to what extent BAE's	01:51:26
11	operations on that property, in fact, contributed to the	01:51:31
12	PCB levels that are located there; correct?	01:51:33
13	A. Yes, we would	01:51:37
14	MR. DART: Same objections and assumes facts.	01:51:37
15	THE WITNESS: We would look at that information,	01:51:41
16	yes.	01:51:44
17	BY MR. BENSHOOF:	01:51:50
18	Q. Now, in the the in your prior answer, you	01:51:52
19	referred to, I guess, the passage of time generally. And	01:51:54
20	I was I need to ask, Mr. Barker, I take it that given	01:51:59
21	the persistency of PCBs in the environment, you're not	01:52:06
22	suggesting, are you, that somehow PCBs would have	01:52:10
23	diminished in time on this property between the 2004	01:52:17
24	investigation reflected in Table 9-7 and the Port's	01:52:20
25	investigation six years later?	01:52:22

1	A. There if these are evidence of legacy	01:52:26
2	discharges and it's it could be there could be	01:52:32
3	various explanations for why levels might fluctuate in	01:52:40
4	in the environment through storm water runoff, for	01:52:43
5	example, might be one.	01:52:51
6	Q. And how would that cause it to fluctuate?	01:52:54
. 7	A. Just washing sediment, contaminated soil from	01:52:56
8	one portion of a leasehold to another would be a	01:53:06
9	possibility.	01:53:10
10	Q. Of diminishing the concentrations?	01:53:14
11	A. Possibly, yes, through dispersion, I guess.	01:53:16
12	Q. All right.	01:53:22
13	So I take it part of what you would want to do	01:53:22
14	in evaluating the Port data would be to look at those	01:53:24
15	kinds of factors to attempt to make a judgment, are those	01:53:29
16	legacy discharges or somehow these concentrations are the	01:53:34
17	result of the concentrations moving over time.	01:53:46
18	A. Yes.	01:53:48
19	Q. Okay.	01:53:49
20	A. Fluctuations in the levels.	01:53:51
21	Q. Right.	01:53:55
22	A. I might note that the aroclor measurements, the	01:53:56
23	PCB aroclor is a mixture of PCB congeners. And the	01:54:10
24	chemistry of that make up can can fluctuate due to	01:54:19
25	weathering and that type of thing.	01:54:23

1	Q. Yeah. And and the right. And we're	01:54:28
2	just I'm not I guess I missed the point of your	01:54:40
3	observation, Mr. Barker.	01:54:44
4	A. I'm just saying	01:54:47
5	Q. Could you	01:54:48
6	A there could be fluctuations in the in the	01:54:50
7	concentrations of the relative concentrations between the	01:54:53
8	aroclors where something that was one particular aroclor	01:54:57
9	at a particular point in time might show up later at	01:55:05
10	another time as as as where the mixtures of the	01:55:08
11	congeners that make up that aroclor, the proportions of	01:55:14
12	them have changed.	01:55:18
13	Q. Due to what?	01:55:19
14	A. Due to weathering.	01:55:20
15	Q. Has that been something, an inquiry that you've	01:55:25
16	made at any portion of this site?	01:55:31
17	A. No.	01:55:33
18	Q. So what you're describing as possibilities, I	01:55:36
. 19	take it you agree are are rather speculative at this	01:55:40
20	point in time?	01:55:45
21	A. Yes. But yes.	01:55:48
22	Q. And are are you talking about a this topic	01:55:53
23	of PCB degradation, is that something that you regard	01:55:58
24	yourself as having expertise in, or is it just something	01:56:02
25	that you're	01:56:05

1	A. Generally aware of.	1:56:08
2	Q. Okay.	1:56:09
3	A. But not an expert in it.	1:56:10
4	Q. Now, were any of these questions raised about 0	1:56:14
5	potential these kinds of degradation factors in	1:56:18
6	connection with putting together Table 9-7?	1:56:24
7	A. Not that I'm aware of, no.	1:56:30
8	Q. So none of those were taken into account in the $^{\circ}$	1:56:31
9	section in in the DTR that we've been focusing on?	1:56:34
10	MR. CARRIGAN: Vague.	1:56:40
11	THE WITNESS: I don't believe so, no.	1:56:42
12	BY MR. BENSHOOF:	1:56:43
13	Q. Now, but obviously, you, now knowing that BAE	1:56:46
14	and and its predecessors utilized this property where $^{\circ}$	1:56:56
15	the wastewater ponds are as we discussed this morning, 0	1:56:58
16	you would want to do further investigation into the 0	1:57:02
17	extent to which their operations might be responsible for $^{\circ}$	1:57:05
18	what's described in Section 9.10 in the DTR?	1:57:11
19	A. Yes. We would we would consider the	1:57:14
20	information that I've such as the information	1:57:18
21	contained in this letter here, yes.	1:57:24
22	Q. Right. And isn't it also relevant and I	1:57:28
23	think you agreed before that it would be to some	1:57:31
24	extent that if if an area was a source area of	1:57:33
25	impacts, you would expect to find concentrations of a)1:57:41

1	persistent contaminant that are in some proportion to	01:57:46
2	those found in the area to which it was allegedly	01:57:52
3	transported.	01:57:57
4	MR. CARRIGAN: Asked and answered.	01:57:58
5	BY MR. BENSHOOF:	01:57:58
6	Q. Does that question make sense?	01:58:00
7	A. I'm I'm having a hard time following that	01:58:01
. 8	one.	01:58:04
9	Q. The the let's just look again at Table 2.	01:58:05
10	And you would agree that those results in Table 2 of	01:58:11
11	total PCB aroclors are substantially beneath results	01:58:16
12	reported in the sediment in the bay; correct? I mean,	01:58:21
13	Environ used the term "orders of magnitude." And would	01:58:25
14	you agree that with that characterization, orders of	01:58:30
15	magnitude less than what's found in the	01:58:34
16	A. I I would want to do my my own comparison.	01:58:37
17	Q. Okay. Fair enough.	01:58:42
18	A. Which I haven't done.	01:58:45
19	Q. Let me just let me just mark for the next in	01:58:46
20	order an exhibit that we prepared for purposes of the	01:58:53
21	questioning, Mr. Barker, that compares all the data, all	01:58:58
22	the data of the Port's investigation and all the the	01:59:03
23	Exponent data that's in the DTR. And I just want to ask	01:59:09
24	you a few questions with regard to what it shows. And	01:59:11
25	again, I know this is this is probably something you'd	01:59:15

1	want to do yourself.	01:59:17
2	MR. DART: Does that withstand a foundation	01:59:25
3	objection then?	01:59:29
4	MR. HANDMACHER: Actually, that what's the	01:59:32
5	exhibit number?	01:59:34
6	MR. BENSHOOF: This is 1274.	01:59:37
7	(Exhibit 1274 was marked.)	01:59:37
8	BY MR. BENSHOOF:	01:59:37
9	Q. Now, understanding that you would want to make	01:59:40
10	your own data summary, Mr. Barker, and so on, but would	01:59:42
11	you agree that the sort of comparison that's reflected on	01:59:50
1,2	Exhibit 1274, assuming it's accurate, is a comparison	01:59:54
13	that's useful to assess whether or not it's reasonable to	01:59:59
14	believe that a source on a particular property, here	02:00:05
15	described as the BAE subleasehold, could have been a	02:00:09
16	significant contributor to the contaminants in the bay	02:00:14
17	sediment that are referred to in the other two columns?	02:00:22
18	MR. DART: Lacks foundation. Calls for	02:00:28
19	speculation. Assumes facts.	02:00:29
20	THE WITNESS: It's	02:00:34
21	BY MR. BENSHOOF:	02:00:34
22	Q. In other words, the question is sort of what I'd	02:00:35
23	asked before. If a if a source exists on a had	02:00:37
24	existed in the form of what the DTR alleges, that is a	02:00:42
25	wastewater pond, the the testing of the sediments in	02:00:46

1	that property ought to show, should it not, levels of	02:00:51
2	contaminant that are that resemble the order of	02:00:57
3	magnitude found in the area to which they were	02:01:01
4	transported.	02:01:07
5	MR. DART: Same objections and vague.	02:01:09
6	MR. CARRIGAN: Join and incomplete hypothetical.	02:01:11
7	THE WITNESS: I'm going to I'm not sure what	02:01:21
8	you're asking me. So I'm going to repeat what I think	02:01:22
9	you're asking me and then answer that question.	02:01:26
10	You seem to be asking me, is it a relevant	02:01:29
11	consideration that samples from an an upland source	02:01:36
12	are significantly less than levels found in the receiving	02:01:46
13	water.	02:01:54
14	BY MR. BENSHOOF:	02:01:54
15	Q. Correct.	02:01:55
16	A. Okay.	02:01:55
17	Q. You're much better at asking my questions than I	02:01:56
18	am.	02:01:59
19	A. And, I mean, that's a consideration in looking	02:01:59
20	at that one one thing, we would consider is once the	02:02:12
21	sediment enters the or the pollutants would enter	02:02:18
22	the the bay, they tend to accumulate. They're not	02:02:21
23	subject to, for example, storm water actions that	02:02:29
24	could could that that could affect the levels.	02:02:35
25	They're they're they're just in the bay. And	02:02:48

1	they're subject to other factors once they're in the bay	02:02:50
2	that could have various effects on the levels but	02:02:53
3	Q. If your own if your own investigation,	02:03:00
4	though, of the data showed, for example, that the that	02:03:03
5	confirms you what this exhibit shows, that the average of	02:03:08
6	the PCB aroclors on the subleasehold was 35 and its	02:03:13
7	maximum was 810, and that compares to SW1, 2 and 4 areas'	02:03:18
8	average of 5,400 and 36,000, I take it you would you	02:03:26
9	would look at that and say that raises a bit of a red	02:03:31
10	flag as to whether or not that property was the source	02:03:34
11	for those numbers would you not, sir? Whether you would	02:03:41
12	conclude conclusively, I'm not asking that. But that	02:03:44
13	would be a red flag in your mind, wouldn't it?	02:03:47
14	MR. DART: Objection. Assume facts. Incomplete	02:03:49
15	hypothetical and lacks foundation.	02:03:51
16	THE WITNESS: Yes. It's a consideration, again.	02:03:53
17	I mean, we would tend I would tend to approach this as	02:03:56
18	a legacy discharge, where the discharge is no longer	02:03:59
19	occurring. And what we're seeing on the upland source	02:04:05
20	might be just the the footprint of the discharge, the	02:04:13
21	trace levels, the remnants of the discharge.	02:04:16
22	And and the fact that those levels are a lot	02:04:22
23	lower than what's in the bay doesn't necessarily rule out	02:04:24
24	that at some point in time it could have been a more	02:04:28
25	significant pathway than what appears at present day.	02:04:30

1	But in the same breath, we would not, of course,	02:04:38
2	ignore the fact that there is a major shipyard also	02:04:42
3	tributary to the same area that could have influenced	02:04:46
4	the that area, as well.	02:04:51
5	BY MR. BENSHOOF:	02:04:53
6	Q. Wouldn't you expect a source area to show a	02:04:59
. 7	greater correlation to the levels in the receiving area	02:05:01
8,	than is shown by this data, assuming it's correct?	02:05:04
9 .	MR. CARRIGAN: Calls for expert testimony.	02:05:06
10	Lacks foundation. Incomplete hypothetical.	02:05:07
11	MR. DART: Join.	02:05:09
12	THE WITNESS: It's it's been our experience	02:05:10
13	in other areas of the bay where where the upland	02:05:14
14	sources levels were quite a bit different than was out in	02:05:26
15	the bay. And yet, in the end, the upland source we were	02:05:30
16	looking at turned out to be the primary source.	02:05:35
17	BY MR. BENSHOOF:	02:05:40
18	Q. So it's not conclusive?	02:05:40
19	A. Yes.	02:05:42
20	Q. And and and yet you did agree that it	02:05:43
21	raises a concern in your mind in looking at data like	02:05:48
22	this as to whether or not the subleasehold could have	02:05:52
23	been a source to the concentrations that are reflected in	02:05:58
24	the bay.	02:06:04
25	A. Well, to look at the data, I would conclude that	02:06:05

1	they are a source but may not be the only source to	02:06:09
2	what's out in the bay.	02:06:12
3	Q. All right. And when you say they are, explain	02:06:13
4	that.	02:06:16
5	A. Or excuse me. That the just and I'm just	02:06:18
6	looking at this table, that the looking at values for	02:06:22
7	PCBs on the the subleasehold, that there are levels of	02:06:25
8	PCBs present there that are levels that are out in the	02:06:34
9	bay. And that's the kind of information we use to make	02:06:39
10	findings to establish a pathway to the bay from a source.	02:06:50
11	Q. There's levels here, there's levels there. But	02:06:55
12	we're talking about does the phrase "order of	02:06:58
13	magnitude," is that one that you're uncomfortable saying,	02:07:02
14	there's an order of magnitude difference between one	02:07:05
15	number and the other?	02:07:08
16	A. No. I no. I would concede that one	02:07:11
17	number the number out in the bay is far higher than	02:07:14
18	the number that's on the leasehold.	02:07:16
19	Q. So you would consider that, and you would	02:07:21
20	consider if it if I'm can accurately summarize our	02:07:24
21	earlier discussion, you'd also consider whether or not	02:07:28
22	the wastewater ponds were the subject for these values in	02:07:32
23	the leasehold, or whether it was the shipyard operations	02:07:41
24	there that we discussed earlier today; correct?	02:07:45
25	A. Yes. It's not it's it's kind of a complex	02:07:50

1	consideration. It's it's there's factors to be	02:07:52
2	weighed.	02:07:57
3	Q. And do you agree that at a very minimum, the	02:07:57
4	Section 9.10 of the DTR should be revised to at least	02:08:01
5	discuss these complex factors?	02:08:05
6	A. The type of information that's contained in your	02:08:10
7	letter, which was not available to us when we prepared	02:08:13
8	this, it's relevant information.	02:08:16
9	Q. Okay.	02:08:19
10	A. Yes.	02:08:20
11	Q. Now, let me go to another section of the DTR.	02:08:22
12	And that's Section 9.8 on page 9-11. It's titled	02:08:38
13	"Unauthorized Discharge of Toxic Pollutants to Land."	02:08:46
14	Could you just glance at that? And I have a	02:09:00
15	number of questions that I'm going to be asking about	02:09:03
16	that section.	02:09:05
17	A. All right. Okay.	02:09:06
18	Q. Now, is does reviewing that Section 9.8,	02:10:56
19	Mr. Barker, refresh your recollection that another	02:10:59
20	allegation that's made in the DTR against SDG&E is the	02:11:04
21	fact that releases of PCBs occurred at in the	02:11:09
22	Silvergate power plant facility that would have been	02:11:17
23	transmitted via storm water runoff to the MS4 storm water	02:11:20
24	system and, ultimately, to the outfall in the bay?	02:11:29
25	A. Yes.	02:11:36

1,	Q. The I should have said the substation;	02:11:39
2	Silvergate substation.	02:11:46
3	And the now, and that allegation was was	02:11:48
4	based, was it not, Mr. Barker, on certain soil samples	02:11:56
5	that were taken in 2006 by the consulting firm of TN and	02:12:08
6	Associates; correct?	02:12:12
7	A. Yes.	02:12:14
8	Q. And in the substation or within the footprint	02:12:14
9	of the substation, the at that particular	02:12:19
10	investigation took 18 samples, and PCB levels were	02:12:23
11	reported in those samples.	02:12:33
12	A. Yes.	02:12:37
13	Q. And let's just identify the report that we're	02:12:38
14	I've been referring to as the next in order, 1275.	02:12:41
15	(Exhibit 1275 was marked.)	02:12:52
16	MR. CARRIGAN: Thank you. And these are	02:12:53
17	excerpts from the report?	02:13:03
18	MR. BENSHOOF: Correct.	02:13:05
19	BY MR. BENSHOOF:	02:13:05
20	Q. And the am I correct that the Table 9-4 of	02:13:06
21	the DTR sought to summarize the the data from those	02:13:16
22	18 samples.	02:13:24
23	A. Yes.	02:13:27
24	Q. Now, and one of the samples, specifically SS12,	02:13:28
25	had a high reading of 125,000 parts per billion or 125	02:13:35

1	parts per million. Do you see that?	02:13:43
2	A. Yes.	02:13:45
3 ;	Q. Now, let me ask you, Mr. Barker, are you aware	02:13:51
4	that I assume you've seen investigations in the past	02:13:54
5	that have reported results, and then subsequent	02:13:58
6	investigations have tended to cast doubt on those results	02:14:05
7	in terms of whether they were, in fact, representative or	02:14:08
8	may have been outliers?	02:14:11
9	A. Yes.	02:14:13
10	Q. And oftentimes that subsequent investigations	02:14:16
11	with a greater sampling focus can help assess whether the	02:14:20
12	reported values are truly represented and what we call	02:14:27
13	outliers are not representative; correct?	02:14:31
14	A. Yes. It can help to provide a fuller picture,	02:14:34
15	yes.	02:14:38
16	Q. Okay. And I would like to, then, next mark	02:14:38
17	further information that was submitted to the board in	02:14:43
18	February 2011 as 1276.	02:14:45
19	(Exhibit 1276 was marked.)	02:14:48
20	BY MR. BENSHOOF:	02:14:48
21	Q. Now, I have put in front of you a further report	02:15:05
22	of TN and Associates, dated February 7th, 2011, that	02:15:15
23	provides additional information with regard to the	02:15:24
24	sampling conducted in 2006.	02:15:26
25	And do you recognize this document as having	02:15:34
	·	

1	been recently received by the Regional Board?	02:15:35
2	A. Yes. I I yeah, I have not reviewed it.	02:15:40
3	It may have come in via SD or SDG&E counsel to myself	02:15:50
4	and Mr. Carrigan.	02:15:59
5	Q. Okay. And do you see that this data represents	02:16:02
6	sampling at an additional 56 locations than what was	02:16:17
7	referred to in the the original report marked as	02:16:23
8	here as Exhibit 1275, that is, sampling stations 19	02:16:31
9	through 74?	02:16:36
10	A. Yeah. I see there is a statement in this	02:16:39
11	document that indicates that, yes.	02:16:42
12	Q. And that and at each of these sampling	02:16:43
13	locations, you see there's a statement indicated in the	02:16:47
14	document that samples were taken at at two intervals	02:16:52
15	at those locations?	02:16:56
16	A. Let's see. Additional I I'm missing the	02:17:04
17	two.	02:17:20
18	Q. Well, depth intervals. And let me just	02:17:21
19	perhaps a simpler way of looking at it is to go to	02:17:26
20	Table 2. And it's several pages.	02:17:29
21	A. All right.	02:17:32
22	Q. And do you see that each sampling location	02:17:33
23	appears to report data from two different depth	02:17:37
24	intervals?	02:17:41
25	A. Yes, I see that.	02:17:42

1	Q. Okay. So we've got approximately 100 additional	02:17:43
	Q. Okay. So we've got approximately 100 additional	02.17.45
2	samples, of sampling data points; correct?	02:17:47
, 3	A. I	02:17:52
4	Q. If that's if that's accurate?	02:17:53
5	A. Yeah, if that's accurate, yes.	02:17:55
6	Q. All right. And I appreciate you haven't had a	02:17:57
7	chance yet to go through this.	02:17:58
8	But I take it to to be able to look through a	02:18:00
9	hundred different or more data points would be important	02:18:05
10	for you to review in order to determine whether any of	02:18:11
11	the data in Table 9-4 is should more accurately be	02:18:13
12	characterized as an outlier.	02:18:21
13	A. Yes. It's supplementary information that	02:18:27
14	that we would consider.	02:18:29
15	Q. Okay. And I want you to look at page 6 of 10 in	02:18:38
16	Table 2. And I guess you may need to take my	02:18:44
17	representation on this because you haven't had time to	02:18:51
18	thoroughly analyze this.	02:18:56
19	But if you look at Sampling Point 51, you'll	02:18:58
20	notice that in the first sample interview, the total	02:19:03
21	aroclors of 7,500 parts per billion is reported at that	02:19:10
22	sampling location.	02:19:19
23	A. At S S51.	02:19:20
24	Q. Correct.	02:19:22
25	A. And I'm on page 6 of 10.	02:19:23

A. Right. Q. Sixty is reported at 4.0. A. Right. Q. Total aroclors are indicated at that sampling point of 7,500 parts per billion; correct? A. Yes. Q. And without spending the time to go through each one of these, I'll represent to you, Mr. Barker, that that's the highest reading obtained in these hundred-plus samples. Okay? Now I'd like you to consider that, that in looking at a more comprehensive data set, the highest reading was 7,500 parts per billion, and ask you whether or not that would be information you would want to consider, Mr. Barker, in determining whether the result reported in Table 9-4 for Sampling Point 12 of 125,000, considerably higher than the highest found in the other data set, might be an outlier. A. Yes. It I mean, they were taken at different points in time. And but resampling of an of an area is done. And that information should be considered. Q. Okay.	*		
A. Right. Q. Sixty is reported at 4.0. A. Right. Q. Total aroclors are indicated at that sampling point of 7,500 parts per billion; correct? A. Yes. Q. And without spending the time to go through each one of these, I'll represent to you, Mr. Barker, that that's the highest reading obtained in these hundred-plus samples. Okay? Now I'd like you to consider that, that in looking at a more comprehensive data set, the highest reading was 7,500 parts per billion, and ask you whether or not that would be information you would want to consider, Mr. Barker, in determining whether the result reported in Table 9-4 for Sampling Point 12 of 125,000, considerably higher than the highest found in the other data set, might be an outlier. A. Yes. It I mean, they were taken at different points in time. And but resampling of an of an area is done. And that information should be considered. Q. Okay.	1	Q. If you look at "Total Aroclors," adding 54 and	02:19:26
Q. Sixty is reported at 4.0. A. Right. Q. Total aroclors are indicated at that sampling point of 7,500 parts per billion; correct? A. Yes. Q. And without spending the time to go through each or one of these, I'll represent to you, Mr. Barker, that that's the highest reading obtained in these hundred-plus samples. Okay? Now I'd like you to consider that, that in looking at a more comprehensive data set, the highest reading was 7,500 parts per billion, and ask you whether or not that would be information you would want to consider, Mr. Barker, in determining whether the result reported in Table 9-4 for Sampling Point 12 of 125,000, considerably higher than the highest found in the other data set, might be an outlier. A. Yes. It I mean, they were taken at different points in time. And but resampling of an of an area is done. And that information should be considered.	2	60, 54 is reported at 3.5.	02:19:30
A. Right. Q. Total aroclors are indicated at that sampling point of 7,500 parts per billion; correct? A. Yes. Q. And without spending the time to go through each one of these, I'll represent to you, Mr. Barker, that that's the highest reading obtained in these hundred-plus samples. Okay? Now I'd like you to consider that, that in looking at a more comprehensive data set, the highest reading was 7,500 parts per billion, and ask you whether or not that would be information you would want to consider, Mr. Barker, in determining whether the result reported in Table 9-4 for Sampling Point 12 of 125,000, considerably higher than the highest found in the other data set, might be an outlier. A. Yes. It I mean, they were taken at different points in time. And but resampling of an of an area is done. And that information should be considered. Q. Okay.	3	A. Right.	02:19:33
Q. Total aroclors are indicated at that sampling point of 7,500 parts per billion; correct? A. Yes. Q. And without spending the time to go through each or one of these, I'll represent to you, Mr. Barker, that that's the highest reading obtained in these hundred-plus samples. Okay? Now I'd like you to consider that, that in looking at a more comprehensive data set, the highest reading was 7,500 parts per billion, and ask you whether or not that would be information you would want to consider, Mr. Barker, in determining whether the result reported in Table 9-4 for Sampling Point 12 of 125,000, considerably higher than the highest found in the other data set, might be an outlier. A. Yes. It I mean, they were taken at different points in time. And but resampling of an of an area is done. And that information should be considered.	4	Q. Sixty is reported at 4.0.	02:19:34
point of 7,500 parts per billion; correct? A. Yes. Q. And without spending the time to go through each or one of these, I'll represent to you, Mr. Barker, that that's the highest reading obtained in these hundred-plus samples. Okay? Now I'd like you to consider that, that in looking at a more comprehensive data set, the highest reading was 7,500 parts per billion, and ask you whether or not that would be information you would want to or consider, Mr. Barker, in determining whether the result reported in Table 9-4 for Sampling Point 12 of 125,000, considerably higher than the highest found in the other data set, might be an outlier. A. Yes. It I mean, they were taken at different points in time. And but resampling of an of an area is done. And that information should be considered.	5	A. Right.	02:19:36
A. Yes. Q. And without spending the time to go through each one of these, I'll represent to you, Mr. Barker, that that's the highest reading obtained in these hundred-plus samples. Okay? Now I'd like you to consider that, that in looking at a more comprehensive data set, the highest reading was 7,500 parts per billion, and ask you whether or not that would be information you would want to consider, Mr. Barker, in determining whether the result reported in Table 9-4 for Sampling Point 12 of 125,000, considerably higher than the highest found in the other data set, might be an outlier. A. Yes. It I mean, they were taken at different points in time. And but resampling of an of an area is done. And that information should be considered. Q. Okay.	6	Q. Total aroclors are indicated at that sampling	02:19:37
Q. And without spending the time to go through each 02 one of these, I'll represent to you, Mr. Barker, that 02 that's the highest reading obtained in these hundred-plus 02 samples. Okay? 02 Now I'd like you to consider that, that in 02 looking at a more comprehensive data set, the highest 03 reading was 7,500 parts per billion, and ask you whether 04 or not that would be information you would want to 05 consider, Mr. Barker, in determining whether the result 05 reported in Table 9-4 for Sampling Point 12 of 125,000, 05 considerably higher than the highest found in the other 05 data set, might be an outlier. 05 A. Yes. It I mean, they were taken at different 05 points in time. And but resampling of an of an 05 area is done. And that information should be considered. 06 02 06 Okay.	7	point of 7,500 parts per billion; correct?	02:19:39
one of these, I'll represent to you, Mr. Barker, that that's the highest reading obtained in these hundred-plus samples. Okay? Now I'd like you to consider that, that in looking at a more comprehensive data set, the highest reading was 7,500 parts per billion, and ask you whether or not that would be information you would want to consider, Mr. Barker, in determining whether the result reported in Table 9-4 for Sampling Point 12 of 125,000, considerably higher than the highest found in the other at Yes. It I mean, they were taken at different points in time. And but resampling of an of an area is done. And that information should be considered. Q. Okay.	8	A. Yes.	02:19:43
that's the highest reading obtained in these hundred-plus 02 samples. Okay? Now I'd like you to consider that, that in 02 looking at a more comprehensive data set, the highest 02 reading was 7,500 parts per billion, and ask you whether 02 or not that would be information you would want to 02 consider, Mr. Barker, in determining whether the result 02 reported in Table 9-4 for Sampling Point 12 of 125,000, 02 considerably higher than the highest found in the other 02 data set, might be an outlier. 02 A. Yes. It I mean, they were taken at different 02 points in time. And but resampling of an of an 02 area is done. And that information should be considered. 02 Q. Okay. 02	. 9	Q. And without spending the time to go through each	02:19:43
samples. Okay? Now I'd like you to consider that, that in looking at a more comprehensive data set, the highest reading was 7,500 parts per billion, and ask you whether or not that would be information you would want to consider, Mr. Barker, in determining whether the result reported in Table 9-4 for Sampling Point 12 of 125,000, considerably higher than the highest found in the other data set, might be an outlier. A. Yes. It I mean, they were taken at different points in time. And but resampling of an of an area is done. And that information should be considered. Q. Okay.	10	one of these, I'll represent to you, Mr. Barker, that	02:19:47
Now I'd like you to consider that, that in 14 looking at a more comprehensive data set, the highest 15 reading was 7,500 parts per billion, and ask you whether 16 or not that would be information you would want to 17 consider, Mr. Barker, in determining whether the result 18 reported in Table 9-4 for Sampling Point 12 of 125,000, 19 considerably higher than the highest found in the other 20 data set, might be an outlier. 21 A. Yes. It I mean, they were taken at different 22 points in time. And but resampling of an of an 23 area is done. And that information should be considered. 24 Q. Okay. 26	11	that's the highest reading obtained in these hundred-plus	02:19:49
looking at a more comprehensive data set, the highest reading was 7,500 parts per billion, and ask you whether or not that would be information you would want to consider, Mr. Barker, in determining whether the result reported in Table 9-4 for Sampling Point 12 of 125,000, considerably higher than the highest found in the other data set, might be an outlier. A. Yes. It I mean, they were taken at different points in time. And but resampling of an of an area is done. And that information should be considered. Q. Okay.	12	samples. Okay?	02:19:55
reading was 7,500 parts per billion, and ask you whether 02 or not that would be information you would want to 02 consider, Mr. Barker, in determining whether the result 02 reported in Table 9-4 for Sampling Point 12 of 125,000, 02 considerably higher than the highest found in the other 02 data set, might be an outlier. 02 data set, might be an outlier. 02 points in time. And but resampling of an of an 02 area is done. And that information should be considered. 02 Q. Okay. 02	13	Now I'd like you to consider that, that in	02:19:57
or not that would be information you would want to 17 consider, Mr. Barker, in determining whether the result 18 reported in Table 9-4 for Sampling Point 12 of 125,000, 19 considerably higher than the highest found in the other 20 data set, might be an outlier. 21 A. Yes. It I mean, they were taken at different 22 points in time. And but resampling of an of an 23 area is done. And that information should be considered. 24 Q. Okay. 26 27 28 29 20 20 20 20 20 20 20 20 20	14	looking at a more comprehensive data set, the highest	02:19:59
consider, Mr. Barker, in determining whether the result reported in Table 9-4 for Sampling Point 12 of 125,000, considerably higher than the highest found in the other data set, might be an outlier. A. Yes. It I mean, they were taken at different points in time. And but resampling of an of an area is done. And that information should be considered. Q. Okay.	15	reading was 7,500 parts per billion, and ask you whether	02:20:04
reported in Table 9-4 for Sampling Point 12 of 125,000, 19 considerably higher than the highest found in the other 20 data set, might be an outlier. 21 A. Yes. It I mean, they were taken at different 22 points in time. And but resampling of an of an 23 area is done. And that information should be considered. Q. Okay. Okay.	16	or not that would be information you would want to	02:20:08
considerably higher than the highest found in the other data set, might be an outlier. A. Yes. It I mean, they were taken at different points in time. And but resampling of an of an area is done. And that information should be considered. Q. Okay.	17	consider, Mr. Barker, in determining whether the result	02:20:11
data set, might be an outlier. 20 A. Yes. It I mean, they were taken at different 02 21 points in time. And but resampling of an of an 02 23 area is done. And that information should be considered. 02 Q. Okay.	18	reported in Table 9-4 for Sampling Point 12 of 125,000,	02:20:14
A. Yes. It I mean, they were taken at different 02 points in time. And but resampling of an of an 02 area is done. And that information should be considered. 02 Q. Okay. 02	19	considerably higher than the highest found in the other	02:20:20
points in time. And but resampling of an of an 02 area is done. And that information should be considered. 02 Q. Okay.	20	data set, might be an outlier.	02:20:26
area is done. And that information should be considered. Q. Okay.	21	A. Yes. It I mean, they were taken at different	02:20:29
Q. Okay.	22	points in time. And but resampling of an of an	02:20:31
Q. Okay.	23	area is done. And that information should be considered.	02:20:40
25 And is it also relevant in your view, 02	24	Q. Okay.	02:20:47
	25	And is it also relevant in your view,	02:20:47

1	Mr. Barker, to the allegations contained in 9.8,	02:21:18
2	unauthorized discharge to land, that as to whether or not	02:21:25
3	the discharges occurred within the containment structure	02:21:31
4	area that was part of the substation?	02:21:40
5	MR. CARRIGAN: Vague.	02:21:47
6	MR. BENSHOOF: Let me rephrase it so it's not	02:22:02
7	vague.	02:22:04
8	BY MR. BENSHOOF:	02:22:04
9	Q. Would you agree with me, Mr. Barker, that if the	02:22:04
10	soil samples reported on Table 9-4, let's assume that	02:22:07
11	they're not outliers, I take it from your prior testimony	02:22:11
12	you would want to review these to determine whether they	02:22:14
13	are outliers, particularly the high one.	02:22:17
14	But assuming they're not, I take it, it would be	02:22:20
15	relevant to you that as to whether or not that those	02:22:23
16	measurements of soil were taken within the area that the	02:22:28
17	DTR earlier describes as having been within a containment	02:22:32
18	area of concrete sumps as part of the spill prevention	02:22:43
19	and control plan measures for secondary containment?	02:22:49
20	MR. CARRIGAN: Where are you reading from,	02:22:53
21	Counsel?	02:22:55
22	MR. BENSHOOF: I'm sorry. It's at 9-3. Let's	02:22:55
23	go back to 9-3 again.	02:22:58
24	BY MR. BENSHOOF:	02:23:04
25	Q. And about the middle of the page, Mr. Barker,	02:23:04

1	the DTR states, "SDG&E reported that the facilities had	02:23:08
2	transformers on site. The transformers were contained	02:23:13
3	within concrete sumps as a part of the spill prevention	02:23:17
4	and control-plan measures for secondary containment for	02:23:21
5	oil storage units," citing to the report of ENV America.	02:23:27
6	And just looking at that, Mr. Barker, would you	02:23:35
7	agree that if the table set forth in the DTR at the	02:23:37
8	section we were just focused on, "Unauthorized Discharges	02:23:50
9	to Land," Section 9.8, if those discharges occurred	02:23:54
10	within the containment structure that's described in the	02:24:01
11	DTR, the assumption of that 9.8 is based on, that any	02:24:05
12	release would have necessarily have traveled into the	02:24:10
13	storm water system, would be incorrect; would you agree	02:24:14
14	with that?	02:24:16
15	A. I	02:24:17
16	MR. CARRIGAN: Compound and vague.	02:24:22
17	THE WITNESS: I'd have to review what we know	02:24:23
18	about the concrete sumps. I don't I've never seen	02:24:26
19	those sumps myself, and I'm not aware of so I really	02:24:37
20	can't comment on it.	02:24:43
21	BY MR. BENSHOOF:	02:24:44
22	Q. Okay. Let's look at the description again.	02:24:44
23	A. Certainly a consideration.	02:24:47
24	Q. Okay. Let's let's look at that, then.	02:24:49
25	Because the reference you do reference a document;	02:24:51

1	correct?	02:24:53
2	A. Yes.	02:24:54
3	Q. To back up your statement in the DTR	02:24:54
4	A. Yes.	02:24:57
5	Q that there were containment structures?	02:24:57
6	A. Yes. Yes.	02:24:59
7	Q. And you referenced the ENV America 2004 report;	02:25:00
. 8	correct?	02:25:03
9	A. Yes. Yes.	02:25:07
1.0	Q. And that appears at SAR 193272 in the	02:25:07
11	administrative record through 193329. And I would just	02:25:13
12	simply for purposes of these questions, Mr. Barker, I've	02:25:18
13	turned the page to 19328, which describes the containment	02:25:21
14	structures present at the Silvergate substation. And I'd	02:25:27
15	like you to just review that, if you could.	02:25:31
16	A. Okay.	02:26:12
17	Q. For the record, that is marked as Exhibit 1020	02:26:13
18	to the Carlisle deposition. Keep that there in front of	02:26:16
19	you. I've got another copy here.	02:26:21
20	And would you agree, Mr. Barker, reading that	02:26:26
21	description, that if the soil results reported in the DTR	02:26:29
22	at Table 9-4 were results of soil within that structure	02:26:37
23	described in the ENV America report, that the assumption	02:26:45
24	of the DTR that any leak or discharge from the	02:26:50
25	transformers would have necessarily found its way into	02:26:54

the storm water conveyance system would be not accurate?	02:26:58
the storm water conveyance system would be not accurate:	02.20.30
MR. CARRIGAN: Incomplete hypothetical.	02:27:02
THE WITNESS: I would agree it's a potential	02:27:07
pathway. It it may have been contained, or maybe it	02:27:10
was not contained.	02:27:18
BY MR. BENSHOOF:	02:27:19
Q. What would you because it's not you would	02:27:22
agree that the DTR does not describe it as merely a	02:27:27
potential pathway. The DTR alleges that the following:	02:27:35
"The PCB, metals, and TPH pollutants" and I'm reading	02:27:44
at page 9-7 so you can follow along. There's nothing	02:27:50
that says "a potential." It says, "They were or would	02:27:55
probably be discharged into San Diego Bay."	02:27:58
Would you agree, Mr. Barker, that that statement	02:28:01
is no longer valid given what you have just read about	02:28:05
the containment structure existing at that facility?	02:28:10
MR. CARRIGAN: Misstates the record. Misstates	02:28:14
facts in evidence.	02:28:16
BY MR. BENSHOOF:	02:28:17
Q. In other words, there would you agree there's	02:28:21
no factual basis for the Regional Board to allege that	02:28:24
the results shown in 9-4 would probably have been	02:28:28
discharged into the bay in view of the extensive	02:28:33
containment structure described?	02:28:38
MR. CARRIGAN: Incomplete hypothetical.	02:28:41
	MR. CARRIGAN: Incomplete hypothetical. THE WITNESS: I would agree it's a potential pathway. It it may have been contained, or maybe it was not contained. BY MR. BENSHOOF: Q. What would you because it's not you would agree that the DTR does not describe it as merely a potential pathway. The DTR alleges that the following: "The PCB, metals, and TPH pollutants" and I'm reading at page 9-7 so you can follow along. There's nothing that says "a potential." It says, "They were or would probably be discharged into San Diego Bay." Would you agree, Mr. Barker, that that statement is no longer valid given what you have just read about the containment structure existing at that facility? MR. CARRIGAN: Misstates the record. Misstates facts in evidence. BY MR. BENSHOOF: Q. In other words, there would you agree there's no factual basis for the Regional Board to allege that the results shown in 9-4 would probably have been discharged into the bay in view of the extensive containment structure described?

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1	THE WITNESS: Could I ask you to point out where	02:28:45
2	in the DTR you you were reading a certain section?	02:28:47
3	BY MR. BENSHOOF:	02:28:51
4	Q. I'm sorry. It's right above Table 9-4. Let me	02:28:51
5	read it all into the record on page 9-12.	02:28:55
6	A. 9-12. Okay.	02:28:59
7	Q. Yeah. I apologize.	02:29:01
. 8	There's a table there, 9-4. And above that, the	02:29:02
9	Regional Board asserts that "PCBs, metals, and TPH	02:29:08
10	pollutants reported in the surface soils were discharged	02:29:13
11	or deposited over a large area where they were or would	02:29:17
12	probably be discharged into San Diego Bay via storm water	02:29:22
13	runoff, creating or threatening to create a condition of	02:29:25
14	pollution or nuisance."	02:29:29
15	Now, my question is related to that allegation,	02:29:31
16	Mr. Barker. And wouldn't you agree that having now	02:29:34
17	become aware of the fact that these samples were taken in	02:29:39
18	the vicinity of a containment structure, wouldn't you	02:29:43
19	agree that there is no evidence that those reported	02:29:48
20	contaminants would probably be discharged into the bay?	02:29:55
21	MR. CARRIGAN: Incomplete hypothetical.	02:30:00
22	THE WITNESS: Let's see. Right my first	02:30:04
23	question or the first thing I'd want to examine is	02:30:07
24	which samples were collected within the containment	02:30:11
25	structure out of the 18 that are cited there in that	02:30:16

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1	table. And I'll that's	02:30:21
2	BY MR. BENSHOOF:	02:30:29
3	Q. Well, let's say No. 12 was. That's that is	02:30:30
4	one sample that the Regional Board was relying upon for	02:30:33
5	its allegation; correct? Just pick one, the highest one.	02:30:39
6	A. Okay. I	02:30:44
7	MR. CARRIGAN: There's no	02:30:49
8	MR. BENSHOOF: Let's say that that	02:30:49
9	MR. CARRIGAN: There's no question pending.	02:30:49
10	BY MR. BENSHOOF:	02:30:50
11	Q. Let's say you were your further investigation	02:30:51
12	concluded that that particular sample was one of several	02:30:57
13	that was located within the containment structure.	02:31:00
14	I take it you would agree that with that	02:31:03
15	background, there would be no substantial evidence to	02:31:08
16	support an assertion that whatever the release was that	02:31:12
17	was associated with that discharge would have probably	02:31:17
18	found its way into the bay.	02:31:21
19	MR. CARRIGAN: Incomplete hypothetical.	02:31:23
20	THE WITNESS: The statement that's above that	02:31:32
21	table seems to be, I believe, was was trying to	02:31:35
22	summarize a conclusion from the table taken in total that	02:31:40
23	the consideration that some of these samples may have	02:31:49
24	been in a containment structure which might have	02:31:53
25	contained them would be certainly a consideration.	02:31:59

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1	But the the containment structure that's	02:32:07
2	described in the in the report is is is not full	02:32:09
3	containment. There's there's possibilities that	02:32:28
4	whatever was contained in that nevertheless left that	02:32:32
5	structure.	02:32:35
6	BY MR. BENSHOOF:	02:32:37
7	Q. But you would agree that that would be	02:32:38
, 8	speculative?	02:32:40
.9	A. Well, examining the evidence in total where	02:32:47
10	there was PCBs found in the soil and PCBs found in the	02:32:51
11	storm drain and PCBs found in the bay, it's it's I	02:32:58
12	don't it's not speculative. It's got more weight than	02:33:04
13	that.	02:33:07
14	Q. But we've already gone through the whole storm	02:33:08
15	drain line of questioning, and you agree that it's now	02:33:11
16	very, very questionable as to whether or not the evidence	02:33:16
17	that you were relying on for there being PCBs from the	02:33:19
18	SDG&E facility, specifically Catch Basin No. 1, even	02:33:25
19	represents anything from the SDG&E facility. You	02:33:32
20	recognize that, don't you, sir?	02:33:36
21	MR. CARRIGAN: Misstates testimony.	02:33:38
22	MR. DART: Join.	02:33:40
23	THE WITNESS: I I we considered evidence	02:33:40
24	of other contributors to the storm drain that's relevant,	02:33:46
25	as we've discussed.	02:33:51

1	BY MR. BENSHOOF:	02:33:53
2	Q. In other words, you're not asserting that the	02:33:56
3	any of the soil sampling at the Silvergate facility is	02:33:59
4	evidence that the is substantial evidence that those	02:34:03
5	contaminants detected in Catch Basin No. 1 were from the	02:34:16
6	SDG&E facility, do you? You I think we talked about	02:34:23
7	the fact that you probably don't wouldn't conclude	02:34:26
8	that there was a PCB source on the roof of that facility.	02:34:30
9	MR. CARRIGAN: Calls for a legal conclusion and	02:34:34
10	misstates witness's testimony.	02:34:36
11	MR. DART: Join. Assumes facts.	02:34:38
12	MR. CARRIGAN: Assumes facts not in the record.	02:34:39
13	THE WITNESS: The the DTR asserts that there	02:34:45
14	is a pathway from from the SDG&E facility to the storm	02:34:49
15	drain. And those are the facts that I'm aware of.	02:34:57
16	BY MR. BENSHOOF:	02:35:00
- 17	Q. Right. But, I mean, an assertion isn't	02:35:01
18	evidence. And so this process is trying to identify what	02:35:04
19	evidence any of that is based on. And I think we agreed	02:35:08
20	in our discussion of let me just go back.	02:35:14
21	Your answer that the claims against SDG&E were	02:35:18
22	not speculative stated that there were PCBs found in the	02:35:23
23	soil and there were PCBs found in the storm drain and the	02:35:33
24	bay. We've already covered the fact that you never asked	02:35:41
25	anyone to do an analysis as to determine whether or not	02:35:48

1	the PCB contamination in the bay could be explained	02:35:55
2	solely by releases from the shipyard; correct?	02:35:58
3	A. Yes, that was correct.	02:36:03
4	Q. Okay. So that question's never even been asked.	02:36:05
5	Now, I take it the same is true for Catch Basin	02:36:08
6	No. 1. Now, you said there was evidence of PCBs in the	02:36:12
7	storm drain. But obviously, no one ever asked anybody to	02:36:17
8	verify that those came from SDG&E correct?	02:36:21
9	A. We we established what we considered a	02:36:28
10	pathway of PCBs leading from the SDG&E facility to the	02:36:39
11	bay.	02:36:45
12	Q. Okay. Now	02:36:46
13	A. And	02:36:47
14	Q. Oh, go ahead. I'm sorry.	02:36:48
15	A. Just, you know, based on the conclusions and	02:36:51
16	data that's in the DTR.	02:36:53
17	Q. And I assume that everything we've talked about	02:36:56
18	over the last couple of deposition sessions, you'd	02:36:59
19	probably want to go back and reconsider that conclusion;	02:37:02
20	is that a fair statement?	02:37:05
21	A. Yeah. We've we've covered the the	02:37:11
22	information we've talked about, I think is it's all	02:37:15
23	relevant. It all meets the criteria that's described in	02:37:18
24	Resolution 92-49. I'm not sure in the end, after	02:37:22
25	considering it all, whether whether it would change	02:37:27

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1	the result.	02:37:32
2	Q. Okay. And that's why we've focused on specific	02:37:34
3	pieces of the broad conclusion that the board has	02:37:37
4	reached. But I take it that after all of our discussion	02:37:41
5	today, you recognize that some doubt exists as to what	02:37:45
6	who who contributed	02:37:49
7	A. Yeah.	02:37:51
8	Q to the contamination in SB or in	02:37:51
9	Catch Basin No. 1; correct?	02:37:54
10	MR. DART: Vague. Lacks foundation.	02:37:58
11	THE WITNESS: There's yeah. I would agree	02:38:02
12	that there's more information the board should consider	02:38:05
13	in the DTR in analyzing that pathway.	02:38:09
14	BY MR. BENSHOOF:	02:38:12
15	Q. And that there may be reasons to disbelieve	02:38:13
16	Mr. Halvax's assertion that SDG&E's facility drained into	02:38:20
17	that catch basin; correct?	02:38:26
18	MR. CARRIGAN: Asked and answered.	02:38:28
19	MR. DART: Join.	02:38:29
20	MR. CARRIGAN: Fifth time over this same topic,	02:38:30
21	Ward? Please, move on.	02:38:32
22	THE WITNESS: Just in my mind, Mr. Halvax's	02:38:43
23	assertion was like an, oh, by the way, bit of	02:38:49
24	information. It was not the primary information we	02:38:56
25	considered in in establishing a pathway for SDG&E.	02:39:00

1	BY MR. BENSHOOF:	02:39:05
2	Q. Okay. And likewise, when you say you're not	02:39:06
3	sure if the board's conclusions would change at all,	02:39:18
4	that's understandable because a lot of this information	02:39:23
5	you've heard for the first time; correct?	02:39:26
6	A. Yes.	02:39:29
7	Q. Okay. You've never seen the aerial photographs	02:39:30
8	before that we went over; correct?	02:39:34
9	A. Yes, yes, yes.	02:39:36
10	Q. You've never you've never seen the Sanborn	02:39:39
11	maps that locate	02:39:42
12	A. No.	02:39:43
13	Q the shipyard facilities. You hadn't known	02:39:43
14	that the 6-inch line that the catch basin drained from a	02:39:47
15	roof and not the facility itself.	02:39:50
16	MR. CARRIGAN: Assumes facts not in evidence.	02:39:52
17	MR. DART: Join.	02:39:54
18	BY MR. BENSHOOF:	02:39:54
19	Q. You hadn't known that the shipyards, at least	02:39:55
20	the sublease area, for 50-some years and had shipbuilding	02:39:57
21	and shipwrecking operations on that area. You hadn't	02:40:02
22	known of the Port's investigation or the results.	02:40:06
23	And I guess the general question would be, even	0,2:40:0,9
24	though you don't know where it would come out, would you	02:40:11
25	make the same recommendations today, knowing now what you	02:40:16

1	know, that you did before, which was to include SDG&E	02:40:21
2	within the tentative cleanup & abatement order?	02:40:26
3	MR. DART: Calls for speculation. Calls for a	02:40:31
4	legal conclusion. Assumes facts. Compound.	02:40:32
5	MR. CARRIGAN: Join all. And incomplete	02:40:36
6	hypothetical.	02:40:39
7	THE WITNESS: Yeah. Again, I would agree that	02:40:41
. 8	all of the information or or or not all, but a	02:40:44
9	lot of the information we've discussed today is relevant	02:40:50
10	to the board's consideration about the degree to which	02:40:54
11	PCB discharges pass through SW4 and in in into the	02:41:00
12	bay.	02:41:05
13	The what I meant by the statement where I	02:41:06
14	said I wasn't sure that it would change the outcome is	02:41:12
15	that under Resolution 92-49, the board is not concerned	.02:41:16
16	with making pronouncements about whether one discharge	02:41:28
17	was a de minimis contribution and another was a a much	02:41:32
18	larger contribution.	02:41:38
19	The the resolution indicates that for a given	02:41:40
20	pollution problem in the bay, that the board should	02:41:47
21	identify responsible parties associated with the	02:41:50
22	discharge. And the degree to which the degree of what	02:41:55
23	party was most accountable for the discharge is is not	02:42:03
24	part of the board's proceedings in the cleanup and	02:42:07
25	abatement order.	02:42:10

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1	BY MR. BENSHOOF:	02:42:11
, 2	Q. And I and you also, I think, explained to us	02:42:13
3	how the board policies require that there be substantial	02:42:17
4	evidence in support of the identifying the discharger;	02:42:21
5	correct?	02:42:27
6	A. Yes.	02:42:30
7	Q. And so my question is, Mr. Barker, as you sit	02:42:30
8	here today, knowing what you now know about the evidence	02:42:36
9	that the DTR relied upon, do you believe that there still	02:42:42
10	exists substantial evidence to identify SDG&E as a	02:42:47
11	discharger?	02:42:50
12	MR. CARRIGAN: Calls for a legal conclusion.	02:42:51
13	MR. DART: Join and same objections.	02:42:53
14	BY MR. BENSHOOF:	02:42:54
15	Q. Or is that something you would want to	02:42:55
16	reconsider after learning what you have over the last	02:42:56
17	couple of days?	02:43:01
18	MR. CARRIGAN: Same objections.	02:43:02
19	MR. DART: Join.	02:43:03
20	THE WITNESS: Part of the board's proceedings is	02:43:04
21	we're going to release the document, the the tentative	02:43:07
22	CAO and the DTR for comment, and allow submission of	02:43:14
23	additional information on all the issues covered in those	02:43:21
24	documents. And and I don't I'm not sure if I'm	02:43:25
25	answering your question. But in that process, we will	02:43:34

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. 1	be, in effect, reconsidering everything that's in the	02:43:37
2	document in in light of new information that might be	02:43:40
3	coming into the board during that period.	02:43:48
4	BY MR. BENSHOOF:	02:43:50
5	Q. I think you tried to answer the question. I	02:43:50
6	don't think you did.	02:43:54
7	MR. CARRIGAN: I think that's a pretty good	02:43:55
8	answer, actually.	02:43:56
9	MR. BENSHOOF: But that's okay. I know	02:43:58
10	you're I know you're making your best efforts to.	02:43:58
11	BY MR. BENSHOOF:	02:44:01
12	Q. I want to get back to as part of that	02:44:09
13	reconsideration, Mr. Barker, I wanted to get back to	02:44:12
14	asking you sort of where we started, which is this	02:44:18
15	whole everything turns on whether somebody or some	02:44:20
16	business caused discharge which creates or threatens to	02:44:26
17	create a condition of pollution or nuisance.	02:44:34
18	A. Yes.	02:44:37
19	Q. And you agreed early on that not just any	02:44:37
20	discharge does that; correct? Not necessarily?	02:44:42
21	A. Yes.	02:44:48
22	Q. There's got to be a pathway; correct?	02:44:50
23	A. Yes.	02:44:52
24	Q. And does did you agree that that in order	02:44:53
25	for a discharge to constitute a something which	02:45:03

1	creates or threatens to create a condition of pollution,	02:45:12
2	there has to be more than a pathway; there has to be a	02:45:15
3	sufficient mass or volume of that discharge to alter the	02:45:19
. 4	quality of the receiving waters to the effect that it	02:45:26
5	unreasonably interferes with the beneficial uses of that	02:45:30
6	water? Is that basically not the test that you	02:45:35
7.7	MR. CARRIGAN: Calls for a legal conclusion.	02:45:38
8	BY MR. BENSHOOF:	02:45:38
9	Q the test that you've applied in your role at	02:45:41
10	the water board for a number of years?	02:45:43
11	MR. CARRIGAN: Calls for a legal conclusion.	02:45:46
12	THE WITNESS: I'm I'll try to answer your	02:46:03
13	question. In in situations where there are more than	02:46:04
14	one discharge to a receiving water, the in determining	02:46:12
15	pollution effects, the board looks at the combined	02:46:23
16	effects of the results of the discharges from all the	02:46:26
17	sources in determining whether pollution conditions have	02:46:32
18	been created, and doesn't try to break down the residue	02:46:38
19	to, well, for example, again, this is a hypothetical.	02:46:44
20	But where discharges are going to the same	02:46:52
21	location, we don't try to determine which which	02:46:55
22	discharge caused the pollution effects. We determine	02:47:01
23	that there was a that there was a discharge into the	02:47:06
24	receiving waters and that the the result of of	02:47:10
25	the all of the discharges into the receiving water has	02:47:18

1	caused or created a pollution, condition of pollution.	02:47:21
2	BY MR. BENSHOOF:	02:47:25
3	Q. So it doesn't make any difference in the board's	.02:47:26
4	mind whether or not a particular entity's release in and	02:47:30
5	of itself would have threatened to create any nuisance	02:47:33
6	or	02:47:37
7	A. Well	02:47:37
8	Q condition of pollution?	02:47:37
9	MR. CARRIGAN: Calls for a legal conclusion.	02:47:39
10	MR. BENSHOOF: No. I meant in his mind as a	02:47:41
11	regulator.	02:47:43
12	BY MR. BENSHOOF:	02:47:43
13	Q. Does that make no difference at all?	02:47:44
14	MR. CARRIGAN: Same objection.	02:47:46
15	THE WITNESS: Well, with respect to to PCB	02:47:47
16	discharges into an area where PCBs are accumulating in	02:47:56
17	the sediments to levels that could adversely affect uses,	02:48:03
18	those discharges are prohibited.	02:48:14
19	BY MR. BENSHOOF:	02:48:16
20	Q. Yeah. And I'm not my question was slightly	02:48:22
21	different. I'm talking about what you and your practice	02:48:25
22	regards as substantial evidence that a party or an entity	02:48:35
23	has created or threatened to create a condition of	02:48:40
24	pollution.	02:48:43
25	And my question, Mr. Barker, was, are you	02:48:44

1	telling me that it's irrelevant to you in making that	02:48:46
2	judgment whether or not that party's discharge was of	02:48:50
3	sufficient mass or volume to alter the quality of the	02:48:56
4	receiving waters and unreasonably interfere with the	02:49:01
5	beneficial uses of that water?	02:49:05
6	MR. CARRIGAN: Calls for a legal conclusion.	02:49:07
7	THE WITNESS: The mass or volume of discharge	02:49:10
8	is is evidence that would be considered in issues	02:49:11
9	involving legacy discharges where the discharges are no	02:49:20
10	longer occurring or or or where the the mass or	02:49:25
,11	volume are unknown. It's problematic figuring those type	02:49:31
12	of factors into the equation. I'm not saying they're	02:49:40
13	ruled out. I'm just saying they are sometimes that	02:49:44
14	information just does not exist.	02:49:51
15	For example, in this case we we don't have	02:49:55
16	data as we would for a sewage treatment plant where the	02:50:04
17	flow is documented on a given day and what the level of a	02:50:08
18	contaminant in the discharge was and and that type of	02:50:13
19	thing. With with the discharges we're talking about	02:50:16
20	today, where some may have been processed wastewater	02:50:21
21	discharges or discharges that occurred where pollutants	02:50:26
22	were washed into the bay over time, mass and volume	02:50:32
23	are are are not known.	02:50:36
24	BY MR. BENSHOOF:	02:50:42
25	Q. Well, actually, they are very well known with	02:50:42

1	regard to the discharges of BAE and Southwest Marine as a	02:50:46
2	result of the monitoring reports required since the	02:50:52
3	1970s; correct? They're very well known.	02:50:57
4	A. I I would say no, they're not known. The	02:51:01
5	the types of monitoring as I mentioned earlier, I	02:51:11
6	believe the board for many years did not did not	02:51:15
7	regulate or did not require monitoring of the sediment.	02:51:21
8	So the board was not in a position to know what kinds of	02:51:28
9	discharges were getting into the bay.	02:51:31
10	The board required implementation of BMPs to	02:51:33
11	control activities. Discharges and the monitoring was	02:51:36
12	not complete monitoring of of of the discharges. I	02:51:48
13	mean, there were some aspects of the operation that were	02:51:52
14	monitored, and where attempts were made to quantify ways	02:51:56
15	such as in the I think one one bit of information	02:52:00
16	we used to ask was how much solid waste was collected and	02:52:05
17	disposed of and that type of thing, sandblast waste. But	02;52:12
18	as far as measuring volumes going in the bay, I don't	02:52:15
19	think so.	02:52:19
20	Q. Well, that was one reason I actually, I asked	02:52:22
21	you whether you bothered to look at the federal court	02:52:25
22	trial evidence. Because the judge there apparently	02:52:28
23	didn't have any difficulty in concluding, quote, The	02:52:30
24	evidence conclusively demonstrated that substantial	02:52:33
25	quantities of pollutants from BAE Systems's	02:52:37

1	paint-blasting operations had entered San Diego Bay in	02:52:40
2	BAE Systems' storm water discharges.	02:52:43
3	So that wasn't an unknown to the federal court.	02:52:48
4	But I guess all these years it's been unknown to the	02:52:51
5	board.	02:52:54
6	MR. DART: Object to the characterization.	02:52:55
7	BY MR. BENSHOOF:	02:52:56
8	Q. The board has no clue as to what historically	02:52:57
9	BAE Systems has been discharging into the bay.	02:53:01
10	MR. CARRIGAN: Argumentative. Misstates the	02:53:04
11	witness's testimony.	02:53:06
12	MR. DART: Join.	02:53:07
13	MR. CARRIGAN: I think it may do you have	02:53:09
14	go ahead.	02:53:11
15	BY MR. BENSHOOF:	02:53:11
16	Q. No.	02:53:12
17	Is it your testimony, Mr. Barker, that you've	02:53:13
18	required all these reports, all this monitoring, going	02:53:14
19	out and sifting the sediment to actually weigh the grams	02:53:19
20	and the sample of paint chips, and all of those reports	02:53:23
21	required over all of these decades by the Water Board has	02:53:27
22	given it no clue as to the extent of impacts caused by	02:53:30
23	BAE Systems, Inc., to this sediment contamination?	02:53:34
24	MR. CARRIGAN: Argumentative.	02:53:38
25	THE WITNESS: The types of monitoring that's	02:53:39

done there is to collect evidence of discharge. But not the type of monitoring done to that could measure and mass of discharge. For instance, in sandblasting activities,	02:53:49 02:53:55 02:53:58
3 volume and mass of discharge.	02:53:55
	02:53:58
4 For instance, in sandblasting activities,	
· · · · · · · · · · · · · · · · · · ·	ction. 02:54:01
5 pollutants could be conveyed into the bay by wind a	
6 The monitoring is not going to detect that kind of	02:54:05
7 release.	02:54:08
For many years, there was no storm water	02:54:10
9 monitoring done at the shipyards. That's only been	a 02:54:13
development since the early '90s. And but the p	eriod 02:54:21
of discharges of concern predate that. So no, the	board 02:54:27
does not have a complete picture on the on the -	- on 02:54:33
the volume and mass of discharges released, just	just 02:54:38
evidence that the discharges occurred but	02:54:43
BY MR. BENSHOOF:	02:54:48
Q. Okay. Did you ask the I mean, since th	e 02:54:51
board doesn't have any of that evidence of quantity	02:54:54
would it be relevant for you to inquire as to how t	he 02:54:59
19 federal court arrived at a conclusion that BAE t	he 02:55:04
evidence conclusively demonstrated that substantial	02:55:08
quantities of pollutants from BAE were discharged i	nto 02:55:11
the bay? I mean, that would help the board, I assu	o2:55:14
MR. CARRIGAN: Asked and answered.	02:55:18
MR. DART: Object to the extent the statem	ent in 02:55:18
the DTR varies from the court findings.	02:55:20

1	THE WITNESS: The we we took the findings	02:55:26
2	of the court into consideration. And and we named BAE	02:55:32
3	as a discharger in the cleanup and abatement order.	02:55:38
4	And and the board did not have a need to delve further	02:55:44
5	into that.	02:55:49
6	MR. BENSHOOF: Okay.	02:55:50
7	THE WITNESS: That was a fact that we cited and	02:55:52
8	used as a basis for naming BAE as a discharger in the	02:55:55
9	cleanup order.	02:56:01
10	MR. CARRIGAN: Okay. I think we've been going	02:56:02
11	for quite some time.	02:56:04
12	MR. BENSHOOF: Fair enough.	02:56:05
13	MR. CARRIGAN: Let's go off the record.	02:56:06
14	MR. BENSHOOF: Let's go that. Let's go off the	02:56:07
15	record. I think I'm within 20 minutes or so.	02:56:09
16	THE VIDEOGRAPHER: The time now is 2:56 p.m.	02:56:12
17	Off the record.	02:56:15
18	(A recess was taken.)	02:56:16
19	THE VIDEOGRAPHER: The time now is 3:08 p.m. On	03:08:04
20	the record.	03:08:06
21	BY MR. BENSHOOF:	03:08:06
22	Q. Now, there's lots of information in the record,	03:08:07
23	is there not, Mr. Barker, that that quantifies in	03:08:10
24	terms of volume the illicit discharges from BAE? Doesn't	03:08:15
25	the SAR include documents such as Environmental Affairs	03:08:22

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1	Spill Elicit Discharge Report Form? We can go through	03:08:27
2	them all, spill elicit discharge log. So it's not true,	03:08:30
3	is it, that the board is without any means to go back and	03:08:35
4	look at its own files and start to quantify the volume of	03:08:38
5	elicit discharges caused by BAE?	03:08:42
6	A. Yes. I would just make the observation that	03:08:46
7	that may not be the total population of elicit	03:08:50
8	discharges.	03:08:56
9	Q. All right.	03:08:57
10	A. And I think the board has has done an	03:08:58
11	extensive tabulation of discharges from if we're	03:09:11
12	talking about BAE.	03:09:16
13	Q. Yeah. I'm just talking about but I'm on	03:09:19
14	volume. Your my impression from your prior testimony	03:09:22
15	was that there was no way for the board to estimate	03:09:25
16	volumes of elicit discharges caused by BAE. And my point	03:09:27
17	is, as a matter of fact, there's all sorts of forms that	03:09:32
18	the board has available to it where BAE reported itself	03:09:36
19	what the elicit discharges were and the volumes involved;	03:09:40
20	correct?	03:09:44
21	A. There may have been volumes on some of those	03:09:49
22	reports but not all. Sometimes it might be there was an	03:09:51
23	oil spill or there was an oil sheen in the water or	03:09:56
24	I'd have to review them all to see.	03:10:06
25	Q. Well, there's an "Estimated Volume" column on	03:10:08

1	their Spill and Elicit Discharge Log. We can we'll	03:10:11
2	just mark that for evidence purposes as next in order.	03:10:14
3	(Exhibit 1277 was marked.)	03:10:18
4	MR. HANDMACHER: 1277?	03:10:31
5	MR. BENSHOOF: And this is SAR document 013619.	03:10:36
6	MR. CARRIGAN: Yeah.	03:10:45
7.	BY MR. BENSHOOF:	03:10:45
8	Q. You see that amongst the documents in the	03:10:51
9	administrative record submitted to the board on a	03:10:53
10	periodic basis by Mr. Halvax, this is this happens to	03:10:56
11	be his 1988 reports in September, and July is an elicit	03:11:02
12	discharge log that would give the board a basis to	03:11:08
13	calculate volumes?	03:11:11
14	MR. CARRIGAN: Document speaks for itself.	03:11:14
15	MR. BENSHOOF: And then we'll next mark	03:11:16
16	BY MR. BENSHOOF:	03:11:17
17	Q. You agree that there's a volume or estimated	03:11:19
18	amount column on that report?	03:11:22
19	A. Yes, yes.	03:11:23
20	Q. And you you recognize that there are any	03:11:24
21	number of reports like this in the administrative record	03:11:28
22	available to the Regional Board if it wanted to review	03:11:31
23	volumes associated with BAE?	03:11:35
24	A. Yes. There's volume data for certain types of	03:11:38
25	discharges but not all of the types of discharges that	03:11:41

1	the board was alleging. But like, for example, oil	03:11:45
2	oil spills where it was possible to get a volume. And	03:11:51
3	they gave us that information, yes.	03:11:56
. 4	Q. Now and there are, in addition to documents	03:11:59
5	in the record titled "Spill Elicit Discharge Logs,"	03:12:12
6	there's also documents in the record, I'll give you one	03:12:15
7	example, SAR 35105, titled "Environmental Affairs Spill	03:12:18
8	Elicit Discharge Report Form." This will be 1278.	03:12:24
9	(Exhibit 1278 was marked.)	03:12:27
10	MR. BENSHOOF: And that's SAR 35105 in this	03:12:30
11	particular example.	03:12:33
12	BY MR. BENSHOOF:	03:12:33
13	Q. And the question is, Mr. Barker, you recognize	03:12:58
14	that the Regional Board has in its filed and indeed	03:13:01
15	included in the administrative record a number of	03:13:04
16	different elicit discharge report forms that were filed	03:13:08
17	by BAE?	03:13:11
18	A. Yes.	03:13:14
19	Q. Of which this is one example, 1278?	03:13:15
20	A. Yes.	03:13:18
21	Q. And that a form has a Category No. 3, which	03:13:19
22	reads, "Estimated Volume of the Spill or Elicit	03:13:27
23	Discharge." You recognize that?	03:13:30
24	A. Yes.	03:13:33
25	Q. So if the board wanted to, it could go back and	03:13:33

1	access these reports that it has in its file and	03:13:38
2	determine at least what the volumes were in these reports	03:13:42
3	that were reported to it by BAE; correct?	03:13:43
4	A. Yes, for these types of discharges, yes.	03:13:46
5	Q. Now, as I understand it from your previous	03:13:53
6	testimony, you do believe it is irrelevant to being	03:13:56
7	for a party being named as a discharger whether or not	03:14:01
8	its discharge created or threatened to create a condition	03:14:05
9	of pollution in the bay.	03:14:11
10	A. Whether	03:14:12
11	MR. CARRIGAN: Calls calls for a legal	03:14:14
12	conclusion. Misstates testimony. Go ahead.	03:14:15
13	THE WITNESS: Yeah. The board typically looks	03:14:20
14	at, as far as whether a condition of pollution or	03:14:23
15	nuisance is created in the receiving water, the board	03:14:29
16	examines what is the what are the conditions in the	03:14:32
17	receiving water, and then makes decisions about whether	03:14:38
18	the levels of the contaminants in the receiving water,	03:14:46
19	what what effects on beneficial uses might they	03:14:50
20	might have.	03:14:52
21	BY MR. BENSHOOF:	03:14:52
22	Q. Okay. But that wasn't the question. The	03:14:52
23	question was perhaps you indirectly answered it. But	03:14:54
24	my question was more correctly and I'd appreciate you	03:15:00
25	responding to this one.	03:15:02

1	As far as you're concerned, it is irrelevant	03:15:04
2	whether the discharge of a single discharger was in a	03:15:07
3	sufficient mass or volume to itself create or threatened	03:15:15
4	to create a condition of pollution in the bay.	03:15:21
5	MR. CARRIGAN: Calls for a legal conclusion.	03:15:23
6	MR. DART: Join. And it's vague.	03:15:24
7	THE WITNESS: The board, I would say the board	03:15:31
8	would consider that but also consider the extent to which	03:15:34
9	that discharge contributed to a condition of pollution in	03:15:39
10	the bay.	03:15:43
11	BY MR. BENSHOOF:	03:15:43
12	Q. Okay. And am I correct that no where in the	03:15:44
13	DTR	0,3:15:51
14	A. May I	03:15:52
15	Q. Oh.	03:15:53
16	A just amplify my answer?	03:15:54
17	Q. Sure.	03:15:57
18	A. Typically, the board looks at discharges in the	03:15:58
19	sense did they cause pollution conditions themselves or	03:16:01
20	contribute to the creation of pollution conditions, cause	03:16:05
21	or contribute.	03:16:10
22	Q. Regardless of whether they may have just been	03:16:11
23	simply a single molecule; is that your testimony?	03:16:13
24	MR. CARRIGAN: Calls for	03:16:17
25	BY MR. BENSHOOF:	03:16:18

1	Q. A single molecule discharged by SDG&E would, in	03:16:19
2	your judgment, be sufficient to cause SDG&E to be named	03:16:22
3	as a respondent on a cleanup and abatement order if that	03:16:26
4	single molecule combined with a hundred years' worth of	03:16:30
5	PCB discharges by the shipyard. Is that your testimony,	03:16:34
6	Mr. Barker?	03:16:38
7	MR. CARRIGAN: I believe this one was asked and	03:16:39
. 8	answered. But I'm also going to object on the basis that	03:16:40
9	it calls for a legal conclusion.	03:16:44
10	MR. DART: Incomplete hypothetical. Join.	03:16:47
11	MR. CARRIGAN: I'll join counsel for BAE also.	03:16:49
12	BY MR. BENSHOOF:	
13	Q. Do you need the question repeated?	03:16:55
14	A. No. No. I the level and volume of discharge	03:16:57
15	are considerations. And the and the contribution of	03:17:04
16	the discharge to the to causing or creating pollution	03:17:13
17	conditions in the receiving water is a consideration.	03:17:21
18	Now, how the board would weigh those factors	03:17:26
19	might might differ between sites based on	03:17:32
20	site-specific information. And I would again point out	03:17:39
21	that Resolution 92-49 doesn't really doesn't comment	03:17:53
22	on de minimis contributions to a pollution condition	03:18:01
23	when in in the allocation of responsibilities to	03:18:14
24	parties. I guess there's room for judgment there.	03:18:17
25	Q. And I guess that's the one of the purposes of	03:18:22

1	my question, Mr. Carlisle or excuse me Mr. Barker,	03:18:24
2	which was to ask you how you apply judgment, if at all,	03:18:33
3	in making the recommendations which you make for purposes	03:18:39
4	of who should be named as a discharger.	03:18:43
5	And do you in your own judgment give any weight	03:18:46
6	to the volume or mass that's associated with the	03:18:51
7	contribution of that discharger?	03:18:58
8	MR. DART: Asked and answered.	03:19:01
9	MR. CARRIGAN: Join.	03:19:03
10	THE WITNESS: Yes. That's a relevant	03:19:08
11	consideration but not the a conclusionary type	03:19:11
12	consideration in and of itself.	03:19:18
13	BY MR. BENSHOOF:	
14	Q. Okay. It's relevant. And in what in what	03:19:21
15	way was that weighed in connection with the decision to	03:19:23
16	add SDG&E as a discharger?	03:19:27
17	A. To the same extent it was weighed in add	03:19:37
18	adding BAE as a discharger. We we considered	03:19:39
19	activities that BAE was engaged in and the proximity of	03:19:47
20	those activities to surface waters and potential pathways	03:19:55
21	of release to surface waters and and concluded that	03:20:01
22	the levels in the sediment were associated with those	03:20:08
23	activities. And we did the same type of analysis with	03:20:12
24	SDG&E using the site-specific data that's described in	03:20:16
25	the DTR.	03:20:25

1	Q. You made no effort to quantify the volume of	03:20:27
2	releases that were allegedly attributed to SDG&E, did	03:20:33
3	you, sir?	03:20:37
4	A. The volume of releases, no, no. We looked at	03:20:44
5	evidence of evidence of releases and and and	03:20:48
6	whether there was a pathway of that evidence that would	03:20:55
7	link discharges from SDG&E to the sediment contaminant	03:21:02
8	levels out in the bay.	03:21:10
9	Q. Okay. But you did say, and I did ask you this	03:21:11
10	question. And I want to repeat it because I want it	03:21:14
11	answered.	03:21:17
12	I asked you the question, do you do you in	03:21:18
13	your own judgment give any weight to the volume or mass	03:21:23
14	that's associated with the contribution of that	03:21:26
15	discharger?	03:21:30
16	MR. CARRIGAN: Asked and answered.	03:21:31
17	MR. BENSHOOF: Right. Join.	03:21:32
18	BY MR. BENSHOOF:	
19	Q. And you answered, "Yes, that's a relevant	03:21:35
20	consideration but not a conclusionary type of conclusion	03:21:37
21	in and of itself."	03:21:42
22	But it's fair to say, isn't it, Mr. Barker, that	03:21:43
23	you gave no consideration to that volume issue in	03:21:47
24	connection with SDG&E because you didn't have any	03:21:52
25	information your investigation didn't determine any	03:21:54

1	information as to volume or mass?	03:22:01
2	MR. CARRIGAN: Vague.	03:22:03
3	THE WITNESS: No. Our analysis was wasn't	03:22:04
4	based on the scale of the contribution. It was just	03:22:07
5	based on whether there was evidence of discharge of PCBs	03:22:11
6	from from either SDG&E or BAE.	03:22:19
7	MR. BENSHOOF: Okay. And I'm not	03:22:26
8	THE WITNESS: The board did not attempt to	03:22:28
9	allocate responsibility and and and apportion the	03:22:29
10	pollution between the two facilities.	03:22:38
11	BY MR. BENSHOOF:	
12	Q. So as I understand your practice, and you'll	03:22:48
13	need to correct me if I'm wrong, I keep coming back to	03:22:52
14	this maybe it's the same question. But I'm getting a	03:22:55
15	different sense from you each time I ask it.	03:22:58
16	It seems to me your practice is, and tell me if	03:23:02
17	I'm wrong, because you read the law as saying if somebody	
18	contributed with another, they're also liable. I take it	03:23:10
19	that's the way you read it in terms of a discharger.	03:23:14
20	MR. CARRIGAN: Calls for a legal conclusion.	03:23:16
21	BY MR. BENSHOOF:	
22	Q. You would you would recommend to the board	03:23:18
23	that there were evidence of the discharge of a single	03:23:19
24	molecule by an entity that they should be added? I take	03:23:24
25	it you wouldn't do that.	03:23:27

1	A. I haven't done that as yet.	03:23:33
2	Q. No. And not only because it would be	03:23:35
3	ridiculous, but it's because you would want to know that	03:23:38
4	there was some substantial evidence and fair basis	03:23:41
5	A. Yeah, I	03:23:44
6	Q to name somebody.	03:23:45
7	MR. CARRIGAN: Calls for a legal conclusion.	03:23:46
8	THE WITNESS: I would want to look at the entire	03:23:47
, 9	list of factors that are I would be interested in	03:23:49
10	evidence on the list of factors that were outlined from	03:23:56
11	Resolution 92-49. They're all relevant considerations.	03:24:01
12	BY MR. BENSHOOF:	
13	Q. Okay. And and yet, let's make sure we	03:24:05
14	understand the judgment you brought, because you did	03:24:07
15	participate in the recommendation that's been that we	03:24:10
16	see in front of us to add SDG&E as a discharger; correct?	03:24:14
17	A. Yes.	03:24:18
18	Q. Okay. And I take it you base that not on any	03:24:19
19	evidence that you had that SDG's SDG&E's discharges in	03:24:26
20	and of themselves threatened or created or threatened	03:24:31
21	to create a condition of pollution. But you did so on	03:24:36
22	the basis that you believed those discharges in	03:24:39
23	combination with others threatened or to create a	03:24:42
24	condition of pollution; is that correct?	03:24:47
25	MR. CARRIGAN: Calls for a legal conclusion.	03:24:48

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1	You can answer.	03:24:50
2	THE WITNESS: Yes. We were we were alleging	03:24:51
3	contribution contributions to a common pollution	03:24:53
4	problem in the bay from both sources with without	03:24:58
5	trying to allocate who was more responsible.	03:25:02
6	BY MR. BENSHOOF:	
7	Q. And have you do you believe that there's	03:25:08
8	language in the water code that supports that?	03:25:16
9	MR. CARRIGAN: Calls for a legal conclusion.	03:25:19
10	BY MR. BENSHOOF:	
11	Q. You've obviously adopted it as a practice that a	03:25:22
12	discharger's discharge does not in itself have to	03:25:26
13	threaten to create a condition of pollution. And so I	03:25:30
14	assume you find in the water code that governs your	03:25:33
15	actions some language that says somebody can be liable if	03:25:36
16	their amount combines with others to create a condition	03:25:43
17	of pollution.	03:25:47
18	MR. CARRIGAN: Calls for a legal conclusion.	03:25:48
19	THE WITNESS: Yes. We believe that how we	03:25:50
20	the allegations that we structured met the requirements	03:25:56
21	of Water Code Section 13304. And that the factors we	03:25:59
22	considered met the definition of of the they	.03:26:07
23	provided a basis for us to name both BAE and SDG&E in the	03:26:21
24	order.	03:26:27
25		

1	BY MR. BENSHOOF:	
2	Q. And you're familiar with the term of	03:26:28
3	"environmental fate model," fate and transport models?	03:26:31
4	A. Yes.	03:26:36
5	Q. And you you are aware that various models	03:26:36
6	exist which can determine whether or not the discharge of	03:26:41
7	a particular contaminant from a particular source was	03:26:46
8	released in a sufficient mass to cause a condition of	03:26:49
9	pollution or nuisance elsewhere?	03:26:52
10	MR. CARRIGAN: Calls for expert testimony.	03:26:55
11	You're asking if he's aware of those kinds of models?	03:26:57
12	MR. BENSHOOF: Right.	03:27:00
13	MR. CARRIGAN: Okay.	03:27:01
14	THE WITNESS: Yes. I'm aware that there's	03:27:02
15	fate and transport processes are modeled and projections	03:27:03
16	made from that.	03:27:10
17	BY MR. BENSHOOF:	
18	Q. Right. And those could have been used to, for	03:27:11
19	example, say assume you know, what what mass would	03:27:13
20	have had to have been released from the Silvergate	03:27:18
21	substation in order to create a condition in the	03:27:21
22	sediments in excess of the cleanup levels; correct? Such	03:27:24
23	a model could have been used by the board to calculate a	03:27:27
24	mass?	03:27:30
25	MR. CARRIGAN: Lacks foundation. Assumes facts	03:27:31

1	not in evidence. Calls for speculation.	03:27:32
2	THE WITNESS: Yeah. I've never done that type	03:27:45
3	of of calculation. I assume it could be done.	03:27:47
4	BY MR. BENSHOOF:	
5	Q. Okay. And, in fact, in preparing the DTR and	03:27:52
6	the tentative CAO, no such modeling analysis of that sort	03:28:01
7	was done by the Water Board because of your the belief	03:28:08
8	that you've testified to.	03:28:13
9	A. Right.	03:28:15
10	Q. That it was not the board's obligation to show	03:28:15
11	that a discharger's discharges would in and of themselves	03:28:21
12	create a condition of pollution. Is that fair?	03:28:25
13	MR. CARRIGAN: Calls for a legal conclusion.	03:28:28
14	THE WITNESS: No. We did not believe that we	03:28:32
15	had to establish that as a basis.	03:28:35
16	BY MR. BENSHOOF:	
17	Q. And in fact, in preparing the DTR and tentative	03:28:41
18	CAO, the Water Board made no effort to assure that the	03:28:44
19	named dischargers were restricted only to those persons	03:28:47
20	where substantial evidence existed that those persons or	03:28:51
21	entities had themselves discharged contaminants in a	03:28:55
22	sufficient mass to cause a condition of pollution in the	03:28:58
23	bay, or threaten to cause such a condition?	03:29:04
24	A. The board's basis was whether a discharger	03:29:11
25	caused or permitted the discharge of of waste. And	03:29:13

1	the board believed it established that, as I've	03:29:19
2	mentioned, through upland soils samples that were	03:29:24
3	collected, the storm drain samples that were collected,	03:29:32
4	and the sediment samples out in the bay that were	03:29:36
5	collected.	03:29:39
6	Q. And then the so my question was, because of	03:29:40
7	that reason, in preparing the DTR and the tentative CAO,	03:29:42
8	the Water Board made no effort to assure that the named	03:29:47
9	dischargers dischargers were restricted to only those	03:29:50
10	persons where substantial evidence existed that such	03:29:55
11	persons had discharged contaminants in a sufficient mass	03:29:57
12	that in itself caused or threatened to cause a condition	03:30:02
13	of pollution in the bay?	03:30:07
14	A. No. Yeah, the board in its analysis of the	03:30:09
15	pollution effects looked at the pollution at	03:30:14
16	contaminant levels as they existed in the bay, which were	03:30:19
17	influenced by discharges from the different sources that	03:30:23
18	the board identified. And then so the yeah, the board	03:30:26
19	did not attempt to allocate who had the biggest discharge	03:30:32
20	into the area.	03:30:40
21	Q. Or whether that discharge in itself would have	03:30:42
22	threatened to cause a condition of pollution?	03:30:44
23	A. Yes, that's correct.	03:30:46
24	MR. BENSHOOF: That's all I've got. Thank you.	03:30:48
25	MR. CARRIGAN: Okay. Let's go off the record.	03:30:50

1	THE VIDEOGRAPHER: The time now is 3:31 p.m.	03:30:52
2	Off the record.	03:30:54
3	(A discussion was held off the record.)	03:30:55
4	THE VIDEOGRAPHER: This ends Videotape No. 3 in	03:31:47
5	the deposition of David Barker, Volume No. 4. Today's	03:31:50
6	date is March 10th, 2011. The time is now 3:32 p.m.	03:31:54
7	Off the record.	03:31:59
8	(A recess was taken.)	03:32:08
9	THE VIDEOGRAPHER: This begins Videotape No. 4	03:35:31
10	in the deposition of David Barker, Volume No. 4. Today's	03:35:33
11	date is March 10th, 2011. The time is 3:36 p.m. On	03:35:37
12	the record.	03:35:43
13	***	03:35:43
14	EXAMINATION	03:35:43
15	BY MR. HANDMACHER:	
16	Q. Mr. Barker, my name is Jim Handmacher. You	03:35:46
17	recall that I represent Campbell Industries in this	03:35:50
18	matter.	03:35:53
19	I think I just have a few minutes questions for	03:35:53
20	you. You have Exhibit 1263 in front of you, the 1950	03:35:53
21	Sanborn map; is that correct?	03:35:59
22	A. Yes.	03:36:01
23	Q. And do you see in the upper left quadrant of	03:36:02
24	that exhibit where the SDG&E plant is located?	03:36:05
25	A. Yes, I do.	03:36:10

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1	Q. And do you see a reference just above on the	03:36:11
2	document "The Plant" where it has a label that says "Open	03:36:14
3	Transformer"?	03:36:19
4	A. Yes.	03:36:24
5	Q. Okay. Does it in your experience, would you	03:36:25
6	expect an open transformer located outside of a power	03:36:32
7	plant in 1950 to be within a containment structure?	03:36:36
8	MR. BENSHOOF: I'll object. Calling for	03:36:42
9	speculation. No foundation.	03:36:43
10	THE WITNESS: I I I don't know what	03:36:48
11	regulations were in effect at that time around	03:36:56
12	transformers. I would assume they were would be less	03:37:00
13	stringent than what is required now.	03:37:06
14	MR. BENSHOOF: Move to strike the latter	03:37:08
15	assumption as speculative.	03:37:10
16	BY MR. HANDMACHER:	•
17	Q. Do you know what is meant by the phrase "open	03:37:14
18	transformer"?	03:37:18
19	MR. BENSHOOF: Same thing, calling for	03:37:20
20	speculation. Lacks foundation.	03:37:22
21	THE WITNESS: No. Just reading that phrase,	03:37:23
22	I'm I'm not sure what that means.	03:37:26
23	BY MR. HANDMACHER:	
24	Q. Let me have you turn to Finding 6 of the DTR.	03:37:32
25	I'll direct your attention to page 6-3. I believe this	03:37:39

1	is Master Exhibit 2. Do you have that in front of you?	03:37:51
2	A. Yes.	03:37:57
3	Q. Okay. And you recall that Finding 6 is the	03:37:57
4	finding regarding Campbell Industries?	03:38:00
5	A. Yes.	03:38:02
6	Q. Okay. And you were the designated as the	03:38:02
7,	person most knowledgeable regarding Finding 6; is that	03:38:05
8	correct?	03:38:09
9	MR. CARRIGAN: Counsel, we don't have a	03:38:14
10	designation for a PMK on this topic. But Mr. Barker was	03:38:15
11	the supervisor for the project.	03:38:20
12	BY MR. HANDMACHER:	
13	Q. Let me direct your attention, then, to page 6.3.	03:38:23
14	In the middle of the page is the paragraph that starts,	03:38:30
15	"In my letter dated March 5, 2004, Mr. Fernstrom of Marco	03:38:32
16	responded to the San Diego Water Board's investigative	03:38:38
17	order."	03:38:41
18	Do you see that paragraph?	03:38:42
19	A. Yes.	03:38:42
20	Q. And that's referring to a letter that	03:38:43
21	Mr. Fernstrom sent to the Water Board in in 2004; is	03:38:45
22	that correct?	03:38:48
23	A. Yes.	03:38:48
24	Q. And I want to go through with you briefly the	03:38:50
25	the statements that were made in Mr. Fernstrom's letter	03:38:52

1	as they are quoted on page 6.3.	03:38:58
2	He states in the second sentence that "Marco has	03:39:06
3	undertaken an internal search and has no information	03:39:09
4	pertaining to and has found no records of any alleged	03:39:13
5	Marco and/or Campbell Industry operations within or	03:39:16
6	adjacent to the current Southwest Marine leasehold from	03:39:20
7	1914 to 1979 or any other time."	03:39:24
8	Do you have any evidence that that statement is	03:39:29
9	incorrect?	03:39:31
10	A. The evidence that we have concerning Marco	03:39:55
11	would would be up in the second paragraph of page 6-3.	03:40:01
-12	Q. Well, the sentence that I was just just read	03:40:10
13	to you, and I won't repeat it, is a statement as to the	03:40:12
14	steps that Marco had taken and the information that it	03:40:17
15	had found; is that correct?	03:40:21
16	A. Yes, that's what we understood.	03:40:23
17	Q. And do you have any evidence that the steps that	03:40:25
18	Marco had undertaken and the information that it found as	03:40:27
19	reported in this letter are inaccurate as of 2004?	03:40:31
20	A. At when we constructed this section, we felt	03:40:39
21	there was a disconnect between the February 2004 letter	03:40:46
22	and our findings up in in paragraph 2.	03:40:50
23	Q. What is the nature of that disconnect?	03:41:01
24	A. That where it's it indicated the stock of	03:41:03
25	Campbell Industries was acquired by Marco Holdings oh,	03:41:16

1	excuse me in 1979. And and the statement that was	03:41:23
2	in the letter said that there were no records of Marco or	03:41:33
3	Campbell Industry operations within or adjacent to the	03:41:44
4	Southwest Marine leasehold from 1914 to to 1979 or any	03:41:49
5	other time. And so we felt that we had evidence that had	03:41:56
6	pointed to a different conclusion.	03:42:10
7,	Q. Did you have any evidence that in 2004,	03:42:12
8	Campbell Industries or Marco had any records of its	03:42:15
9	earlier operations at the site?	03:42:19
10	A. No. We only knew what evidence that that the	03:42:30
11	board had.	03:42:34
12	Q. Okay. So let me get back to the statement	03:42:35
13	that's in the letter, not whether or not you found any	03:42:38
14	evidence of Campbell's operations at the site, which are	03:42:41
15	not really disputed here.	03:42:44
16	The question I'm asking you is whether the	03:42:46
17	statement in the letter that Marco had undertaken an	03:42:49
18	internal review search and had located no records of its	03:42:52
19	earlier of any earlier operations at the site, do you	03:42:56
20	have any reason to think that statement is not true?	03:42:59
21	A. I'm hesitating a little bit because I believe we	03:43:25
22	commented on that further in the DTR. Let me just take a	03:43:28
23	minute to scan it quickly, and I'll yeah.	03:43:36
24	We, at the bottom of 6-3, had concluded that	03:43:44
25	Marco was not being responsive to the directives of the	03:43:50

1	order, of the investigative order. So we were I don't	03:43:54
2	know that we were I guess we were taking we were	03:44:01
3	taking issue with that. We we felt Marco was not	03:44:09
4	being responsive.	03:44:15
5	Q. How is it not responsive to look for documents	03:44:18
6	and then report that no such documents could be found?	03:44:20
7	A. We were drawing the conclusion that because of	03:44:39
8	the information that's up in paragraph 2, that we felt	03:44:44
9	Marco did have documents; although, we had no proof of	03:44:52
10	that. But we were we were viewing the type of	03:44:58
11	response we got from Marco as as not being forthcoming	03:45:02
12	and responsive.	03:45:08
13	We felt there was more information than what	03:45:11
14	Marco was indicating to us. But we weren't certain what	03:45:16
15	that information was. We had information that Marco had	03:45:20
16	an interest in the operations at the Southwest Marine	03:45:26
17	leasehold, and Marco seemed to be indicating that they	03:45:30
18	that they had no information and no records of it. And	03:45:34
19	so we I guess we we felt that was not being	03:45:42
20	responsive to the investigative order that had been	03:45:53
21	issued. We felt that's all I can say.	03:45:56
22	Q. Let's move on to the next sentence that was	03:46:00
23	contained in that letter. It said, "Marco" which is	03:46:02
24	defined in the letter as Marine Construction and Design	03:46:05
25	Company, "has no California operations or offices."	03:46:09

1	Do you have any evidence that that statement is	03:46:12
2	not true?	03:46:13
3	A. No.	03:46:16
4	Q. The next sentence said, "The Campbell Industries	03:46:17
5	subsidiary terminated all California operations in 1999	03:46:19
6	at Eighth Avenue and Harbor Drive."	03:46:25
7	Do you have any evidence that that statement is	03:46:28
8	not true?	03:46:30
9	A. No.	03:46:31
10	Q. The last sentence says, "The records we have	03:46:35
11	from California-based operations pertain to the Campbell	03:46:37
12	Shipyard Site at Eighth and Harbor and CAO 95-21."	03:46:40
13	Do you have any evidence that that statement is	03:46:46
14	not true as of the time this letter was written in 2004?	03:46:47
15	A. No. We had no no evidence. Although, we	03:47:03
16	the next paragraph we had drawn the conclusion that Marco	03:47:08
17	was not being responsive. We felt that the information	03:47:12
18	we had in paragraph 2 is information Marco should have	03:47:18
19	known.	03:47:26
20	THE COURT REPORTER: Should have what?	03:47:26
21 /	MR. CARRIGAN: Known.	03:47:26
22	THE WITNESS: Known.	03:47:26
23	THE COURT REPORTER: Thank you.	03:47:26
24	BY MR. HANDMACHER:	03:47:26
25	Q. Okay. Campbell Industries has been actively	03:47:32

1	involved in the Water Board proceedings and the mediation	03:47:34
2	for the Water Board proceedings since April of 2009; is	03:47:38
3	that correct?	03:47:41
4	A. Campbell Industries?	03:47:42
5	Q. Isn't that what I said?	03:47:47
6	A. Yes.	03:47:49
7	Q. And Campbell Industries has provided substantial	03:47:51
8	amount of information to the Cleanup Team since April of	03:47:56
9	nine 2009 as to the nature of its operations or its	03:48:00
10	ownership of the site and operation at the site from 1972	03:48:09
11	to 1979; correct?	03:48:14
12	A. Yes.	03:48:16
13	Q. And would you agree with me that since	03:48:17
14	Campbell Industries became involved in the Water Board	03:48:20
15	proceedings in April of 2009, that Campbell Industries	03:48:24
16	has been responsive to the Water Board's directive to	03:48:28
17	provide information regarding its operations?	03:48:33
18	A. Yes, to my knowledge.	03:48:36
19	Q. So as of the latest draft of the DTR, which is	03:48:38
20	what we're looking at that was issued in September of	03:48:43
21	2010, wouldn't you agree as of that time that the	03:48:46
22	determination that Marco or Campbell Industries was is	03:48:52
23	not responsive is no longer a basis for naming Marco or	03:48:56
24	Campbell Industries as a discharger?	03:49:02
25	A. I guess we might say was initially not	03:49:10

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1	responsive.	03:49:14
2	Q. But at this point in time, it's no longer a	03:49:17
3	basis for naming Campbell Industries or Marco as a	03:49:20
4	discharger in these proceedings; correct?	03:49:23
5	A. I think I'm hesitating a little bit because I'd	03:49:25
6	like the cleanup order in front of me that names the	03:49:29
7	parties. But	03:49:33
8	Q. Okay. Take a look at the tentative CAO,	03:49:35
9	Exhibit 1, and look at paragraph 6.	03:49:39
10	A. Okay.	03:49:48
11	Q. Under the heading "Persons Responsible," it	03:49:52
12	refers to Campbell Industries, doesn't it?	03:49:54
13	A. Yes, it does.	03:49:56
14	Q. And there's no reference in there of Marco, is	03:49:57
15	there?	03:49:59
16	A. That's correct.	03:50:00
17	Q. And the Cleanup Team is not recommending that	03:50:01
18	Marine Construction Design Company be named as a	03:50:05
19	discharger in these proceedings, is it?	03:50:08
20	A. No.	03:50:11
21	Q. So going back, then, to Finding 6 in the DTR and	03:50:13
22	paragraph the language we've been looking at on	03:50:20
23	page 6.3, which says that Marco was not responsive and	03:50:22
24	Marco should be named as a discharger, would you agree	03:50:27
25	that language is no longer appropriate for the the	03:50:30

1	DTR?	03:50:32
2	A. Potentially so. I would reserve the would	03:50:37
3	want to discuss that with legal counsel. That's not a	03:50:41
4	matter that I've paid close attention to in all of the	03:50:44
5	information that's been we've been analyzing with	03:50:49
6	this. But legal counsel has evaluated that.	03:50:53
7	MR. HANDMACHER: I have no further questions.	03:50:58
8	Thank you.	03:50:59
9	MR. CARRIGAN: Let's go off the record.	03:51:00
10	THE VIDEOGRAPHER: Time now is 3:51 p.m. Off	03:51:01
11	the record.	03:51:03
12	(A recess was taken.)	03:51:04
13	THE VIDEOGRAPHER: The time now is 3:53 p.m. On	03:53:31
14	the record.	03:53:33
15	***	03:53:34
16	FURTHER EXAMINATION	03:53:34
17	BY MR. WATERMAN:	
18	Q. Mr. Barker, my name is Ryan Waterman. I'm an	03:53:35
19	attorney for Latham and Watkins, and we represent NASSCO	03:53:38
20	in this proceeding.	03:53:42
21	I understand that you've already given several	03:53:43
22	days of testimony with Mr. Richardson on behalf of in	03:53:45
23	testifying on behalf of NASSCO or behalf of the	03:53:50
24	Regional Board to NASSCO's questions.	03:53:52
25	So my questions are just going to be limited to	03:53:54

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1	follow-up questions that continue lines of questioning	03:53:56
2	that you had already you already testified to. So	03:54:00
3	hopefully this is just to clarify and to follow up on	03:54:02
4	things where you had previously testified, and we just	03:54:06
5	want a little bit more information to clear up the	03:54:10
. 6	record.	03:54:12
7	A. Okay.	03:54:13
8	Q. I appreciate all your patience over these last	03:54:14
9	few days. You've really put a lot of energy and thought	03:54:16
10	into this. I really appreciate it.	03:54:23
11	A. Okay. Thank you.	03:54:24
12	Q. I'd like to start with what's been termed, I	03:54:29
13	think, the Commercial Basin Basin Boatyards CAOs.	03:54:33
14	Do you recall whether there was any testing done	03:54:38
15	there to determine whether there were benthic effects	03:54:40
16	from TBT, mercury, and PCBs?	03:54:43
17	A. These cleanups were done or the	03:54:55
18	investigations were done in the late 1980s or in the 1988	03:55:00
19	time frame, roughly. And this was about the time when	03:55:08
20	sediment quality triad analysis was first emerging as	03:55:12
21	a as the state-of-the-art way to analyze sediment.	03:55:16
22	And I I I know that sediment chemistry and	03:55:23
23	toxicity values were collected. I'm not sure if the	03:55:27
24	benthic community values were collected at that time.	03:55:31
25	The I think the Port District at some point	03:55:38

1	in time did some analysis of benthic communities in more	03:55:41
2	recent years over there, just to see what the health of	03:55:46
3	the communities were in present day. But I never saw the	03:55:50
4	results of that.	03:55:55
5	Q. Okay. I'm going to hand you what's been	03:55:56
6	previously marked as Barker deposition Exhibit 1225.	03:55:58
7	A. Okay.	03:56:03
8	Q. This is the just to summarize, this is the	03:56:16
9	Bay City Marine CAO. Do you agree that that's what that	03:56:18
10	is?	03:56:22
11	A. Yes.	03:56:23
12	Q. Looking at paragraph 13, which appears on	03:56:26
13	page CUT 009712, towards the bottom of that paragraph, do	03:56:30
14	you see where there were tests done on Macoma nasuta, a	03:56:37
15	species also used in testing at the shipyards?	03:56:42
16	A. Okay. Yes, I see that.	03:57:10
17	Q. And at paragraph 20, which appears on	03:57:12
18	pages CUT 009714 and runs on to 9715, do you see that	03:57:15
19	there were benthic toxicity tests including the ten-day	03:57:24
20	amphipod survival test and the bivalve larvae survival	03:57:29
21	test?	03:57:36
22	A. Yes. I see that.	03:57:42
23	Q. Would you expect benthic test organisms like the	03:57:43
24	amphipods, the bivalves, Macoma nasuta to respond to	03:57:46
25	contaminants like TBT, mercury, and PCBs the same way,	03:57:54

	1	whether they were measured from the commercial basin's	03:58:01
;	2	shipyard area or the shipyard site that's at issue, the	03:58:08
	3 .	tentative CAO in this case?	03:58:13
	4	MR. CARRIGAN: Compound.	03:58:18
	5	THE WITNESS: The the theory of the toxicity	03:58:19
	6	test was the same, just analyzing the sediment under	03:58:24
	7	laboratory conditions with test organisms. There	03:58:28
	8	the the I'm not sure of what test organisms were	03:58:34
	9	used here versus whether those same ones were in the	03:58:41
1	0	shipyard sediment analysis. That could have yielded	03:58:46
1	1	different results. And any changes in laboratory	03:58:53
1	2	procedures, et cetera, but from the 1980s to now could	03:59:00
1	3	might might have a bearing, yes.	03:59:07
1	4	Q. But if all things were hypothetically equal, the	03:59:09
1	5	test subject species were drawn from the same area, if	03:59:13
, 1	6	those species were exposed to TBT, mercury, or PCBs drawn	03:59:17
1	7	from the Commercial Basin's shipyard, you would expect	03:59:22
1	8,	those organisms under test conditions to react the same	03:59:26
1	9	way that they would if contaminants of concern were drawn	03:59:29
2	0	from the shipyard site.	03:59:35
2	1	MR. CARRIGAN: Incomplete hypothetical.	03:59:37
2	2	THE WITNESS: Well, the levels that the the	03:59:38
2	3	type of sediment, there might be differences in that	03:59:45
2	4	between the sites, maybe in terms of the actual levels of	03:59:48
2	5	the contaminants, I'm not sure which site had higher	03:59:54

1	levels. The amount of the pollutant that would bind to	03:59:59
2	the sediment and not be bioavailable to the test	04:00:03
3	organisms may have been different.	04:00:07
4	So it's it's possible that you you could	04:00:09
5	take sediment from one site and get one result in the	04:00:13
6	toxicity test and go to another site for those reasons	04:00:17
7	and get a different result.	04:00:22
8	Q. Do you have any reason to believe that the	04:00:25
9	sediment at the Commercial Basin shipyard would result in	04:00:27
10	higher toxicity or lower toxicity to those types of	04:00:32
11	organisms than the shipyard site sediments?	04:00:37
12	A. The findings would be would it would be	04:00:44
13	interesting to look at that. I I'm just remembering	04:00:49
14	one thing the board was criticized for was trying to take	04:00:54
15	findings on the toxicity sample from the Campbell	04:01:00
16	Shipyard Site and and and transfer those findings	04:01:08
17	to the NASSCO site, that a couple of peer reviewers told	04:01:11
18	us that was scientifically inappropriate to do that.	04:01:17
19	Q. What report are you referring to, what peer	04:01:21
20	reviewers are you referring to?	04:01:24
21	A. There was a peer review report done towards the	04:01:26
22	end of the 1990s. Steve Bay from SCCWRP was one of the	04:01:33
23	reviewers. And I think an individual, Rusty Ferry, was	04:01:40
24	another one. And there was a third consult peer	04:01:47
25	reviewer that kind of represented the shipyard industry.	04:01:51

1	And all three kind of the board had a	04:01:55
2	proposal underway at that time to try to transfer the	04:01:57
3	findings from the Campbell Shipyard Site and use those	04:02:02
4	same finding in lieu of a site-specific investigation.	04:02:09
5	And so these three peer reviewers looked at that, and I	04:02:14
6	think two of the three indicated it was inappropriate.	04:02:18
7	Q. So if I understand your testimony correctly,	04:02:23
8	what would matter in terms of comparing reactions of test	04:02:25
9	organisms to substances that are in sediment, whether	04:02:31
10	it's from one site or another, would be things like grain	04:02:36
11	size of the sediment, maybe total organic carbon content,	04:02:39
12	maybe bioavailability of those substances in sediment; is	04:02:46
13	that correct?	04:02:50
14	A. Yes. Yes. And the pattern and mixture of, you	04:02:50
15	know, what suite of contaminants, in addition to the one	04:02:56
16	you're focusing on, might also be present.	04:02:59
17	Q. Yeah. And obviously levels of contaminants, as	04:03:02
18	well?	04:03:05
19	A. Right. The mixture of those, the different	04:03:05
20	types, et cetera.	04:03:07
21	Q. Would the size or the complexity of the	04:03:10
22	commercial operations at the if we were to isolate the	04:03:13
23	size and the complexity of the commercial operations in	04:03:18
24	one place versus another, would that factor into your	04:03:23
25	analysis as to whether benthic or these test organisms	04:03:25

1	would react more or less favorably under test conditions	04:03:35
2 .	to these substances?	04:03:39
3	A. No. I I I don't I don't believe so.	04:03:43
4	It would just be the the other factors I discussed.	04:03:45
5	Q. Do you mind if I grab that back? Thanks.	04:03:54
6	Last week you discussed some of the impacts that	04:04:00
. 7	would result from dredging to the mature benthic	04:04:03
8	communities and eelgrass beds that are already present at	04:04:06
9	the shipyard site. Do you remember that?	04:04:10
10	A. Yes.	04:04:12
11	Q. Would differences in physical characteristics of	04:04:12
12	the sediment surface after dredging affect what type of	04:04:15
13	benthic community will colonize after the dredging is	04:04:19
14	finished?	04:04:22
15	MR. CARRIGAN: Calls for an expert opinion.	04:04:24
16	THE WITNESS: Would would difference in the	04:04:26
17	sediment composition?	04:04:29
18	MR. WATERMAN: Right.	04:04:31
19	THE WITNESS: I suppose that might might	04:04:32
20	affect what type of benthic community, yes.	04:04:35
21	BY MR. WATERMAN:	
22	Q. Counsel, is he not the person most knowledgeable	04:04:41
23	for the Regional Board on benthic community benthic	04:04:43
24	communities? Isn't he here to give that expert opinion?	04:04:48
25	MR. CARRIGAN: Yes, he is. I apologize. I	04:04:51

1	have had yet to shift gears into that speed. I'll	04:04:53
2	withdraw my objection.	04:04:56
3	MR. WATERMAN: Thank you.	04:04:59
4	BY MR. WATERMAN:	
5	Q. Can you predict with any level of confidence	04:05:00
6	what type of benthic community would be reestablished	04:05:03
7	after the dredging is complete?	04:05:06
8	A. The assumption is is made by regulatory	04:05:18
9	agencies that benthic communities will eventually	04:05:22
10	reestablish themselves.	04:05:25
11	The the board, to my knowledge, has never	04:05:28
12	gotten into the fine points of comparing what type of	04:05:40
13	benthic community reemerged at a site following dredging	04:05:46
14	versus what type of benthic community was there before	04:05:51
15	dredging, as typically in the board's sediment cleanup	04:05:55
16	orders to date, there there really wasn't	04:06:04
17	post-remediation monitoring conducted to obtain that kind	04:06:07
18	of information.	04:06:14
19	And when we as we developed the current CAO,	04:06:14
20	we were careful to insert that in there because we felt	04:06:23
21.	it was a data gap that we needed to fill.	04:06:26
22	Q. So your answer there is that, at least based on	04:06:30
23	the Regional Board's experience to date, you have no	04:06:32
24	basis on which to predict with any level of confidence	04:06:34
25	what type of benthic community will be reestablished	04:06:38

1	after the dredging?	04:06:41
2	A. Yeah. The board has not attempted to do that,	04:06:42
3	no.	04:06:44
4	Q. Is there any research that you're aware of in	04:06:45
5	the literature that discusses that type of an analysis?	04:06:47
6	A. There's there are documents I've seen that	04:06:53
7	that have indicated that for the regulatory agency to	04:06:59
8	consider whether the cure is worse than the disease with	04:07:09
9	respect to benthic communities, whether it is appropriate	04:07:13
10	to dredge and disrupt and destroy those communities than	04:07:18
11	it would have been just to take some other remediation	04:07:23
12	strategy and and strategy that would involve less	04:07:28
13	disruption to the benthic communities there on the site.	04:07:38
14	Q. Can you give me some examples where the cure is	04:07:41
15	worse than the disease to the benthic communities?	04:07:43
16	A. Maybe one one hypothetical might be where	04:07:48
17	there's contaminants in in the sediment that are above	04:07:58
18	background levels. But the extent and magnitude of those	04:08:02
19	levels is such that the board might look to some kind of	04:08:06
20	natural attenuation strategy to address any concerns	04:08:18
21	about the effects of of the contaminants on beneficial	04:08:26
22	uses and just leave things alone.	04:08:31
23	Q. Is it possible that invasive invasive	04:08:34
24	species, for example, could recolonate recolonize and	04:08:36
25	replace what would otherwise have been there what is	04:08:41

1	currently there as a benthic community?	04:08:44
2	A. I guess invasive species are a possibility at	04:08:52
3	any any site. I'm not personally familiar with the	04:08:57
4	pathway for at a dredge site of how invasive species	04:09:01
5	might be introduced to the site. But I suppose it's a	04:09:06
6	possibility.	04:09:09
7	Q. Can you predict with any level of confidence	04:09:12
8	well, let me let me step back and ask another question	04:09:17
9	first.	04:09:19
10	Would the existing eelgrass beds at the shipyard	04:09:20
11	site be affected by dredging the way the dredging	04:09:25
12	footprint is set up in the tentative CAO?	04:09:28
13	A. I haven't reviewed where the eelgrass grass	04:09:32
14	beds are in relation to the dredge footprint to answer	04:09:37
15	that question.	04:09:42
16	Q. If they are within the dredge footprint, would	04:09:45
17	they be destroyed by the dredging.	04:09:47
18	A. I would think they they would be disrupted or	04:09:49
19	destroyed, yes.	04:09:52
20	Q. Can you predict with any level of confidence	04:09:53
21	whether eelgrass beds could be reestablished after the	04:09:55
22	dredging?	04:09:58
23	A. That is one type of mitigation that is commonly	04:09:59
24	employed for sediment remediation action or other	04:10:04
25	dredging that's conducted in the bay that the resource	04:10:09

.1	agencies look to, to re-establish eelgrass beds at	04:10:14
2	another location in the bay, yes.	04:10:20
3	Q. Last week you testified about the remedy	04:10:24
4	monitor monitored natural attenuation, or MNA?	04:10:26
5	A. Yes.	04:10:35
6	Q. Do you agree that the monitoring portion of MNA	04:10:35
7	is an important component of the remedy?	04:10:38
8	A. Yes. Yes, I would. For a site as for	04:10:43
9	instance, if that were employed at the shipyard site,	04:10:53
10	that would be a very important component, I would think.	04:10:56
11	Q. And that was because it's necessary to confirm	04:10:59
12	whether there is natural attenuation occurring; is that	04:11:02
13	correct?	04:11:05
14	A. Yes. And also to confirm permanent containment	04:11:06
15	of the contaminants of concern.	04:11:11
16	Q. In your experience, if the Regional Board	04:11:16
17	selected MNA as a remedy, but monitoring shows that the	04:11:18
18	remedy is not working as expected, does the	04:11:23
19	Regional Board then consider imposing another remedy to	04:11:26
20	address the situation?	04:11:30
21	A. I would think they could.	04:11:31
22	Q. Would one benefit of selecting monitored natural	04:11:36
23	attenuation as the remedy for the shipyard site be	04:11:40
24	avoiding the destruction of mature benthic communities	04:11:43
25	and polaries bods that are already there?	04:11:47

1	A. That could could be a consideration in that	04:11:50
2	decision, yes.	04:11:54
3	Q. Do you agree that if monitored natural	04:11:57
4	attenuation was selected as the remedy for the site, but	04:11:59
5	monitoring later showed that, for example, containment	04:12:03
6	wasn't occurring or that natural attenuation was not	04:12:07
7	occurring as expected, that dredging could always be	04:12:10
8	selected at the later date as the remedy?	04:12:13
9	MR. CARRIGAN: Calls for a legal conclusion.	04:12:17
10	Incomplete hypothetical.	04:12:19
11	THE WITNESS: Yeah. Yeah. I believe when	04:12:25
12	contaminants are left behind or are left in place at a	04:12:27
13	site, there's a continuing responsibility that the	04:12:32
14	parties that discharged those contaminants would have,	04:12:37
15	and that the board could could allege that those	04:12:42
16	parties address any any problems that might emerge at	04:12:53
17	a future date in the in San Diego Bay.	04:12:58
18	BY MR. WATERMAN:	
19	Q. Do you agree that runoff to San Diego Bay from	04:13:06
20	rain events that occur early in the rainy season	04:13:08
21	contribute a greater load of pollutants than later rain	04:13:11
22	events, after a few rain events have flushed out the	04:13:15
23	system?	04:13:18
24	MR. CARRIGAN: Incomplete hypothetical.	04:13:18
25	THE WITNESS: Oh, that the initial rain events	04:13:21

1	might have a greater pollutant load than later events?	04:13:23
2	MR. WATERMAN: Yes.	04:13:28
3	THE WITNESS: I mean, there's different	04:13:30
4	assumptions one could make. You you could all	04:13:31
5	things being equal, the initial rain events might have a	04:13:36
6	higher pollutant load than later events in the season,	04:13:47
, 7	yes.	04:13:50
8	BY MR. WATERMAN:	
9	Q. That's because during the dry season when	04:13:51
10	there's no storm water flows, pollutants can accumulate?	04:13:53
11	A. Yes.	04:13:57
12	Q. So if one's going to accurately measure the	04:13:58
13	impact of pollutant loading from storm water flow into	04:14:01
14	San Diego Bay, would one want to measure pollutant	04:14:04
15	concentrations early in the rainy season as opposed to	04:14:10
16	later in the rainy season to get a better measurement of	04:14:13
17	that first flush effect?	04:14:17
18	A. Yeah, the pollutant loads could vary. And that	04:14:20
19	would be certainly a consideration that could be cranked	04:14:35
20	into the analysis.	04:14:42
21	Q. How would they vary?	04:14:52
22	A. Just well, the intensity of storms can can	04:14:56
23	vary. For instance, you could have lower residual	04:15:02
24	samples on the ground because it's later in the rainy	04:15:08
25	season but a higher rate of flow. And then so in terms	04:15:14

1	of mass, it's could be it it could could	04:15:18
2	still equate to earlier in the season where maybe a	04:15:25
3	rainfall event of that's less duration, less flow	04:15:30
4	involved but higher concentrations, if you kind of follow	04:15:35
5	what I'm saying. It's the mass of a discharge is	04:15:40
6	related both to the concentration of a contaminant and	04:15:45
7	the flow volume one assumes in computing that mass.	04:15:49
8	Q. But we could, as scientists could measure the	04:15:53
9	flow and the contaminant loading and create a ratio; is	04:15:56
10	that right?	04:15:59
11	A. Yeah. I believe you can model and make all	04:16:01
12	kinds of assumptions assume assuming there's a	04:16:04
13	rational basis for doing that, yeah.	04:16:07
14	Q. And under your your hypothetical where	04:16:11
15	earlier storm events have less flow, wouldn't you still	04:16:13
16	expect to see higher pollutant loading because of that	04:16:17
17	buildup during the dry season?	04:16:20
18	MR. CARRIGAN: Incomplete hypothetical.	04:16:22
19	THE WITNESS: It's possible it could could be	04:16:26
20	higher. It's you know, as I said, you could have a	04:16:28
21	bigger storm later in the season. And even though the	04:16:35
22	contaminant levels are low, the mass discharge could be	04:16:40
23	the same or more.	04:16:43
24	BY MR. WATERMAN:	
25	Q. But on a proportional basis comparing flow and	04:16:45

1	contaminant loading, would you expect the earlier storm	04:16:48
2	events to have a higher concentration of contaminants for	04:16:51
3	flow than later events?	04:16:55
4	A. Yeah.	04:16:57
5	MR. CARRIGAN: Same objections.	04:16:57
6	THE WITNESS: I mean, that we would be	04:16:58
7	interested in that analysis and thinking about it and	04:17:00
8	what would be the best way to model that, yes.	04:17:04
9	BY MR. WATERMAN:	
10	Q. But you don't have an opinion one way or the	04:17:07
11	other?	04:17:09
12	A. No, not right now, no.	04:17:10
13	Q. I thought I heard you testify earlier to the	04:17:12
14	concept of first flush events.	04:17:14
15	A. Yes.	04:17:17
16	Q. What did you mean by that?	04:17:17
17	A. These are there's a I can't remember	04:17:20
18	exactly how it is spelled out in the discharge permits.	04:17:29
19	But but it it involves the the determination	04:17:33
20	or it involves the concern with pollutant loads that	04:17:42
21	occur at a certain time period after a storm begins.	04:17:48
22	Because in a given storm event, the the pollutant load	04:17:53
23	typically decreases in a as the duration of the	04:18:01
24	event with the duration of the event.	04:18:13
25	And so the the first flush would be the	04:18:19

4.7		
1	beginning of the storm that's that's coming into	04:18:21
2	contact with pollutants that have been, in theory,	04:18:26
3	accumulating and would have a higher load at the	04:18:28
4	beginning of the storm than later in the storm.	04:18:31
5	Q. Thank you.	04:18:35
6	I'd like to give you an excerpt of the DTR,	04:18:36
7	Volume 1. It's drawn from Section 4. And I've	04:18:41
: ,8	highlighted some pieces of the the document. This is	04:18:46
9	master it's drawn from Master Exhibit 2A.	04:18:51
10	Did I represent that document properly?	04:19:00
11	A. Master Exhibit 2A.	04:19:03
12	Q. Just that it's part of DTR Volume 1.	04:19:06
13	A. Oh, yes.	04:19:08
14	Q. Looking at the looking at page 4-14, there's	04:19:13
15	a portion, I've highlighted it toward the top.	04:19:17
1.6	Do you see where it says, "Storm water outflows	04:19:20
17	from Chollas Creek has contributed to the accumulation of	04:19:23
18	pollutants in marine sediment at the Shipyard Sediment	04:19:27
19	Site"?	04:19:29
20	A. Yes.	04:19:33
21	Q. Do you have any reason to disagree with that	04:19:33
22	statement in the DTR?	04:19:35
23	A. No.	04:19:37
24	Q. A little further down on page 4-14 where the DTR	04:19:39
25	is discussing the shift study findings, do you see where	04:19:43
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1	it says that, "Storm water plumes emanating from	04:19:47
2	Chollas Creek extended between 0.02 and 2.25 square	04:19:50
3	kilometers over San Diego Bay during small to moderately	04:19:57
4	sized storm events"?	04:20:02
5	A. Yes.	04:20:04
6	Q. And that toxicity extended up to one kilometer	04:20:05
7	from the mouth of Chollas Creek?	04:20:12
8	A. Yes.	04:20:14
9 ,	Q. Wouldn't those areas mentioned in the shift	04:20:15
10	report include the inner portion of the NASSCO shipyard?	04:20:17
11	A. Yeah. Yes, we believe that these were facts we	04:20:28
12	were were documenting here in support of the statement	04:20:34
13	that the board has concluded that storm water outflows	04:20:41
14	has contributed to the accumulation of sediment	04:20:47
15	contaminants at the shipyard site.	04:20:50
16	Q. And would that include contaminants to areas	04:20:53
17	that are intended for remediation in the footprint,	04:20:58
18	including NA 19, NA 6, NA 15, and NA 17?	04:21:02
19	A. I think I have the cleanup order here.	04:21:11
20	Q. And if it helps, I have Attachment 2 to the	04:21:24
21	tentative order that shows the mouth of Chollas Creek and	04:21:27
22	then the remediation footprint.	04:21:30
23	A. Sure.	04:21:33
24	Q. Would you like that?	04:21:33
25	MR. CARRIGAN: That's what he's looking at.	04:21:35

1	THE WITNESS: But I wouldn't mind seeing the	04:21:36
2	color.	04:21:39
3	MR. WATERMAN: And for the record, he's looking	04:21:39
4	at Master Exhibit 1, Attachment 2.	04:21:41
5	THE WITNESS: And the question was? Would	04:21:50
6	the	04:21:52
7	BY MR. WATERMAN:	
8	Q. Would the area of influence from storm water	04:21:53
9	plumes emanating from Chollas Creek include the inner	04:21:57
10	portions of the NASSCO shipyard, including the areas	04:22:01
11 .	slated for remediation NA 19, NA 06, NA 15, and NA 17?	04:22:05
12	MS. PERSSON: Calls for speculation.	04:22:16
13	THE WITNESS: We we believe those areas were	04:22:21
14	potentially subject to influence from from	04:22:23
15	Chollas Creek, yes.	04:22:28
16	BY MR. WATERMAN:	
17	Q. Can I get that back?	04:22:32
18	I'm not sure whether or not this has been marked	04:22:54
19	as a Barker deposition exhibit yet. But it is the Order	04:22:56
20	No. R9-2007-43 from the California Regional Water Quality	04:23:00
21	Control Board, San Diego region, which is a resolution	04:23:11
22	adopting amendment to the water quality control plan for	04:23:14
23	the San Diego basin to incorporate total maximum daily	04:23:19
24	loads for dissolved copper, lead, and zinc in	04:23:23
25	Chollas Creek, tributary to San Diego Bay, otherwise	04:23:27

. 1	known as the Chollas Creek TMDL.	04:23:33
2	A. Yes.	04:23:35
3	Q. Has this been introduced as an exhibit? Why	04:23:38
, 4	don't we mark it as the next one.	04:23:42
5	THE COURT REPORTER: Okay.	04:23:47
6	MR. WATERMAN: What is the next deposition	04:23:47
7	or	04:23:47
8	THE COURT REPORTER: 1279.	04:23:47
9	MR. WATERMAN: Okay. So let's mark that as	04:23:47
10	exhibit Barker Exhibit 1279.	04:23:49
11	(Exhibit 1279 was marked.)	04:23:50
12	BY MR. WATERMAN:	
13	Q. Are you familiar with the Chollas Creek TMDL?	04:24:00
14	A. Somewhat familiar. It's been been a while	04:24:04
15	since I've thought about it.	04:24:06
16	Q. Did include it in connection with your work on	04:24:08
17	the cleanup tentative cleanup & abatement order and	04:24:11
18	the DTR?	04:24:13
19	A. Yes. In the sense of it, we viewed it as part	04:24:15
20	of the source control measure for pollutant outflows from	04:24:20
21	the creek.	04:24:24
22	Q. You anticipated my next question.	04:24:25
23	How will the Chollas Creek TMDL affect affect	04:24:28
24	source control?	04:24:32
25	A. The as let me make sure I've this was	04:24:35

1	what we sometimes refer to as a concentration based TMDL.	04:24:51
2	Let's see. And down at the bottom of page 3, there is a	04:25:06
3	statement that said, "The waste load allocations are set	04:25:19
4	equal to 90 percent of the numeric targets loading	04:25:22
5	capacity."	04:25:26
6	And what what what this means is that	04:25:28
7	those waste load allocations would apply to any NPDS	04:25:32
8	permit outfall into Chollas Creek watershed. And and	04:25:37
9	it would one of the in the federal regulations when	04:25:46
10	those permits are opened for reissuance, they have to be	04:25:51
11	in conformance with any TMDLs that have been approved by	04:25:57
12	the San Diego Water Board and EPA.	04:26:06
13	And and in effect, this would establish	04:26:08
14	numeric effluent limits equal to 90 percent of the	04:26:10
15	numeric targets that are described in the TMDL. So it	04:26:16
16	all and this would all have the effect of reducing	04:26:20
17	pollutant loading to the creek and, hence and outflows	04:26:26
18	from the creek to the bay.	04:26:31
19	Q. Looking at paragraph 14 on Barker Exhibit 1279,	04:26:32
20	which is found on page 4, do you see the first sentence	04:26:38
21	there of paragraph 13 where it says, "Full implementation	04:26:43
22	of the TMDLs for dissolved copper, lead, and zinc shall	04:26:48
23	be completed within 20 years from the effective date of	04:26:52
24	the basin plan amendment"?	04:26:55
25	A. Let's see. On page	04:26:57

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1	Q. Page 4, paragraph 13.	04:27:00
2	A. Paragraph	04:27:10
3	Q. Paragraph 13, page 4.	04:27:11
4	A. Oh, I'm looking at four here. Oh, excuse me. I	04:27:13
- 5	see. Okay. Thirteen. Okay. I see that.	04:27:18
6	Q. Okay. And then looking towards the back of	04:27:31
7	of Barker Exhibit 1279, and I think you were looking at	04:27:32
8	this, this is Attachment A. On page 6 of Attachment A,	04:27:44
9	there's a Table 4 entitled "Compliance Schedule."	04:27:50
10	A. Yes.	04:27:53
11	Q. Do you see there that Item 1 says the effective	04:27:55
12	date of the Chollas Creek metals, TMDL, and waste load	04:27:59
13	allocations is October 22nd, 2008?	04:28:02
14	A. Yes.	04:28:05
15	Q. So looking back at paragraph 13 on page 4, the	04:28:07
16	main section of the Barker Exhibit 1279, does that mean	04:28:12
17	that full compliance or full implementation of the	04:28:17
18	TMDL will occur by October 22nd, 2028?	04:28:18
19	A. Full implementation would be over the 20-year	04:28:31
20	period, yes.	04:28:34
21	Q. And by 2028, October 22nd, 2028, that's when	04:28:36
22	full implementation will have occurred?	04:28:42
23	A. Yes.	04:28:44
24	Q. So even assuming	04:28:46
25	A. Although, just I'd add the caveat no later than	04:28:47

1	that date. It's possible that various measures could be	04:28:51
2	taken to improve on that.	04:28:58
3	Q. Looking at Exhibit A to that, if you look at the	04:29:03
4	preceding page, the bottom of page 5 of Exhibit A or	04:29:21
5	Attachment A to Barker Exhibit 1279. At the bottom of	04:29:28
6	page 5, there's a Table 4.	04:29:37
7	A. I see it. Yes. I see it.	04:29:38
8	Q. And it has three rows for Compliance Years 1,	04:29:40
<u>:</u> 9	10, and 20. Do you see that?	04:29:43
10	A. Yes.	04:29:45
11	Q. So in Year 1, it looks like, to me, the	04:29:48
12	allowable exceedances for the waste load allocations is a	04:29:52
13	hundred percent for all contaminants; is that correct?	04:29:56
14	A. Yes.	04:29:59
15	Q. But by Compliance Year 10, it drops to	04:30:00
16	20 percent exceedances for all contaminants. I'm looking	04:30:03
17	here at the bottom of page 5.	04:30:08
18	A. Yeah. I'm just looking back to an earlier	04:30:10
19	finding. Bear with me just for one second. Okay. Yes.	04:30:12
20	So another way of looking at that is the TMDL	04:30:31
21	requires 80 percent reduction within the first ten years.	04:30:36
22	Q. But for that first ten-year period, no reduction	04:30:42
23	is required; right? It's just by year ten that they have	04:30:45
24	to have achieved that 80 percent reduction?	04:30:49
25	A. Yes.	04:30:51

1	Q. I understand it's probably unreasonable to think	04:30:52
2.	that everybody's going to reduce their emissions by	04:30:54
3	80 percent overnight, maybe it will happen iteratively.	04:30:58
4	A. Yes.	04:31:04
5	Q. But as the TMDL stands, everybody could wait	04:31:04
6	until the last day before the ten years happen and then	04:31:07
7	flip a switch and reduce their exceedances; is that	04:31:10
8	correct?	04:31:15
9	A. Well, the way this TMDL will actually be	04:31:15
10	implemented is these criteria, the waste load allocation	04:31:19
11	and the compliance schedule is incorporated into the NPDS	04:31:26
12	permits. All dischargers' discharges that are going into	04:31:32
13	the Chollas Creek watershed. And then under the federal	04:31:40
14	regulations, the permit writers have the latitude to put	04:31:44
15	additional conditions, as long as those are consistent	04:31:53
16	with the assumption and requirements of the TMDL, into	04:31:58
17	the permit.	04:32:03
18	For instance, the permit writers could establish	04:32:04
19	other interim dates and targets that aren't mentioned in	04:32:08
20	the in the, kind of the master schedule of the TMDL	04:32:13
21	document, just depending on what type of discharge it is	04:32:17
22	and where they are on their curve in relation to those	04:32:22
23	concentrations.	04:32:27
24	Q. So your testimony is that over that first	04:32:28
25	ten-year period there will be a sliding scale of some	04:32:30

1	nature based on these renewals of these NPDS permits	04:32:34
2	iteratively, and then by the tenth year, you'll reach	04:32:37
3	that 20 percent exceedance level.	04:32:44
4	A. Yeah. The TMDLs don't really become enforceable	04:32:47
5	until they are incorporated in the NPDS permits. And	04:32:50
6	that's actually the next the board is working on the	04:32:55
7	reissuance for naval base San Diego. And that's one of	04:32:59
8	the first of the facilities that will have this	04:33:04
9	incorporated in the permit. And then the City of	04:33:06
10	San Diego's MS4 permit will be another one. So we	04:33:10
11	haven't taken that step yet.	04:33:15
12	Q. But under this compliance schedule here at the	04:33:21
13	bottom of page 5 of Attachment A, Barker Exhibit 1279,	04:33:23
14	assuming that implementation is timely and successful,	04:33:28
15	the latest date that that could happen would be 2028; is	04:33:34
16	that correct?	04:33:37
17	A. Yes.	04:33:38
18	Q. Okay. Is it likely that the shipyard sites will	04:33:38
19	be remediated under this tentative cleanup and abatement	04:33:43
20	order much earlier than 2028?	04:33:45
21	A. That's that's my hope, yes.	04:33:48
22	Q. When do you project the remediation to be	04:33:51
23	complete?	04:33:56
24	A. That's I think there's a schedule in the	04:33:57
25	cleanup order. I don't remember exactly what it said.	04:33:59

1	Q. Are you looking for Attachment 5 at the back	04:34:18
2	side, this chart?	04:34:20
3	A. Yes. And I think one of the directives might	04:34:22
4	might lay that out. Let's see. Okay.	04:34:30
5	Okay. So it must have referred to that schedule	04:34:44
6	that you're referring to there. Yeah. I see this.	04:34:47
7	Q. So this schedule, Attachment 5 in Master	04:34:51
8	Exhibit 1, has a five-year remedial action schedule; is	04:34:54
9	that right?	04:34:58
10	A. Yes.	04:34:59
11	Q. And it's currently the Regional Board's intent	04:34:59
12	to approve the tentative cleanup and abatement order this	04:35:02
13	year in 2011; is that correct?	04:35:05
14	A. Yes, that's	04:35:08
15	Q. So if everything works according to plan, we can	04:35:10
16	expect remediation to be completed by 2016, somewhere in	04:35:12
17	there, that range.	04:35:17
18	A. Yes.	04:35:18
19	Q. A full 12 years before source control at	04:35:19
20	Chollas Creek can be will be accomplished under the	04:35:23
21	time frames established in the Chollas Creek TMDL?	04:35:26
22	A. Well well, it would yeah, before the full	04:35:31
23	compliance. I guess with the caveat that 80 percent	04:35:37
24	reduction is required within ten years so there there	04:35:41
25	will be interim steps on the way.	04:35:47

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1	One other factor I'd like to just throw in is	04:35:50
2 1	that there are legislative legislation being proposed	04:35:54
3	that, for example, is directed to auto manufacturers and	04:36:06
4	the amount of copper they include in their brake lining	04:36:15
5	systems. And there I think there's some proposed bill	04:36:18
6	out right now that if it were passed, would probably in	04:36:22
7	and of itself also result in a gradual reduction. So	04:36:25
8	reductions can come from various by various means.	04:36:34
9	They don't all come from the board.	04:36:38
10	Q. Right. But at least at this time, that's not	04:36:40
11	the	04:36:42
12	A. Right.	04:36:43
13	Q current law or	04:36:43
14	A. Yes. Okay.	04:36:45
15	Q. Last week you testified about the permitting	04:36:48
16	process for near shore-confined disposal facilities or	04:36:50
17	CDFs, and also the permitting process for confined	04:36:54
18	aquatic disposal facilities or CADs. Do you recall that?	04:36:59
19	A. Yes.	04:37:04
20	Q. If I understand the way that a CDF would work	04:37:08
21	properly, if it was chosen as a remedy here, as part of	04:37:11
22	the remedy here, then the shipyard site dredge spoils	04:37:14
23	would be used to fill in a portion of San Diego Bay to	04:37:19
24	create land where previously it was bay; is that right?	04:37:22
25	A. Yes. Yes.	04:37:28

1	Q. And I think you testified previously that the	04:37:30
2	permitting process for a CAD, or confined aquatic	04:37:34
3	disposal facility, would be similar in nature to that for	04:37:40
4	a near shore confined disposal facility or CDF; is that	04:37:43
5	right?	04:37:48
6	A. Yes.	04:37:48
7	Q. I thought it might be helpful to look at the	04:38:01
8	Campbell sediment remediate remediation aquatic	04:38:03
9	enhancement EIR. This is a copy of the Campbell sediment	04:38:07
10	remediation aquatic enhancement draft supplemental	04:38:13
11	environmental impact report. I'd like to mark it as	04:38:17
12	Barker Exhibit 1280.	04:38:19
13	(Exhibit 1280 was marked.)	04:38:21
14	BY MR. WATERMAN:	
15	Q. Mr. Barker, did I represent that document	04:38:39
16	properly?	04:38:41
17	A. Yes, you did.	04:38:42
18	Q. I'd like you to turn to page 2-7 in the	04:38:45
19	document.	04:38:48
20	A. Okay.	04:38:54
21	Q. And there's a heading there, it says, it's	04:38:55
22	Heading 2.6, "Intended Uses of This EIR." And the first	04:38:57
23	line says, "This EIR will be considered by the board in	04:39:05
24	their decisions regarding the following action." And	04:39:09
2.5	then there's a bullet that says, "Issuance by the Port of	04:39:12

1	a coastal development permit." Is that correct?	04:39:16
2	A. Yes.	04:39:21
3	Q. And then there are seven bullets following that	04:39:23
: 4	that outline the agencies that may have discretionary	04:39:28
5	approval or permitting authority over the project.	04:39:33
6	A. Yes.	04:39:37
. 7	Q. I'd like you to look at this list of permits	04:39:40
8	which was developed for a confined aquatic disposal	04:39:44
9	facility, or a CAD, at the Campbell shipyard and see if	04:39:49
10	there are any permits there that you think might be	04:39:53
11	missing from that list that would be required for a CAD.	04:39:55
12	A. It's possible. I recall that in the	04:40:24
13	Teledyne Ryan cap there was some type of permit or action	04:40:27
14	required from the Coastal Commission. And I don't oh,	04:40:40
15	excuse me. If that's what the first bullet is, then I	04:40:45
16	guess that's addressed.	04:40:49
17	Q. Great. So you think that that's a complete list	04:40:53
18	of permits?	04:40:55
19	A. It seems so to me.	04:40:56
20	Q. And in your opinion, would that be the line-up	04:40:59
21	of permits and agencies with discretionary approval that	04:41:03
22	we would expect to have be taking action for a confined	04:41:08
23	disposal facility or a CDF?	04:41:15
24	A. I I believe that it would, yes. The I'm	04:41:18
25	just it's possible that NOAA might be a commenting	04:41:23

. 1	agency. I don't think I see them listed there.	04:41:31
2	Q. I'd like to mark as deposition Barker	04:41:45
3	deposition Exhibit 1281 a Construction Quality Assurance	04:41:47
4	report and documentation of construction completion for	04:42:01
, 5	the Campbell shipyard bay sediment cap, prepared by	04:42:06
6	Anchor Environmental CALP of June 2008.	04:42:11
7	(Exhibit 1281 was marked.)	04:42:17
8	THE WITNESS: Okay.	04:42:20
9	BY MR. WATERMAN:	
10	Q. Did I represent that document properly,	04:42:21
11	Mr. Barker?	04:42:22
12	A. Yes.	04:42:24
13	Q. I'd like you to turn to page 16 of that	04:42:25
14	document. Do you see Table 4-1 there, the summary of	04:42:28
15	dredged volumes?	04:42:45
16	A. Yes.	04:42:46
17	Q. And it looks like there in the first row that	04:42:47
18	the first the onset of the first dredging phase was	04:42:50
19	December 17th, 2005.	04:42:54
20	A. Yes.	04:42:57
21	Q. So looking back to the prior exhibit, 1280,	04:42:58
22	which was dated July 2003, do you think we can safely	04:43:03
23	assume that whatever permitting was required of those	04:43:15
24	agencies in on page 2-7 was completed in that	04:43:18
25	two-and-a-half-year period between July 2003 and	04:43:23

		04 40 07
• 1 .	December 2005?	04:43:27
2	A. Yes.	04:43:29
3	Q. So that the outside limits of permitting was	04:43:30
4	about two and a half years for that CAD; is that right?	04:43:34
5	A. Yes.	04:43:39
6	Q. Do you know if there was any do you recall if	04:43:41
7	there was any litigation challenging any part of the	04:43:43
8	permitting process for this Campbell CAD?	04:43:45
9	A. The I don't remember any litigation over the	04:43:56
10	board's permitting of that site. I there was a threat	04:44:02
11	of litigation that was addressed by the Port during its	04:44:10
12	development of the EIR for the for the cap.	04:44:16
13	Q. And how was that threat of litigation averted,	04:44:22
14	if you remember?	04:44:26
15	A. I I attended a few meetings. And this was a	04:44:27
16	project that was being directed by the Port. And I	04:44:35
17	believe they factored in kind of an over-design for the	04:44:40
18	cap, so that when the cap was fully constructed, it	04:44:50
19	actually attained more stringent cleanup levels than what	04:44:53
20	the Water Board was requiring, thus affording a higher	04:44:57
21	degree of protection for the beneficial uses. And that	04:45:01
22	made the environmental groups at the time happy.	04:45:05
23	Q. I'd like to mark Barker Exhibit 1282.	04:45:10
24	(Exhibit 1282 was marked.)	04:45:23

1 BY MR. WATERMAN: And this is a long-term monitoring and reporting 04:45:25 2 Q. 04:45:28 3 plan for the former -- former Campbell shipyard prepared 04:45:35 by Ninyo & Moore on April 20th, 2005. 04:45:49 5 Okay. Yes. 04:45:51 6 If you turn to page 1 of the document, not the 04:45:57 I'm sorry, but the actual page 1 of the cover letter. 04:46:00 The header of that page is, says "Introduction 04:46:04 and Site Description." 04:46:06 10 Α. Right. 04:46:07 11 And the second to last paragraph there, do you 04:46:09 see where it says "August" -- "On August 27, 2004, the 12 04:46:17 District, the San Diego BayKeeper, and the Surfrider 13 04:46:21 14 Foundation, jointly referred to as the Bay Council, 04:46:24 15 entered into a Memorandum of Understanding, MOU, to 04:46:28 16 design and implement specific monitoring requirements for 04:46:32 17 the sediment cap"? 04:46:33 18 Α. Yes. 04:46:34 Does that refresh your recollection of how 19 Q. 04:46:36 20 litigation was averted in that case? 04:46:40 21 That was one example of it. Α. 04:46:45 22 Were there any other agreements that you were Q. 04:46:47 23 aware of that were implemented in order to avert 04:46:51 24 litigation?

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Other than the ones that I've already mentioned,

25

Α.

04:46:53

1	no.	04:46:57
2	Q. Do you have any perspective as to whether a	04:47:00
3	similar similar level of collaboration with the	04:47:02
4	environmental groups is likely to succeed here with	04:47:06
5	respect to the tentative cleanup & abatement order being	04:47:10
6	considered by the Regional Board?	04:47:13
7	MR. CARRIGAN: Calls for speculation.	04:47:14
8	MR. BROWN: Go ahead. Join.	04:47:18
9	THE WITNESS: At at this point in time,	04:47:20
10	I'm I don't believe the the environmental group	04:47:28
11	organizations are in agreement with the projected	04:47:33
12	footprint. And so it remains to be seen what what	04:47:37
13	they will think after the proceedings and hearings are	04:47:52
14	held and the board issues its decision. They could be	04:47:56
15	content, or they could be not content.	04:48:00
16	BY MR. WATERMAN:	
17	Q. Last week you testified about the timing	04:48:10
18	necessary for the Regional Board to issue a 401 Water	04:48:12
19	Quality Certification. Remember that?	04:48:16
20	A. (Nods head.)	04:48:20
21	Q. And I think you testified that you have to ask	04:48:21
22	your staff in order to get a better idea of the typical	04:48:22
23	processing times for 401 certifications. Does that ring	04:48:27
24	a bell?	04:48:32
25	A. Yes.	04:48:32

-		
1	Q. I'd like to mark as 12	04:48:40
2	MR. CARRIGAN: Are we done with the Campbell	04:48:43
3	documents, Ryan?	04:48:44
4	MR. WATERMAN: Yes.	04:48:45
5	MR. CARRIGAN: Thank you.	04:48:46
6	MR. WATERMAN: I'd like to mark as 1283 a	04:48:47
7	printout from the San Diego Regional Water Board's	04:48:58
8	website from the Water Issues Programs, 401 certification	04:49:03
9	location.	04:49:13
10	(Exhibit 1283 was marked.)	04:49:14
11	BY MR. WATERMAN:	
12	Q. And this printout was last updated on	04:49:15
13	February 23rd, 2011 and purports to be a pending water	04:49:17
14	quality certification applications report.	04:49:25
15	A. Let's see. Okay.	04:49:30
1,6	Q. Did I represent that the document accurately,	04:49:41
17	Mr. Barker?	04:49:42
18	A. Yes.	04:49:43
19	Q. So looking on page 1 of the report, does it	04:49:49
20	appear to you that the report is in date order with the	04:49:56
21	oldest pending certifications first and the most recent	04:49:58
22	certifications last?	04:50:03
23	A. Let's see. Yes, it does.	04:50:07
24	Q. And on page 1 of the water 401 Water Quality	04:50:13
25	Certification report	04:50:20

. 1	A. Excuse me. The microphone. Okay.	04:50:22
2	Q. It's getting as tired as the rest of us and	04:50:24
3	wants us to finish. I'm almost done.	04:50:28
4	A. Okay.	04:50:30
5	Q. On page 1, what is the date received of the very	04:50:30
6	first row?	04:50:35
7	A. I believe that refers to the date the	04:50:39
8	application was received, the initial application which	04:50:42
9	may be complete or incomplete.	04:50:48
10	Q. What was that date?	04:50:51
11	A. For the first row?	04:50:53
12	Q. (Nods head.)	04:50:55
13	A. Was November 3rd, 2005.	04:50:56
14	Q. And the next column over, it says, "Date Posted	04:50:57
15	on Web." It's October 11th, 2006.	04:50:59
16	A. Yes.	.04:51:03
17	Q. Is the "Date Posted on Web" column the column	04:51:05
18	that represents the date when the Water Board deemed that	04:51:08
19	certification application complete?	04:51:11
20	A. Yes. And it's the date I think part of the	04:51:13
21	process is there's 21-day public notice period provided.	04:51:18
22	And their method of providing that notification is to	04:51:24
23	oh, yeah. It's addressed up on the first page. It's the	04:51:33
24	date they've it's the that's the date that the	04:51:37
25	public is notified that there's a pending 401	04:51:47

1	certification that's under consideration.	04:51:51
2	Q. So the "Date Posted on Web" date column is the	04:51:54
3	date when the Regional Board is giving notice to the	04:51:57
4	public that there's a complete application, it's now	04:52:00
5	pending before the board, and is under consideration?	04:52:04
6	A. Yes.	04:52:06
7	Q. And what was that what was the what's the	04:52:08
8	date of that very first row?	04:52:10
9 1	A. That's the very first row would be the	04:52:11
10	date excuse me. The date posted on the web in the	04:52:14
11	first row is October 11th, 2006.	04:52:19
12	Q. So the oldest current pending 401 certification	04:52:22
13	application's a little less than five years old; is that	04:52:29
14	right?	04:52:33
15	A. Yes.	04:52:33
16	Q. In looking at pages 4 through 21 of this report,	04:52:35
17	generally speaking, those those are all applications	04:52:42
18	that range in date from roughly December 2009,	04:52:46
19	January 2010, through current date, until late February;	04:52:52
20	is that correct?	04:52:58
21	A. Yes.	04:52:59
22	Q. So the bulk of this report, four from pages 4	04:53:00
23	to 21 are all reports or certifications that are have	04:53:03
24	been pending roughly a year or less.	04:53:08
25	A. Yes.	04:53:10

1	Q. So at least the pending certifications, the bulk	04:53:12
2	of them, are from the last year or so; is that correct?	04:53:16
3	A. Yes.	04:53:20
4	Q. Looking at page 1 again, do you agree that there	04:53:22
5	are two pending certifications from 2006?	04:53:29
6	A. Yes. It appears there are, yes.	04:53:34
7	Q. And six pending certifications from 2007?	04:53:39
8	A. Yes.	04:53:42
. 9	Q. So it's it's less common, but there are some	04:53:48
10	certifications that could be as old as four three or	04:53:52
11	four years old?	04:53:57
12	A. Yes, yeah.	04:54:00
13	Q. So just looking at this report, would you feel	04:54:01
14	comfortable saying that 401 certifications can range in	04:54:03
15	processing time anywhere from typical, something less	04:54:09
16	than a year, to atypical, maybe even up to four years?	04:54:13
17	A. For for our San Diego Bay projects which	04:54:18
18	involve certification projects involving docks and piers	04:54:25
19	and that kind of thing, the the average period to	04:54:35
20	obtain certification has been taking about a year. And	04:54:41
21	usually, the it's not that the process can't move	04:54:46
22	quicker; It's usually based on back and forth going with	04:54:51
23	the applicant on getting a complete application and then	04:54:57
24	agreeing on what mitigation is appropriate for the	04:55:01
25	project. And	04:55:06

to the 04:55:17
04:55:21
04:55:23
I think 04:55:29
04:55:32
04:55:34
don't 04:55:37
04:55:39
04:55:45
04:55:46
04:55:47
04:55:51
levels as 04:55:53
o4:55:58
04:56:00
04:56:01
1? 04:56:01
o4:56:03
aw the 04:56:05
04:56:08
tside of 04:56:09

1	would be appropriate from those sites outside of	04:56:14
2	San Diego Bay to apply to the cleanup to the shipyard	04:56:16
3	site?	04:56:19
4	A. We reviewed I believe there was I	04:56:23
5	testified earlier, I think, on one site up in	04:56:30
6	San Francisco bay area, there was some shipyard site at	04:56:33
7	Hunter's Point area, I believe. We looked at it, but we	04:56:39
8	didn't spend a lot of time analyzing whether those levels	04:56:44
9	were appropriate at at the shipyard site. We put all	04:56:50
10	our energy on that with the work we did on considering	04:56:57
11	whether or not to use the Campbell shipyard levels.	04:57:03
12	Q. Was the Hunter's Point site a cleanup and	04:57:07
13	abatement order that had already been issued?	04:57:10
14	A. I I don't recall. It was it was a	04:57:14
15	sediment investigation. And it's been a long time since	04:57:16
16	we looked at it. And to be honest, I can't remember	04:57:20
17	right now what came out of that. We just kind of looked	04:57:23
18	at the analysis, and I don't even think there was any	04:57:32
19	documentation in the DTR on it.	04:57:37
20	Q. Was it a investigation conducted by the	04:57:39
21	San Francisco Regional Board?	04:57:43
22	A. I it may have been. But I I can't even	04:57:46
23	state that. I my staff looked at it, and they would	04:57:50
24	periodically advise me on things. But it was several	04:57:55
25	years ago.	04:57:59

1	Q. Besides the Hunter's Point site, there were no	04:58:01
2	other sites outside of San Diego Bay that you looked at	04:58:03
3	as potentially similar sites?	04:58:07
4	A. We took an interest in the Hudson River PCB	04:58:09
5	cleanup that's underway. But not with an angle towards	04:58:12
6	adopting findings from that and incorporating them into	04:58:23
7	this analysis.	04:58:27
8	Q. Mr. Barker, I'm going to hand you a excerpt from	04:58:32
9	Master Exhibit 1. It's page 15 of of Master Exhibit	04:58:35
10	1. And it just has the tentative cleanup levels chart	04:58:39
11	that shows the surface weighted average concentrations	04:58:45
12	for the contaminants of concern that have been set in the	04:58:50
13	tentative cleanup & abatement order for the shipyard	04:58:53
14	site.	04:58:56
15	A. Yes.	04:58:57
16	Q. Do you see that?	04:58:57
17	A. Yes.	04:58:58
18	Q. And I'm just going to briefly run through a	04:59:01
19	couple other EPA records of decision that address similar	04:59:03
20	contaminants and ask you to compare them to that table.	04:59:07
21	A. Okay.	04:59:11
22	Q. I'd like to mark as Barker Exhibit 1284 a EPA	04:59:15
23	Superfund record of decision for Commencement Bay in	04:59:27
24	Pierce County, Washington dated September 30th, 1989.	04:59:34
25	(Exhibit 1284 was marked.)	04:59:38

1	MR. CARRIGAN: This is a Superfund site,	04:59:46
2	Counsel?	04:59:48
3	MR. WATERMAN: Yeah.	04:59:49
4	MR. CARRIGAN: Okay. Let the record reflect.	04:59:49
5	BY MR. WATERMAN:	
6	Q. Mr. Barker, is that what you've got in front of	04:59:55
7	you?	04:59:57
8	A. Yes, it is.	04:59:58
9	Q. Can you turn to the very last page where it says	04:59:59
10	"Table 5."	05:00:01
11	A. Yes.	05:00:08
12	Q. And in Table 5, there are three types of	05:00:11
13	contaminants that are similar to those that are listed in	05:00:13
14	Table 2 of Master Exhibit 1. In the very first set of	05:00:18
,15	contaminants which was metals, do you see that on the top	05:00:25
16	of Barker Exhibit 1284?	05:00:30
17	A. Yes.	05:00:36
18	Q. Do you see the "Copper" line item?	05:00:38
19	A. Yes, I do. Yes, I do.	05:00:41
20	Q. Says 390 PPM, or 390 milligrams per kilogram dry	05:00:43
21	weight?	05:00:52
22	A. Mine says 390L.	05:00:53
23	Q. Right. Do you see that there?	05:00:55
24	A. Yes.	05:00:57
25	Q. Comparing that to Table 2, what is the copper	05:00:58

1	concentration for or the copper SWAC for the shipyard	05:01:01
2	site?	05:01:08
3	A. One 159 milligrams per kilogram.	05:01:12
4	Q. So roughly half that of what's in Commencement	05:01:16
5	Bay?	05:01:19
6	A. Yes.	05:01:23
7	Q. Looking down Table 5, do you see the "High	05:01:24
8	Molecular Weight PAH" line item?	05:01:27
9	A. Yes.	05:01:32
10	Q. And what does that read?	05:01:33
11	A. 17,000 milligrams per kilogram.	05:01:36
12	Q. And looking at Table 2 of Master Exhibit 1, what	05:01:40
13	is the HPAHs' or SWAC there?	05:01:42
14	A. It is 2,451 micrograms per kilogram.	05:01:49
15	Q. Roughly seven times lower; is that right?	05:01:54
16	A. I think even I mean, the units are are	05:02:10
17	different. If I'm reading this right, the high molecular	05:02:13
18	weight in Table 5 is 17,000 milligrams per kilogram. And	05:02:21
19	the HPAH level in the tentative cleanup order is 2,451	05:02:26
20	micrograms per kilogram. So it's which would be, I	05:02:33
21	guess, 2.4 milligrams per kilogram. So the 17,000 would	05:02:39
22	be many times higher.	05:02:46
23	Q. Mm-hmm. Looking at the "PCB" line item for	05:02:47
24	total PCBs.	05:02:57
25	A. Yes. Okay.	05:03:00

1	Q. Can you do that comparison?	05:03:03
2	A. Yes. It looks like it's 1,000 milligrams per	05:03:08
3	kilogram. I'm a little troubled by this letter "B" by	05:03:13
4	it. I don't know what those letters	05:03:19
5	Q. The footnotes are on the very back page.	05:03:23
6	A. Okay. I see.	05:03:26
7	Q. "B" stands for benthic.	05:03:27
8	A. Okay. So yeah. The total PCBs in Table 5 is	05:03:29
9	1,000 milligrams per kilogram. And in the cleanup order	05:03:33
10	there are 194 micrograms per kilograms of PCBs, many	05:03:39
11	times more stringent.	05:03:45
12	Q. And I'd like to introduce as Barker	05:03:49
13	Exhibit 1285.	05:03:51
14	(Exhibit 1285 was marked.)	05:03:52
15	BY MR. WATERMAN:	05:03:52
16	Q. This is the EPA Superfund record of decision for	05:04:03
17	the Puget Sound Naval Shipyard complex?	05:04:08
18	A. Yes.	05:04:14
19	Q. Dated June 13th, 2000?	05:04:19
20	A. Yes.	05:04:21
21	Q. We're just going to do the same type of	05:04:26
22	comparison we just did. I'd like you to look at	05:04:27
23	MR. CARRIGAN: This is another Superfund site?	05:04:31
24	MR. WATERMAN: Another Superfund site.	05:04:33
25	MR. CARRIGAN: NASSCO is not a Superfund site,	05:04:35

1	is it, not yet?	05:04:37
2 ,	MR. WATERMAN: No.	05:04:38
3	MR. HANDMACHER: Might be easier for once.	05:04:41
4	BY MR. WATERMAN:	
5 .	Q. I'd like you to look at Table 9.1 and Table 9.2,	05:04:48
6	which are on the second to last and the last page of this	05:04:52
7	exhibit.	05:04:56
8	A. Okay.	05:04:57
9	Q. And do you see the line item for PCBs in	05:05:02
10	Table 9.1 of Barker Exhibit 1285?	05:05:05
11	A. Yes.	05:05:11
12	Q. Where it says the action level is 12 milligrams	05:05:12
13	per kilogram of PCBs.	05:05:17
14	A. Yes.	05:05:20
15	Q. And would you if we were to do the conversion	05:05:22
16	to micrograms per kilogram, would that be 1200 micrograms	05:05:24
17	per kilogram?	05:05:30
18	A. Let's see. 12,000 micrograms per kilogram would	05:05:38
19	be excuse me. Hang on. It's late in the day. Am I	05:05:43
20	doing that right? Yes. It would be 12 times ten to the	05:05:47
21	third micrograms per kilogram, or 12,000 micrograms per	05:05:59
22	kilogram equals 12 milligrams per kilogram.	05:06:05
23	Q. Okay. I'd like you to turn to page	05:06:10
24	Table 9-2, next page.	05:06:13
25	A. Okay.	05:06:16

1	Q. Do you see where it says "Total PCBs" there?	05:06:17
2	A. Yes.	05:06:19
3	Q. And one of the columns says "Cleanup Goal,	05:06:20
4	1.2 milligrams per kilogram"?	05:06:24
5	A. Yes.	05:06:27
6	Q. So if we were going to do that conversion,	05:06:27
7	micrograms per kilogram, would that be 1200 micrograms	05:06:30
8	per kilogram?	05:06:34
9	A. Yes.	05:06:38
10	Q. Just comparing that to the shipyard site, once	05:06:42
11	again, the shipyard site, much lower concentrations for	05:06:46
12	SWAC?	05:06:50
13	A. Yes, it is.	05:06:50
14	Q. Looking back to the previous page for mercury,	05:06:51
15	on the very last line item, it says, "Three milligrams	05:06:59
16	per kilogram for mercury."	05:07:02
17	A. Yes.	05:07:06
18	Q. In comparing that to the shipyard site?	05:07:07
19	A. Yes. The shipyard SWAC value is .68 milligrams	05:07:17
20	per kilogram, which is less than that value, more	05:07:22
21	stringent.	05:07:27
22	MR. WATERMAN: Thank you. That was my very last	05:07:27
23	question.	05:07:30
24	THE WITNESS: Thank you very much.	05:07:31
25	MR. WATERMAN: Thank you very much.	05:07:32

		05 07 00
1	MR. CARRIGAN: Let's go off the record.	05:07:33
2	MR. WATERMAN: I have the stipulation here.	05:07:44
3	Would you like me to read it into the record?	05:07:45
4	MR. CARRIGAN: Since we're still on the record,	05:07:47
. 5	let's do it. I'm sorry. I'm jumping the gun.	05:07:49
6	MR. WATERMAN: All right. Mr. Barker, I'd like	05:07:53
7	to thank you on behalf of all the parties here for your	05:07:55
8	patience and your diligence over these four days of	05:07:57
9	deposition. You've been an extremely good witness, and I	05:08:01
10	really appreciate it. Thank you very much.	05:08:04
11	THE WITNESS: Thank you.	05:08:05
12	MR. WATERMAN: The witness will have 30 days	05:08:06
13	after receipt of transcript by mail by the court reporter	05:08:08
14	to review, make any appropriate corrections and changes	05:08:12
15	and sign the depositions deposition transcript.	05:08:15
16	The witness will provide the corrected	05:08:19
17	transcript to the court reporter. If the witness fails	05:08:21
18	to review and sign the deposition within 30 the 30-day	05:08:28
19	period after receipt by mail, the unsigned deposition	05:08:32
20	shall be given the same effect as those signed by the	05:08:35
21	deponent according to CCP1225.530, Subsection D. Any	05:08:38
22	timely changes or corrections noted in transcript in	05:08:47
23	the transcript shall be sent to the court reporter to be	05:08:49
24	incorporated into the certified transcript.	05:08:54
25	The original transcript shall be kept by Latham	05:08:56

1	and Watkins after the court reporter incorporates any	05:08:59
2	changes or certifies no changes have been made by the	05:09:03
3	witness within the 30-day limit.	05:09:07
4	The original or any copy of the certified	05:09:09
5	transcript can be retained by any counsel in this action	05:09:13
6	to be used by any party for any purpose through the	05:09:16
7	conclusion of this action. So stipulated, Counsel?	05:09:21
8	MR. CARRIGAN: So stipulated.	05:09:26
9	THE VIDEOGRAPHER: This ends the videotaped	05:09:28
10	deposition of David Barker, Volume No. 4, Videotape	05:09:29
11	No. 4. Today's date is March 10th, 2011. The time is	05:09:31
12	5:09 p.m. Off the record.	05:09:36
13	(Whereupon the deposition was adjourned at	05:09:38
14	5:09 p.m.)	05:09:38
15		
16		

1	I declare under penalty of perjury under the laws of the	05:09:38
2	State of California that the foregoing is true and	05:09:38
3	correct; that I have read my deposition and have made the	05:09:38
4	necessary corrections, additions or changes to my answers	05:09:38
5	I deem necessary.	05:09:38
6		05:09:38
7	Executed on thisday of,	05:09:38
8	2011.	05:09:38
9		05:09:38
	DAVID BARKER	
10		05:09:38
11		05:09:38
12		05:09:39
13		
14		
15		4.
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25		. •

1	I, ANNE M. ZARKOS, Certified Shorthand
2	Reporter for the State of California, do hereby certify:
3	
4	That the witness in the foregoing deposition was by me
5	first duly sworn to testify to the truth, the whole
6	truth and nothing but the truth in the foregoing cause;
7	that the deposition was taken by me in machine shorthand
8	and later transcribed into typewriting, under my
9	direction, and that the foregoing contains a true record
10	of the testimony of the witness.
11	
12	Dated: This 23 day of Marck , 2011
13	at San Diego, California.
14	
15	
16	Annana
17	Anne M. Zarkøs RPR, CRR
18	CSR No. 13095
19	
20	
21	

				
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2	SAN DIEGO REGION
3	
4	IN RE THE MATTER OF
5	TENTATIVE CLEANUP AND ABATEMENT) ORDER NO. R9-2011-0001
6	ORDER NO. R9-2011-0001
7	
8	
9	EXHIBIT BOOK ONE OF THREE TO THE
10	DEPOSITION OF DAVID BARKER
11	Volume I - IV
12	San Diego, California
13	2011
14	
15	
16	Parautad Dura Amna M. Zankos, DDD, CDD
17	Reported By: Anne M. Zarkos, RPR, CRR, CSR No. 13095



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eEXHIBIT NO. ____

LATHAM & WATKINS LLP 1 Robert M. Howard (SB No. 145870) Kelly E. Richardson (SB No. 210511) 2 Jeffrey P. Carlin (SB No. 227539) Ryan R. Waterman (SB No. 229485) 3 Jennifer P. Casler-Goncalves (SB No. 259438) 600 West Broadway, Suite 1800 4 San Diego, California 92101-3375 Telephone: (619) 236-1234 Facsimile: (619) 696-7419 6 Attorneys for Designated Party

National Steel and Shipbuilding Company

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SAN DIEGO REGION

IN THE MATTER OF:

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TENTATIVE CLEANUP AND ABATEMENT ORDER NO. R9-2011-0001

NASSCO'S THIRD AMENDED NOTICE OF VIDEOTAPED DEPOSITION OF DAVID BARKER

Date:

March 1-3, 2011

Time:

9:00 a.m.

Place:

Latham & Watkins LLP

600 West Broadway, Suite 1800

San Diego, CA 92101

TO ALL PARTIES AND THEIR COUNSEL OF RECORD:

NOTICE IS HEREBY GIVEN that, pursuant to the Presiding Officer's Order Issuing Final Discovery Plan dated February 18, 2010 and the Presiding Officer's October 27, 2010 Discovery Order, that on March 1-3, 2011, at 9:00 a.m., National Steel and Shipbuilding Company ("NASSCO") will take the deposition of David Barker ("Deponent"). This deposition will take place at the law offices of Latham & Watkins LLP, 600 West Broadway, Suite 1800, San Diego, California, 92101, upon oral examination before a Certified Shorthand Reporter duly authorized to administer oaths, and will continue from day to day, Saturdays, Sundays and holidays excepted, until completed.

PLEASE TAKE FURTHER NOTICE that the deposition may also be videotaped, stenographically recorded, and recorded through such means as to provide the instant display of

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the testimony. NASSCO reserves the right to use any videotaped portion of the deposition

David Barker is required to produce the following items:

DEFINITIONS

The following definitions shall apply to each category of documents set forth below:

- 1. "ADVISORY TEAM" shall mean and refer to the Advisory Team of the California Regional Water Quality Control Board, San Diego Region ("Regional Board"), specially formed in response to and for purposes of advising the Regional Board in connection with its consideration of the TENTATIVE ORDER, and its agents, employees, attorneys, investigators, consultants, affiliates, or anyone acting on its behalf.
- 2. "COMMUNICATIONS" shall mean and refer to the written or verbal exchange of information by any means, including, without limitation, telephone, telecopy, facsimile, or other electronic medium (including e-mail), letter, memorandum, notes or other writing method, meeting, discussion, conversation or other form of verbal expression.
- 3. "DOCUMENT(S)" shall mean and refer to any and all written, printed, typewritten, photographic, graphic, or recorded materials (by tape, video or otherwise), however produced or reproduced, including data stored in a computer, data stored on removable magnetic and optical media (e.g., magnetic tape, floppy disks, and recordable optical disks), e-mail, and voice mail, which relate or pertain in any way to the subject matter to which the Interrogatory refers. "DOCUMENT(S)" shall further include, without limitation, all preliminary, intermediate and final drafts or versions of any DOCUMENT, as well as any notes, comments, and marginalia appearing on any DOCUMENT, and shall not be limited in any way with respect to the process by which any DOCUMENT was created, generated, or reproduced, or with respect to the medium in which the document is embodied. DOCUMENT(S) shall include all "writing" and tangible forms of expression falling within the scope of California Evidence Code § 250, within YOUR custody, possession or control.
 - 4. "ENVIRONMENTAL GROUPS" shall mean and refer to any and all non-profit

and/or advocacy organizations focused on environmental causes and issues, including but not limited to Designated Parties San Diego Coastkeeper (formerly San Diego Baykeeper) and Environmental Health Coalition.

- 5. "PERSON(S)" shall mean and refer to any natural person, proprietorship, public or private corporation, limited or general partnership, trust, joint venture, firm, association, organization, board, authority, governmental entity, or any other entity, including a representative of such PERSON(S).
- 6. "RELATING TO" shall mean and refer to relating to, pertaining to, referring to, evidencing, in connection with, reflecting, respecting, concerning, based upon, stating, showing, establishing, supporting, bolstering, contradicting, refuting, diminishing, constituting, describing, recording, noting, embodying, memorializing, containing, mentioning, studying, analyzing, discussing, specifying, identifying, or in any other way bearing on the matter addressed in the request, in whole or in part.
- 7. "SITE" shall mean and refer to the Shipyard Sediment Site, as described in the TENTATIVE ORDER and TECHNICAL REPORT.
- 8. "TECHNICAL REPORT" shall mean and refer to the Draft Technical Report for the TENTATIVE ORDER, publicly released on September 15, 2010, including but not limited to the prior drafts released publicly on August 24, 2007, April 4, 2008 and December 22, 2009.
- 9. "TENTATIVE ORDER" shall mean and refer to Tentative Cleanup and Abatement Order R9-2010-0002, publically released on September 15, 2010, including but not limited to the prior drafts released publicly on April 29, 2005, August 24, 2007, April 4, 2008 and December 22, 2009.
- 10. "YOU" or "YOUR" shall mean the Deponent, including without limitation YOUR employer or prior employer and its agents, employees, representatives, attorneys, accountants, investigators, and insurance companies, and their employees, and anyone else acting on your behalf). With respect to YOUR DOCUMENTS, it includes any DOCUMENTS in YOUR possession, custody or control.
 - 11. "PERSON" shall mean any entity or natural person.

DOCUMENT REQUESTS

- All DOCUMENTS RELATING TO any work YOU performed regarding the human health risk assessment utilized in connection with the proposed cleanup levels and remediation of the SITE.
- 2. All DOCUMENTS RELATING TO any work YOU performed regarding the ecological risk assessment utilized in connection with the proposed cleanup levels and remediation of the SITE.
- All DOCUMENTS RELATING TO any work YOU performed regarding the economic feasibility analysis utilized in connection with the proposed cleanup levels and remediation of the SITE.
- 4. All DOCUMENTS RELATING TO any work YOU performed regarding the technological feasibility analysis utilized in connection with the proposed cleanup levels and remediation of the SITE.
- 5. All DOCUMENTS RELATING TO any work YOU performed regarding the cost analysis utilized in connection with the proposed cleanup levels and remediation of the SITE.
- 6. All DOCUMENTS RELATING TO any work YOU performed regarding the remedy selection alternatives analysis utilized in connection with the proposed cleanup levels and remediation of the SITE.
- 7. All DOCUMENTS RELATING TO any work YOU performed regarding the aquatic life impairment analysis utilized in connection with the proposed cleanup levels and remediation of the SITE.
- 8. All DOCUMENTS RELATING TO any work YOU performed regarding the aquatic-dependent wildlife impairment analysis utilized in connection with the proposed cleanup levels and remediation of the SITE.
- 9. All DOCUMENTS RELATING TO any work YOU performed regarding the bioavailability analysis utilized in connection with proposed cleanup levels and remediation of the SITE.

1	PROOF OF SERVICE		
2	I am a resident of the State of California, over the age of eighteen years, and not a		
3	party to the within action. My business address is Latham & Watkins, 600 West Broadway,		
4	Suite 1800, San Diego, California 92101. On February 11, 2011, I served the within		
5	document(s):		
6	NASSCO'S THIRD AMENDED NOTICE OF VIDEOTAPED DEPOSITION OF		
7	DAVID BARKER		
8	BY E-MAIL: I caused the above-referenced documents to be converted in digital format (.pdf) and served by electronic mail to the addresses listed below.		
9	format (.put) and served by electronic man to the addresses instead below.		

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