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U.S. ENVIRONMENTAL PROTECTION AGENCY'S
PROPOSED CLEANUP PLAN FOR YOSEMITE SLOUGH

REPORTER'S TRANSCRIPT OF PUBLIC MEETING

AUGUST 21, 2013

Bret Harte Elementary School
1035 Gilman Avenue
San Francisco, California

Reported by Christine M. Niccoli, RPR, C.S.R. No. 4569

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P A R T I C I P A N T S

FACILITATOR:

JACQUELINE ANN LANE - U.S. Environmental Protection  
Agency (EPA)

PRESENTER:

CRAIG COOPER - U.S. EPA Region 9

ALSO PRESENT W/PUBLIC AUDIENCE:

A. GILDA BARBOZA - U.S. Department of Homeland  
Security-FEMA

JOHN D. CHESTNUTT - U.S. EPA Region 9

TINA LOW - San Francisco Bay Regional Water Quality  
Control Board

DAVID YOGI - U.S. EPA Region 9

COMMENTERS:

JOSE ANTONIO JIMENEZ

ANTHONY G. KHALIL

---oOo---

1 SAN FRANCISCO, CALIFORNIA, WEDNESDAY, AUGUST 21, 2013

2 6:12 P.M.

3 ---oOo---

4 MR. COOPER: All right, everybody. I think  
5 we're going to try to get started.

6 MS. LANE: Everybody have a seat, please.

7 Thank you for coming out tonight. We know you  
8 have busy schedules, and we appreciate you coming out to  
9 hear more about the Yosemite Slough and how EPA is going  
10 to clean it up or at least proposing how they want to  
11 clean it up.

12 Tonight we were going to give a presentation,  
13 and then we'll have clarification questions, and then  
14 after that we will follow up by our comment period.

15 Just for those that do not know, that I did not  
16 know, there's a restroom -- they are finally open. So  
17 if you need to go, please do. There's one on the  
18 right. There's a girls' bathroom. You make a right and  
19 right. And the boys' bathroom is further down on the  
20 right.

21 My name is Jackie Lane, and I'm a community  
22 involvement coordinator with the Environmental  
23 Protection Agency here in San Francisco. I am also  
24 assigned to Yosemite Slough as well as the Hunters Point  
25 Naval Shipyard.

1 I know everyone's signed in 'cause I have  
2 someone that is very dear all of a sudden. Make sure  
3 you've signed in tonight.

4 If you did not indicate that you want to be on  
5 our mailing list, please let me know after the meeting,  
6 and I will add you to the mailing list and make sure you  
7 get any future mailings.

8 The slide presentation that you received and  
9 Proposed Plan that you received each have our contact  
10 information on it. If you ever need to get in touch  
11 with us, you have our E-mails, our address, as well as  
12 our phone numbers for me and Craig Cooper who's the  
13 project manager for the site.

14 Let's see. Just a reminder that the public  
15 comment started on August 7th and ends on  
16 September 6th. Within your Proposed Plan, it lets you  
17 know how you can comment in writing; and, of course, the  
18 information that you record today will also be part of  
19 the comment period. You can also E-mail those, but it  
20 has to be in to Craig no later than September 6.

21 The last thing I have to say, we do have a  
22 court reporter present with us today, Christine. And  
23 please try to speak loudly and clearly when you do  
24 speak. I will be facilitating the comment portion and a  
25 little bit of this portion of the meeting. And so it's

1 very imperative that you speak clearly so she can  
2 understand you.

3 One of the things that we would like you to do  
4 is hold your comments until the end of the  
5 presentation. I do have question cards if you'd like a  
6 few of those and maybe want to jot your question down  
7 until Craig finishes. We hope to be done within  
8 30 minutes.

9 The purpose of the court reporter is to make  
10 sure we get an accurate record of your comments so that  
11 we -- so that later on we can consider them and actually  
12 respond to them in our responsiveness summary which  
13 becomes part of what we call an Action Memorandum, which  
14 is the -- the document that actually says we are  
15 selecting this cleanup plan and this is how we will be  
16 going forward. And so the responsiveness summary will  
17 be part of that.

18 We will let everyone know the availability of  
19 that document by mail as well as it will be on our Web  
20 page, and then we'll put it in local paper to also let  
21 you know it's there. And then I will come back  
22 afterwards to talk a little bit more about the public  
23 comment period.

24 I do want to introduce one person in  
25 particular, Tina Lowe right here. She's from our

1 Regional Quality [sic] Control Board, and she is a  
2 co-regulator on this project and has helped Craig and,  
3 of course, some of you who are on our technical team  
4 with a lot of the things that we've come up with so  
5 far.

6 And then I think with that, are there any more  
7 questions before we get started with the presentation?

8 *(Pause; no response elicited.)*

9 Okay. So I will let Craig come up.

10 MR. COOPER: All right. I don't know if I'm  
11 going to use the microphone.

12 MS. LANE: Okay.

13 MR. COOPER: How about if --? Can everybody  
14 hear me okay? I think it will be a lot easier for me.

15 And good evening, everybody. Thank you again  
16 for coming out tonight to hear about EPA's cleanup  
17 recommendation for the Yosemite Slough, and I'm going to  
18 talk for about 30 minutes. It's a nice, small  
19 gathering. So we can keep it very informal, and you can  
20 ask questions along the way.

21 And I -- what I'm going to do is give just an  
22 explanation of the framework for our cleanup, some of  
23 the details. Hopefully, everybody's gotten this fact  
24 sheet [indicating] that's only eight pages long. I'm  
25 going to talk about what's in this.

1           But if you really want to dive into even more  
 2 details, on this [indicating] CD ROM DVD, there's like a  
 3 300-page document; and I've got some extra copies on  
 4 that. And if you really want to dive into the details,  
 5 come talk to me during the break, and I can give you one  
 6 of these.

7           All right.

8           MS. LANE: Ready?

9           MR. COOPER: Time's running here.

10          Okay. Next slide.

11          So again, 30 minutes. I've got a timekeeper  
 12 here someplace.

13          And so next slide.

14          So tonight I'm going to talk about how Yosemite  
 15 Slough got contaminated, at least EPA's belief on that,  
 16 what's the risk from that, what's the risk of the  
 17 contaminants, and why is a cleanup needed, and then what  
 18 cleanup options did EPA consider before it has landed on  
 19 its recommendation and why, what is EPA specifically  
 20 recommending for the cleanup and why.

21          And again, we have a framework. There are --  
 22 There's many details that need to get worked out in  
 23 what's called the design stage, but EPA feels like we  
 24 know enough about this -- about the environmental  
 25 problem at Yosemite Slough to make a general

1 recommendation at this point.

2 Okay.

3 THE COURT REPORTER: Excuse me. Your back is  
4 towards me --

5 MR. COOPER: Oop, I -- excuse me.

6 THE COURT REPORTER: -- and it's more difficult  
7 for me to hear you.

8 MR. COOPER: Sorry, Christine. I'll stand  
9 here.

10 THE COURT REPORTER: Okay.

11 MR. COOPER: Okay. So at any environmental  
12 cleanup project, it's really important before you just  
13 figure out, oh, what are the contaminants and, you know,  
14 where are they going and -- is to really understand  
15 the -- the setting of the -- of the project as well,  
16 the -- the natural setting, what natural resources are  
17 around the site, and what cultural resources are around  
18 the site.

19 So just very briefly -- I brought a laser  
20 pointer. I remembered that. So this is a little bit of  
21 a complicated site. But Yosemite Slough -- it sits  
22 right here [indicating]. It's this little narrow  
23 channel. It's intertidal, and I'm going to -- I've got  
24 some more photos of it in a second.

25 And historically there used to be a big

1 wetlands area here. And actually, Yosemite Slough was  
2 fed -- there's something called Yosemite Creek that  
3 starts in McLaren Park and used to run downhill and then  
4 would fan out into this wetlands area. And Yosemite  
5 Slough actually used to be this wide [indicating]. This  
6 dark gray area is now land that's been put there since  
7 starting about 1940.

8 And so you can see -- if you could just imagine  
9 the shoreline, the water, used to come from this  
10 [indicating] all the way over here. And then out here  
11 on the ship -- you know, where the naval shipyard is,  
12 look how it's mostly what we call artificial fill.  
13 Hunters Point used to be a very narrow, rocky promontory  
14 sticking out in San Francisco Bay.

15 So anyway, back to Yosemite Slough, what we're  
16 talking about is: It used to be much wider, and there  
17 used to be a natural wetlands area around it. And then  
18 starting in the -- and the Ohlone people from a long  
19 time ago used to have villages, encampments around here,  
20 and there was a lot of foraging for shellfish and fish  
21 around here.

22 And then starting -- one interesting historical  
23 site point right around here [indicating] in the 1870s,  
24 there was a big horse racetrack. It was called Bay View  
25 Park, and that was eventually closed down.

1           And -- but then, again, starting in the 1940s,  
2 they started to fill in Yosemite Slough until its  
3 current state. Okay.

4           Next.

5           So this is a high-up view. And so you can see  
6 there's the slough right here [indicating], right here  
7 in the Bayview. And in the 1940s, the Navy actually put  
8 in a whole bunch of housing right here; and then once  
9 that housing left, a light industry zone came in around  
10 Yosemite Slough.

11           And then this is residential area of the  
12 Bayview. This is right -- this [indicating] is right at  
13 the edge of Alice Griffith housing, and so we're --  
14 where we are right now is right over here just a couple  
15 blocks from the slough itself.

16           So next slide.

17           MR. CHESTNUTT: Craig?

18           MR. COOPER: Mmhm.

19           MR. CHESTNUTT: Could you turn your back?

20           Maybe stand on this side.

21           MS. LANE: Stand on this side.

22           MR. CHESTNUTT: Right.

23           MS. LANE: And face her.

24           THE COURT REPORTER: But not far away.

25           MS. LANE: Not too far away.

1 MR. COOPER: Can you hear me, Christine?

2 THE COURT REPORTER: Yeah [laughing].

3 MR. COOPER: Okay. So now, this is the photos  
4 of how the slough looks now. I don't know -- How many  
5 actually -- actually walked down to Yosemite Slough and  
6 checked it out?

7 THE AUDIENCE: (Members raise their hands)

8 MR. COOPER: Okay. So a lot of people have an  
9 idea. You can see that the type of fill soil that's  
10 been brought in in not only around Yosemite Slough, but  
11 it's pretty much true around all of, you know, this  
12 eastern side of San Francisco County, it's -- it's  
13 pretty bad stuff. It's rock. It's debris. It's  
14 bricks. It's --

15 You know, I've been reading various master's  
16 theses about different theories about how this fill soil  
17 came here, because back in the day, wetlands was  
18 considered not good. And there was just a "Oh, those  
19 are --" "That's where mosquitoes live" and stuff like  
20 that, and nobody really understood the value of wetlands  
21 and how wetlands, you know, actually filter rainwater  
22 and keeps our bay water clean.

23 But, well, there's been a lot of environmental  
24 damage here on the eastern side of San Francisco County,  
25 and Yosemite Slough is one of it.

1           So next one. I've got just a couple.

2           And this is the slough itself. You can see  
3 that there's a little bit of water on it right now. So  
4 every day, as you know, the tides come in, and the  
5 slough has about 3 to 6 feet of water on it, depending  
6 on where you are. And then the tide goes out, and it's  
7 a big mudflat; and then the birds run around and forage  
8 for insects and worms.

9           You can also see unfortunately debris like  
10 this, tires and junk, that's been thrown into the  
11 slough.

12           Next slide.

13           This is a nice shot near the mouth of Yosemite  
14 Slough where the banks are a little bit steeper. But  
15 you can see all kinds of things that has been brought  
16 and pushed to the edge of the slough, and this is one of  
17 the reasons why there's contamination in the slough mud  
18 today.

19           Next slide.

20           Another reason is then there's -- three of  
21 these sewer overflow pipes have historically flowed into  
22 Yosemite Slough. Actually, all the way up until about  
23 1959 or so, raw sewage would flow out of these pipes.  
24 And that light industry that I showed you before, so any  
25 type of liquid waste that they were pouring down the

1 drain would go in the sewer pipe and then right out one  
2 of these things.

3 So City of San Francisco has spent a lot of  
4 money upgrading their sewer system and -- in not o- --  
5 in all of San Francisco and around Yosemite Slough  
6 itself. So these sewer pipes are still there  
7 [indicating], but on average they only flow once a year;  
8 and in fact in the last three years, they haven't  
9 flowed -- nothing's come out at all.

10 But the -- they are necessary. I don't want to  
11 get too hung up on the whole sewer system in the City of  
12 San Francisco, but they are a necessary feature how we  
13 can still do the cleanup with these pipes in place.

14 Next.

15 So there's a lot of -- as you know, there's a  
16 lot of change planned for this shoreline area of -- at  
17 the Bayview. The shipyard is undergoing environmental  
18 remediation.

19 And as you may or not know, the Navy -- the  
20 U.S. Navy actually owns this portion [indicating] of San  
21 Francisco Bay, and it has contamination as well.

22 Here is Yosemite Slough, this little channel  
23 right here [indicating].

24 But on the good-news side, State Parks has  
25 Candlestick Point Recreational Area. They have had it

1 for quite a while. And they are working on improvements  
2 of their park, and one of which is a wetlands  
3 restoration project. Phase I has already been completed  
4 over on this side, and there's some photos of their  
5 work.

6 And Phase II is right here [indicating], which  
7 they would like to do right around the time when we  
8 clean up Yosemite Slough, depending on funding.

9 So next.

10 So EPA's project itself -- like I said, this is  
11 a little bit hard to see, but here [indicating] is  
12 Yosemite Slough underneath this crosshatching right  
13 here. Here is the State Parks project Phase I that's  
14 complete.

15 This is the EPA project. So this is what we're  
16 talking about tonight where the mud is contaminated.  
17 Now, the mud is contaminated out here as well, but this  
18 is owned by the U.S. Navy, and the U.S. Navy will do  
19 that cleanup after we clean up Yosemite Slough.  
20 That's what the --

21 I'm the regulator at the shipyard as well, and  
22 I've been in a lot of communication with the Navy about  
23 their schedule for cleaning up the San Francisco Bay  
24 right here [indicating]. And it makes sense to clean up  
25 Yosemite Slough first because in general, you know,

1 things flow downhill. So we -- if the Navy did a lot of  
2 cleanup here, it would -- we would run the risk of  
3 contamination coming from the slough out to the Navy  
4 area.

5 All right. Next slide.

6 This is the outline of Yosemite Slough again,  
7 and all these little dots are places where EPA sampled  
8 the mud. And we actually floated a boat in during high  
9 tide, and we jammed some rods down and pulled out cores  
10 of mud, went -- going down 5 feet. And then we took  
11 off, you know, samples from each mud core to figure out  
12 what kind of contaminants and what concentrations are in  
13 the slough mud.

14 And we tested the mud for a broad range of  
15 potential contaminate types. And we found about 10 to  
16 12 elevated type of chemicals, metals, some pesticides,  
17 some petroleum.

18 But the main contaminants are polychlorinated  
19 biphenyls, our favorite PCBs, which is a banned chemical  
20 now. But it is still very prevalent in our environment  
21 because Mother Nature can't break it down. It keeps  
22 hanging around.

23 And why -- and PCBs are a probable carcinogen;  
24 and if you're exposed too much for too long, you're  
25 running a risk of getting cancer. And there's noncancer

1 health effects in PCBs as well that are not so nice.

2 The other main contaminant is lead in the  
3 slough mud as well. And lead is, you know, from  
4 lead-mixed paint, and it is -- it causes also health  
5 effects in humans as well.

6 But by and large, PCBs are number-one problem  
7 in the Yosemite Slough. It is the most widespread  
8 contaminant and the most toxic contaminant that we have  
9 in the slough mud.

10 So next slide.

11 So that's what I just said. PCBs -- and we can  
12 talk about that. But anyway, what -- so this is just a  
13 little example of a water-based site.

14 And so how do these PCBs, you know, get in --  
15 what makes them risky? And it's really the top layer of  
16 the mud.

17 So just imagine this being the Yosemite Slough,  
18 for example. And the very top layer of the mud, this is  
19 where something called benthic organisms live. This is  
20 just all the worms and insects and things like that.

21 And -- but what happens is that the fish come  
22 in and forage and feed off here or other types of sea  
23 creatures will come in, and they're looking for those  
24 worms and so on. But if the worms have the PCBs in them  
25 or if they have -- if the worms are covered with mud with

1 PCB in it and then the fish eats it and now the PCB now  
2 just enter the fish and then it gets into -- the PCBs  
3 will stay in fish tissue.

4 And what the problem with that, then the fish  
5 could go out into San Francisco Bay. People fish out  
6 there, and then they end up consuming contaminants that  
7 could originate in Yosemite Slough, and it gets in  
8 what's even -- what's even a more dramatic effect.  
9 Because Yosemite Slough was a wetland area, the birds  
10 and -- still like to come to Yosemite Slough. Nobody  
11 can tell the birds that the mud is contaminated. And so  
12 when the birds are eating the worms, they are ingesting  
13 PCBs as well.

14 So the real issue is how do we clean up this  
15 top layer of mud? because we found in some places of  
16 Yosemite Slough the contaminants went down 5 feet. Very  
17 deep. But when something's way down here [indicating],  
18 it's not causing risk like it is when it's at the top  
19 layer of the mud; and again, it's because it's the --  
20 these worms and sea creatures that get into our  
21 ecosystem. This is what's causing risk.

22 So EPA decided what's going to be the best way  
23 to solve this risk problem is cleaning up the top layer  
24 of the mud.

25 Next slide.

1           So this is just a quick summary of how -- how  
2 the slough mud is risky for people is if you are  
3 consuming fish with the contaminants or if you get out  
4 there and actually touch the mud. I don't recommend  
5 that right now as well. But again, it's not so toxic if  
6 you touch it, it will get you sick. I'm not saying it's  
7 anything like that. This is chronic exposure over  
8 time.

9           But really these type of cleanups that EPA  
10 works on were -- we're cleaning up for today's  
11 generation and for future generations. That's really --  
12 It's really the future generations that we're really  
13 trying to protect.

14           So -- and it is chronic exposure to these types  
15 of, you know, contaminants that's a problem. And again,  
16 the birds and the fish that come in here are being  
17 exposed right now today.

18           So next slide.

19           All right. So EPA -- we ran some numbers on,  
20 you know, what would be a safe level to clean the top  
21 layer of the slough mud up to.

22           And so just for example right now, we use these  
23 concentrations. So for PCB on average it's 5 parts per  
24 million, or 5,000 parts per billion, depending on what  
25 you want to say. But I did this table in parts per

1 million.

2           And so it's 5 parts per million on average in  
3 the top layer of the mud. And EPA has decided that it  
4 needs to get much less than 1. So that's 0.386 parts  
5 per million on average would be a safe level.

6           So right now the top layer of the slough mud is  
7 like 13 or 14 times the safe level. All right? So that  
8 gives you an idea of the problem that we're dealing  
9 with.

10           The lead is not as toxic as PCBs; but as you  
11 can see, it's still a problem. On average it's at 359,  
12 and we need to get it on average less than 218.

13           So that's what we're striving for. We're  
14 striving to clean up the top layer of the mud, and it  
15 needs to be on average no greater than these  
16 concentrations.

17           Next.

18           So how are we going to -- how are we going to  
19 make that happen? So EPA looked at some cleanup  
20 options.

21           Next slide.

22           All right. So this is a list of the common  
23 sediment cleanup technologies that are used  
24 nationwide -- actually, worldwide for contaminated  
25 sediment.

1           And this word "sediment" that I use, it's mud.  
2           It's a fancy word for mud, and I use them  
3           interchangeably. So whenever I say "sediment," you can  
4           think of mud.

5           So I'm just going to kind of run through these,  
6           and I'll pretty much cut to the chase.

7           So you can do nothing. And if the risk is so  
8           low, then sometimes, you know, doing nothing is all  
9           right.

10           Institutional controls is just a fancy way of  
11           limiting access, limiting uses, to a particular  
12           contaminated area. Obviously, that doesn't work so well  
13           because, like I said, we can't keep the birds and the  
14           fish away, and the fish go out; and we can't stop people  
15           from fishing in all of San Francisco Bay.

16           So institutional controls really doesn't work  
17           for this type of contamination. It could help to some  
18           degree, and I'll talk about that a little bit, but it  
19           doesn't work.

20           This monitored natural recovery, what that is  
21           is just letting Mother Nature take care of the problem  
22           for the most part is that in bays and lakes, there's a  
23           natural sedimentation process going on where clean  
24           sediments are dropping down onto the bottom of the lake  
25           or the bottom of Yosemite Slough.

1           So EPA has recognized this as a safe way for  
2 the top layer of the mud to become clean just even  
3 because, as -- like I said, Mother Nature doesn't break  
4 down the PCBs, but it could bury the PCBs.

5           We studied that at Yosemite Slough, and we  
6 found that the natural sedimentation rate was not enough  
7 in all places. We did see some natural sedimentation  
8 going on in some places of Yosemite Slough but not  
9 others. Okay?

10          And this enhanced is just putting a thin -- a  
11 little bit of mud or sand to kind of kick-start the  
12 sedimentation process.

13          In situ treatment is you're adding a  
14 carbon to -- and you mix that in with the mud and -- to  
15 render the PCBs less toxic so they don't -- so they will  
16 pass through the fish and they won't get into the  
17 ecosystem.

18          We have found that this could -- it's -- this  
19 is more or less of an -- more of an experimental  
20 treatment method, and EPA has screened that out as not  
21 effective enough, and it doesn't work very well on the  
22 lead.

23          So another option is capping, which is just you  
24 get some clean sand and mud, barge it in, and just drop  
25 it over the top of it to bury it. That is an option

1 that we looked at seriously.

2 But Yosemite Slough has this very unique  
3 ecosystem, this mud -- this intertidal mud flat. So,  
4 you know, like I said, the water comes in and the water  
5 goes out, and you have this mud flat.

6 So if we just brought mud -- clean mud over the  
7 top, we'd be raising the elevation of that, so then  
8 instead of being -- it would just be a mud flat. We  
9 would change the ecosystem, and so it wouldn't be a mud  
10 flat anymore. It would just -- It would start to dry  
11 out. So we decided whatever we do, we want to keep the  
12 elevation of the mud flat the same.

13 So capping could work, but just putting stuff  
14 on top does not work. So we -- dredging is a fancy way  
15 to -- of digging. Digging in mud is called dredging,  
16 and we have two different types; and I have some  
17 pictures of that, mechanical dredging or hydraulic  
18 dredging.

19 And then when you dredge, things get  
20 complicated, and I'm going to talk about that. You have  
21 to -- You just can't take the mud and put it in the  
22 truck and haul it away. The mud is way too wet. So you  
23 have to dewater. We call that dewater, or dry out, the  
24 mud a little bit. And we -- I'm going to talk about  
25 that a little bit, how we do that. And then you can

1 haul it off to a licensed landfill outside of San  
 2 Francisco.

3 Next side.

4 So got a couple of photos. This is a  
 5 mechanical dredge, a clamshell. So this [indicating] is  
 6 a -- the -- a big crane floating on top of the water  
 7 here, and this is cut away. And so you could see the  
 8 crane has this big cable. And then there's this big  
 9 dredge; we call this a clamshell scoop that digs into  
 10 the mud.

11 Problem with this, next slide, is that it is  
 12 messy; and it can -- you know. So this is -- and so the  
 13 dredge is putting the contaminated mud on the barge, but  
 14 you can see some of the c- -- the mud falling out of the  
 15 dredge, and that -- what you're doing is really stirring  
 16 it up.

17 And EPA in some other projects we've learned  
 18 that if we do use a mechanical dredge, we have to be  
 19 really smart on when and what time and how to use it  
 20 because you don't want to spread the PCBs around.

21 Next slide.

22 There's another one called the hydraulic  
 23 dredge. This a boat floating on the water. And then  
 24 notice this big black tube. I'm going to talk about  
 25 that in a second. But this is like a big underground

1 vacuum, and it's -- basically sucks up the mud. There's  
2 a little bit of an agitator here and the injectable bit  
3 of water, and then it just sucks it up; it goes into  
4 this black tube. And then it has to go off to a place  
5 to dry out the mud.

6 I'm going to talk about if -- whether we use a  
7 mechanical dredge or a hydraulic dredge. I'll talk  
8 about if we did use those technologies, where we would  
9 dry out the mud.

10 Next slide.

11 This is a very typical mud-drying bag, and  
12 there's a trademark called Geotubes. But basically it  
13 is a very high-strength woven plastic that is extremely  
14 strong. And so that -- so you -- so your -- your mud  
15 that you either mechanically dredge or hydraulically  
16 dredge, you fill up these bags. And then you see this  
17 water? There's -- The water -- Just the weight of the  
18 mud squeezes the water through the -- the mesh of the  
19 bag. So the mud stays inside, and water gets squeezed  
20 out.

21 Now, this is not the cleanest of water, so you  
22 need to contain this water and treat it a little bit.  
23 Just can't let it go back into the bay or anything like  
24 that.

25 Next slide.

1           And then once the mud is sufficiently dry, then  
2 we can haul it away. And we're looking at trucks or --  
3 depending on where we dry the mud, we'll either use a  
4 truck or a rail car.

5           Next slide.

6           Okay. So if we did use dredging, we have  
7 two -- EPA has identified two places where we could dry  
8 out the mud. One is right here [indicating], the  
9 overflow parking lot for the 49ers stadium; and  
10 obviously, this is convenient. It's nice and flat.  
11 There's a nice big open space there, so we can put  
12 several of those big Geotube bags out. And it's not  
13 very far from Yosemite Slough. So we could probably use  
14 the hydraulic dredge.

15           And then that black tube that I was showing  
16 you, we could maybe tether that along the edge of  
17 Yosemite Slough and pump the mud over here into those  
18 bags and dry out the mud right here [indicating].

19           Now, there is a potential there -- that --  
20 notice that I've got a backup location over way up here  
21 [indicating] on San Francisco Port Authority property.  
22 It's called Pier 96 on the other side of the shipyard.  
23 We're going to be doing some tests of the mud to see  
24 what kind of odors could be generated during the  
25 mud-drawing operations. And --

1           Okay, I've got five more minutes. I think I'm  
2 doing okay.

3           So we'll -- So that's why we show two  
4 locations.

5           I don't know if there's going to be odors from  
6 this if we do dredge and have to dry out the mud. I've  
7 been down over at Mountain Lake just -- they're --  
8 they're doing a big hydraulic dredge project there, and  
9 they are using those Geotube bags. No smell  
10 whatsoever.

11           But obviously, you know, there are odor-control  
12 technologies that we could do. So we'll do some tests  
13 to see if odors are going to be created. And if odors  
14 are going to be created, then there are ways to control  
15 and reduce the odors.

16           And then if we decide the odors are going to be  
17 so strong and we have to move forward with this project,  
18 then we could look at an alternative mud-drawing  
19 location.

20           Next slide.

21           So people oftentimes ask about how do you --  
22 what truck routes would be used? Well, we definitely  
23 don't want trucks driving through residential areas of  
24 the -- of the Bayview. So if we do our mud-drawing  
25 here, they can swing around Candlestick Point and get on

1 101.

2 And we -- of course, it's too early to decide  
3 which landfill the mud -- the dry mud would go to.

4 So . . .

5 Then the next slide.

6 If we do have to go to this backup mud-drawing  
7 location, there's actually a railroad spur here. So  
8 after drying out the mud, we can load up rail cars, take  
9 it away, or trucks could come in, and I have them going  
10 up Cesar Chavez to 101. We would figure that out  
11 specifically. But the bottom line is that we would not  
12 have, you know, trucks driving around on the Bayview or  
13 on Third Street.

14 Next.

15 Okay. So getting to what EPA's going to  
16 recommend. EPA's done these type of sediment or mud  
17 cleanup projects a lot, and we've learned a lot of  
18 lessons on how to do this.

19 And number one is that if you do have to do  
20 dredging, keep it focused. Focus on the highest  
21 concentrations and dredge out those. Don't -- because  
22 you want to limit any type of spreading of contamination  
23 that could get up into the water and then resettle  
24 someplace else. So limit the stirring of the mud.

25 Find the best combination of those remedies:

1 the dredging, the capping, the institutional controls,  
2 the natural recovery. Use the best elements of those  
3 technologies to get to that risk reduction that you  
4 need.

5           When you do do the work during the construction  
6 period, think about the communities; think about people  
7 that live and work here; and keep truck traffic out,  
8 keep dust down, and keep odors down. And when you're  
9 done, make sure you test that top layer of mud to make  
10 sure that you've actually completed what you set out to  
11 do.

12           Next.

13           Okay. So an overview. Again, you could do  
14 nothing. I'm not going to recommend that at all.

15           You could dig up, dry, and haul away some of  
16 the contaminated mud. And then again, we just can't  
17 leave a hole in the mud and then place some clean sand  
18 and mud cap on top. So when you dig up some of the mud,  
19 you're basically capping the rest and bringing it right  
20 up to the same elevation.

21           Or you could dig up and haul away all the  
22 contaminated mud, and then you still need to bring back  
23 clean sand and mud on top. Okay.

24           Next slide.

25           Okay. So EPA -- we developed seven

1 alternatives here. And what basically -- we looked at  
2 dredging. This is number of truckloads removal. So we  
3 already decided that it's going to take a combination of  
4 all these type of actions to have a good cleanup.

5 So here's -- Option No. 1 is no action. You do  
6 nothing. And again, we're not going to do that.

7 So then we looked at -- Options 2 through 6 are  
8 just varied degrees of digging up some of the  
9 contaminated mud. And you could see we go from just  
10 digging up a very little in -- Options 3 and 4 is  
11 digging up very little, and it relies on this natural  
12 burial technique to take care of the rest along with  
13 capping.

14 And then Options 2, 5, and 6 is that you're  
15 digging up all the contaminated mud on top. But then in  
16 these [indicating] you're -- in 5 and 6, you're going  
17 down deeper. Option 6 is you're going down 2 feet  
18 everywhere pretty much at Yosemite Slough. Option 5 is  
19 you're going down up to 2 feet where the top foot is  
20 contaminated. All right?

21 And then Option 7, which is 4,100 truckloads of  
22 mud that would go out, and the same amount of sand and  
23 mud would have to come back is what we think it would  
24 take to take out all the contaminated mud.

25 Okay. Next one.

1           So we have to evaluate these seven options, and  
2 EPA uses criteria of effectiveness. How good will an  
3 option protect public health and the environment in the  
4 short term during the construction and in the long  
5 term? because, again, we're doing this for future  
6 generations.

7           And implementability means does the technology  
8 exist? Does it comply with laws?

9           And then cost.

10          So we balance these three criteria against --  
11 and we rate each of those seven options.

12          Next slide.

13          So this is EPA's evaluation of those seven  
14 options. So here's the seven options again. Here's the  
15 truck -- the mud removal volumes that are associated  
16 with each option. And then they were all  
17 implementable. So they could all be done.

18          So let's just take a look at effectiveness and  
19 cost. And so let's start with the digging-it-all-out  
20 one. And EPA rated that one -- and you may have a  
21 different opinion -- as just having moderate  
22 effectiveness because number one is that they're --  
23 you're running -- the more that we dig down deeper and  
24 deeper of stirring things up, I was starting to lose  
25 confidence that we were going to be spreading too much

1 of the contamination around; and it's a much longer  
2 duration.

3 So it -- this project, for example, could not  
4 happen. This is a multi-year project to dig it all  
5 out. So you would be digging at Yosemite Slough,  
6 perhaps creating odors, with the truck traffic in this  
7 neighborhood for upwards to two years.

8 So that is why I only rated that one moderate.  
9 It's the most expensive, of course, because most of the  
10 costs are associated with how much mud you actually dig  
11 up and haul away because that's -- so that's upwards to  
12 \$35 million.

13 So overall I rated that as low, even though I  
14 know that a lot of people are, like, "Dig it all out,"  
15 you know. But it's my honest opinion that's not the  
16 best solution. It's my honest opinion that doing --  
17 digging just a little bit and relying on natural barrier  
18 is a low -- is -- a natural barrier is a low rating as  
19 well. It -- We did not have enough confidence that  
20 that would get us to that risk reduction that we  
21 needed.

22 So for me it pretty much boiled down to  
23 Options 2 and 5. I'm recommending Option 5 here that is  
24 about a -- about a thousand truckloads of mud will have  
25 to get dredged out, and we'll have to bring about that

1 much of clean mud back in.

2 And so we're focusing on the most contaminated  
3 tops of the top part of the mud, and we're going to  
4 dredge that part out. And so that's what EPA guidance  
5 says is that that's -- the most effective way to reduce  
6 risk is to go after the most contaminated top parts of  
7 the mud. And so Option 5 got the highest rating. It  
8 came in. It's just a cost estimate at this point of  
9 \$11.6 million.

10 Next slide.

11 So EPA's recommending Option 5. That Proposed  
12 Plan fact sheet that I showed you has a lot more details  
13 about what Option 5 is all about. But what we're  
14 recommending is that we're going to dredge some of the  
15 top layers of mud out and take it out of the Yosemite  
16 Slough and then dry it and haul it away.

17 The dredge technology, whether it's a  
18 mechanical dredge or a hydraulic dredge, we'll decide  
19 that during the design phase.

20 The actual mud-drawing location, we'll decide  
21 that during the design phase as well. I'll tell you, my  
22 preference is the overflow parking lot for the 49ers  
23 stadium. But again, we'll decide that in the design  
24 stage.

25 And I want to continue to have public meetings

1 when we make these decisions during the design so the  
2 public is aware of these decisions we make.

3 And the haul routes, I pretty much showed you  
4 what they are. We will stay out of the residential  
5 streets in the Bayview.

6 Another important aspect of the Option 5 is to  
7 prevent recontamination. The slough banks, we have  
8 looked at those. Those are in horrible shape, as you  
9 know. We need to get the debris off the slough banks  
10 and stabilize them so they don't erode any more.

11 And we can -- we would love to monitor -- Any  
12 type of clean sedimentation that happens at Yosemite  
13 Slough is welcome, and we can monitor for that.

14 We can make sure that if we are going to  
15 have -- basically a sediment cap is what I'm  
16 recommending. I'm not recommending dredging everything  
17 out.

18 So we'd be in communication with State Parks  
19 to -- in -- consistent with their general plan for the  
20 park to not allow any type of boating or anything with a  
21 propeller basically because propellers get in there, and  
22 they stir up the mud. And if we have a nice clean layer  
23 of mud on top, we want that clean layer to be there  
24 forever.

25 And so we don't want boats or anchors or

1 anything like that that would ruin our clean layer of  
2 mud on top. And then again test that top layer of mud  
3 to make sure that it stays clean.

4 This -- These green zones right now are  
5 preliminary thinking of the areas that for sure need to  
6 get dredged out. As you can see, there's some areas  
7 where the sediments on top are not contaminated. There  
8 is contamination down deeper, but the top layer's  
9 clean.

10 Next slide.

11 So again, Option 5, we just think -- EPA  
12 believes it's the best way to find that right balance of  
13 protecting people and the ecology in an efficient and  
14 permanent fashion. And there are some decisions to be  
15 made during the design phase. But again, we are  
16 identifying this framework of a cleanup.

17 So what happens next -- I'm almost done. I  
18 think I've gone over my 30 minutes, but next slide.

19 So at -- right now we're in a public comment  
20 period. As Jackie's talked about, we want to hear from  
21 the public on what they think about Option 5, if you  
22 think Option 5 is a good idea, you think it's a bad  
23 idea. If you think it's a bad idea, which option do  
24 like? So we're in public comment.

25 EPA's going to try to make a final decision on

1 which option by the end of this year.

2 And then next year -- I'm going to talk about  
3 this a little bit -- we need to sit down and have what's  
4 called legal settlement negotiations for the parties  
5 that we believe are responsible for the pollution, and  
6 we think that will take an entire year.

7 Then we'll go into these design studies. Very  
8 important. Like I said, there's some important  
9 decisions to be made during the design on dredge  
10 technologies, sediment-drying locations.

11 And then at the earliest, we hope to start the  
12 cleanup work in the summer of 2016, and then 2017 onward  
13 the Yosemite Slough will have a new era of cleanliness.  
14 State Parks can do their work, and the slough can  
15 finally start to recover.

16 Next slide.

17 So this legal -- in -- in 2014 EPA has a  
18 polluter-pay policy. This is Superfund law that I'm  
19 using, and we have identified 75 to 80 parties already  
20 that we think have partial responsibility for the  
21 pollution.

22 We want to sit down with these parties and work  
23 out the settlement agreement. And then they would agree  
24 to hire the contractors, do the designs; and that would  
25 all be under EPA and Water Board jurisdiction, and we

1 will be watching them.

2 And we can have public meetings during that  
3 period of time to -- it's not like we're just going to  
4 let these private parties do what they want for the  
5 cleanup. They have to do what EPA -- the cleanup that  
6 EPA selected, and then EPA will make sure that the  
7 design documents are following those guidelines that EPA  
8 set out.

9 Next.

10 And they have to come up with this amount of  
11 money. And if it ends up costing 14 million, they have  
12 got to pay 14 million. They pay for cost overruns.

13 And again, I want to reiterate this 'cause it's  
14 so important. During the design, there's some important  
15 things that we have to sort out. We have to figure out  
16 how much odor will be generated when we dry out the  
17 mud.

18 And based on how much odor we get generated, we  
19 got to decide what's the best location to dry out the  
20 mud and then make sure whatever location we use we do an  
21 air quality protection program because we know that, you  
22 know, in Bayview in general, lung health is of top  
23 priority here; and we do not want to do anything that  
24 would make anybody, you know, have any type of  
25 air-quality problems.

1           And then set up the final traffic management  
2 plan as well.

3           Next slide.

4           Okay. So this is pretty complicated business,  
5 and EPA has a -- I'm done with my presentation on what  
6 I'm recommending, and I want to -- I've got a couple  
7 closing slides now.

8           This one is -- this -- We have a grant  
9 program, and it's called Technical Assistance Services  
10 for Communities. And, you know, because Superfund  
11 cleanups can get so complicated, EPA -- we basically  
12 provide you with your own technical consultants; and you  
13 can contact Jackie.

14           And we have a program with that that if you  
15 want to better understand EPA's proposal or especially  
16 like when we're in the design phase and you don't want  
17 to necessarily believe everything I say, EPA has a  
18 program where free of charge you can have your own  
19 technical consultant. You can have your private  
20 meetings with that consultant.

21           So that's in the handouts, the contact  
22 information, if you can get -- if a community group is  
23 interested in applying for that.

24           Next slide.

25           So after the cleanup is done -- so, again,

1 2016, 2017 -- the Navy can then proceed with its cleanup  
 2 of South Basin. Very important. That's the part of San  
 3 Francisco Bay that I showed you before. State parks can  
 4 keep working on its wetlands restoration work, start  
 5 putting in its park amenities around Yosemite Slough,  
 6 including a walking trail which I think is also going to  
 7 be a biking trail, and there's going to be a picnic area  
 8 as well. And then the slough starts to recover.

9 Next slide.

10 Oh, and . . .

11 Okay. This is all information in your fact  
 12 sheet. This is EPA's Web site for Yosemite Slough.  
 13 This is where you get more information.

14 I see Saul Bloom from Arc Ecology here. Talk  
 15 to Saul. If you have -- If you don't want to talk to  
 16 me and want to talk to Saul, he knows Yosemite Slough  
 17 extremely well, and he's got all the doc- -- all the EPA  
 18 documents are at his office.

19 We also have EPA documents on a flash drive at  
 20 the Bayview Library, and you can come downtown and --  
 21 come downtown. You can meet with me. And we have a set  
 22 of records downtown as well. Stay informed.

23 Again, thank you again for coming tonight. You  
 24 can -- I hope -- Hopefully, you signed up on our  
 25 mailing list. Here's our contact information, and give

1 us a call if you have any questions.

2 Next slide.

3 And now you -- and you can tell us your  
4 comments tonight. You -- We're going to have a session  
5 right -- I'm done, basically. You can come up and give  
6 your verbal comments. You can write your comments down  
7 on a card, give them to Jackie, and -- or you can mail  
8 them in to me.

9 Next slide.

10 That's it. September 6 is the deadline. Thank  
11 you very much for listening to me. I hope I didn't  
12 drone on too long. And now I'm done, and now it's time  
13 for you to ask questions to me. Or if you have formal  
14 comments that you would like to make for the record --

15 Yes, couple questions.

16 MS. ATTENDEE: Yes. One of my concerns has  
17 nothing to do with our neighborhood. It has to do the  
18 fact the natural cleanup of our environment for some of  
19 the PCBs is not happening.

20 So it's always been my problem that we are  
21 taking our problem, putting in a landfill, that a  
22 hundred years from now somebody's going to build on it.

23 What --? Is there any --? On the land deed,  
24 is there anything that will notice folks a hundred years  
25 from now that this is contaminated material that was

1 dumped in your area?

2 MR. COOPER: Oh -- Yes, yeah. Now we've got  
 3 lots of government. As you know, back in the day, we  
 4 built landfills. We lost track of our landfills. We  
 5 accidentally built homes on landfills. Now we keep  
 6 track of those things, you know.

7 So the landfills that -- the waste that  
 8 Yosemite Slough would get taken to are going to be, you  
 9 know, government-certified landfills that are, you know,  
 10 checked by the State and EPA, and they will -- they  
 11 go -- they are for sure on the land deeds.

12 MS. ATTENDEE: Okay.

13 MR. COOPER: And they can never get -- that  
 14 they can't get built on without approval. So yep.

15 Another clarifying question about my  
 16 presentation?

17 MR. ATTENDEE: The sewer pipes.

18 MR. COOPER: Yes.

19 MR. ATTENDEE: Do those have a possibility of  
 20 recontaminating later on?

21 MR. COOPER: It's a good question. We have  
 22 done some -- some preliminary testing of the -- you  
 23 know, the City of San Francisco, San Francisco PUC, is  
 24 required in general to test the effluent that comes  
 25 out. And again, that -- when they do flow, it's not --

1 fortunately, it's not like it was in the past. It's not  
2 just raw sewage.

3           Inside -- Like I say, the City of San  
4 Francisco built these great big underground caverns  
5 basically. And so when it rains heavily, you know,  
6 because we have sewage and rainwater go in together,  
7 these caverns start to fill up, and then there's a wall  
8 that it will spill over.

9           So you get a little bit of primary treatment of  
10 the contaminants that drop down so that it spills over,  
11 and that's only during super heavy rain falls; then it  
12 goes out the sewer pipe.

13           Now, there's two concerns about that. I'm a  
14 little bit concerned that maybe a little bit of  
15 contamination will still come out and contaminate our  
16 top layer, because remember, it's the top layer of mud  
17 we want to keep clean.

18           And we will do some studies around to make sure  
19 that the stuff coming out of the sewer pipes will not do  
20 that, and we want to make sure that they don't flow with  
21 any type of force that would stir up the mud, you know,  
22 strongly because we don't -- we know that there's some  
23 contamination down deep, and we don't want just the  
24 physical force of any water coming out of that pipe to  
25 mess up our remedy. Okay.

1 Anything else?

2 MS. LANE: Are there any more clarification  
3 questions on the presentation?

4 MR. COOPER: Yes.

5 MR. ATTENDEE: I have a question pertaining to  
6 not the slough, but the area that's being -- has already  
7 been repaired. What is the contamination level of that  
8 ground, or does this not concern --?

9 MR. COOPER: Okay. That -- that's a State  
10 Parks project. So on the --

11 MR. ATTENDEE: Yes.

12 MR. COOPER: On the north side of Yosemite  
13 Slough, State Parks has already started on a wetlands  
14 restoration --

15 MR. ATTENDEE: Right.

16 MR. COOPER: -- project. They have done  
17 environmental cleanup first.

18 MR. ATTENDEE: Oh.

19 MR. COOPER: When they dug -- Notice that the  
20 slough used to have a straight edge there.

21 MR. ATTENDEE: Yeah.

22 MR. COOPER: And now there's these two big, you  
23 know, inlets.

24 MR. ATTENDEE: All right.

25 MR. COOPER: And so when they dug that out,

1 they're under an order from the Water Board, and they  
 2 have -- they had standards that they had to meet when  
 3 they dug that soil out and what kind of clean soil to  
 4 put down.

5 But again, as you saw in that -- I don't know  
 6 if you're -- in the very first slide, it's all  
 7 artificial fill soil there. So we're dealing with some  
 8 soil that, you know, by nature has problems on it. But  
 9 there's ways to manage that so it doesn't get out into  
 10 the environment anymore.

11 And so you clean up the top layer. You put a  
 12 clean layer down. Then you put in some plants in it and  
 13 stabilize it so it's -- that's what State Parks has  
 14 done.

15 Any other questions?

16 MS. LANE: Any more questions before we start  
 17 our public comment period?

18 MR. COOPER: Should we take a short  
 19 couple-minute break for the court reporter?

20 MS. LANE: I'm going to check with Christine.  
 21 Do you need a break?

22 THE COURT REPORTER: No.

23 MS. LANE: Okay.

24 THE COURT REPORTER: I'm good.

25 MS. LANE: So we can start right in unless you

1 guys want to take a quick five-minute break or keep  
2 going. You're going to keep going?

3 MR. COOPER: Keep going. Okay.

4 MS. LANE: So --

5 MR. COOPER: We'll be done faster.

6 MS. LANE: How many people do we have here that  
7 want to do a verbal comment?

8 (A raise of hands)

9 MS. LANE: That's it?

10 MS. ATTENDEE: I think I gave a --

11 THE COURT REPORTER: I'm sorry. What?

12 MS. LANE: Verbal comment.

13 MS. ATTENDEE: I think I gave one . . .  
14 [unintelligible].

15 JOSE JIMENEZ: I think I --

16 MS. LANE: You need to state your name and  
17 spell it for the court reporter.

18 JOSE JIMENEZ: My name is Jose Jimenez,  
19 J-o-s-e, J-i-m-e-n-e-z, and the middle initial is A.

20 MS. LANE: I think she'll need that. You need  
21 to speak in the mic.

22 JOSE JIMENEZ: Oh.

23 COMMENT

24 BY JOSE JIMENEZ:

25 To start off my presentation, I think it's

1 great to see that we're cleaning up Monsanto's mess, the  
2 company that creates all the pesticides and insecticides  
3 that were used in the past couple decades.

4 National -- National Geographic released an  
5 article in 2008, five years ago, about lead-tolerant  
6 worms that changed the chemistry in the meadows such  
7 that it becomes inert, and it allows plants to process  
8 it much easily. I believe that can also be of great use  
9 to the marshland, knowing that the lead levels are above  
10 average.

11 And I believe that as like a -- a process  
12 before about dredging the water, it might be useful  
13 maybe to put those worms out there and get that lead to  
14 become inert. That way the plants can process it much  
15 easily.

16 And also, I did some research, and I found out  
17 that vitamins, B12s, are nucleophiles, and they're also  
18 reducing catalyst, which means that they reduce the time  
19 between chemical reactions and that they are -- they're  
20 also -- they can potentially dechlorinate  
21 polychlorinated biphenyl, PCBs. So it may also help in  
22 doing that process. So that's what I got to say.

23 MS. LANE: Excellent.

24 COMMENT

25 BY ANTHONY KHALIL:

1 Greetings. Anthony Khalil, A-n-t-h-o-n-y,  
2 K-h-a-l-i-l. Greetings. Good night -- Good evening,  
3 everyone.

4 Thank you, Jose, for kind of start the public  
5 comment of this.

6 I want to kind of put -- I want to be cogent,  
7 but I also want to thank Mr. Cooper for the  
8 presentation, kind of the framework for this cleanup.

9 Something I think that was omitted was the fact  
10 that -- you know, that probably gleaned from the paper  
11 that came out was the fact that this is the first  
12 official cleanup of Yosemite Slough in its history. And  
13 we have quite an opportunity here, okay.

14 With that opportunity, I feel we have to  
15 conduct and invest to prevent recontamination. That's  
16 the piece to focus that I would like to highlight  
17 because we are making the investment in the southern  
18 shoreline.

19 As you can see, it's transforming. I've been  
20 part of this transformation personally for close to  
21 15 years now in the southern shoreline in ecological  
22 restoration work. But I come here as, you know, someone  
23 who's part of this community.

24 I don't live here, but I've been working here  
25 for close to 15 years, and it's a part of my greater

1 community that I feel is -- is integral of being an  
2 urban resident, my ability to access open space, my  
3 ability to nourish and steward our ecological treasures  
4 like Yosemite Slough. So I want to highlight that as  
5 well.

6 And I appreciate Mr. Cooper giving this -- this  
7 picture that it is a watershed that connects to McLaren  
8 Park.

9 And it is quite a living classroom. I  
10 facilitated, you know, thousands of students to access  
11 the shoreline as a community park but with a state  
12 park.

13 And something of interest to me is this  
14 opportunity for a living shoreline approach. And it's  
15 taken the perspective that the shoreline will evolve  
16 over time. And we have this potential maybe to not just  
17 rid it of toxins, but bring in what we do want to see,  
18 and that is increasing wetland habitat, that is  
19 increasing the next generation's potential to engage  
20 with their natural environments.

21 And here we are in this -- in this area, Bret  
22 Harte, right, which is literally a stone's throw from  
23 the slough.

24 So we do have to make this -- you know, take  
25 this opportunity and really plan for the future. And

1 what I mean by that is creating a living shoreline  
2 through means of --

3 I am a scientist, you know, by training. And  
4 so my approach is say sure, let's go into subtidal  
5 restoration and really start thinking about oyster beds  
6 and how they filter our waters and how -- and then how  
7 they process contaminate. And then I start thinking  
8 about the approach of, of course, terrestrial  
9 restoration, you know, restarting our wetlands, what  
10 these areas once were.

11 But again, we're in a urban setting, and we  
12 have to -- we have to think about price. We have to  
13 think about, of course, the techniques; and we have to  
14 also think about what is the investment that future  
15 generations would pay.

16 So without getting into those complexities, I  
17 want to recommend is -- is taking a living shoreline  
18 approach, and I hope to do influence that with a formal  
19 recommendation, writing it and continuing this dialogue  
20 through -- through multiple means, this kind of hybrid  
21 approach that is valuing people's connection to their  
22 local environs, which is in my opinion an inalienable  
23 right.

24 It's everyone's right to get access to open  
25 space that is adjacent to their doorways or not and in

1 this urban kind of quandary of saying, well, how do we  
2 rid of these contaminants now, but how do we enhance and  
3 increase our connection and our general comfort with our  
4 environment?

5 You know, we're sitting here, and to me I think  
6 of mud as sediment, okay. But also for some I also have  
7 a humility to understand that yeah, it's just mud. Who  
8 cares about that?

9 But if we understand and we're informed and  
10 there's -- there's groups that I work with  
11 professionally that want to disseminate this information  
12 and not just say, hey, it's polluted. But no, here is  
13 the opportunity on how we can kind of reverse this  
14 legacy.

15 So I really want to stress this approach, and I  
16 hope to make a formal recommendation on how to prevent  
17 the recontamination and how to actually increase it  
18 ecologically but socially as well.

19 So thank you all.

20 MS. LANE: Thank you very much.

21 Are there any more comments?

22 *(Pause; no response elicited.)*

23 Okay. This is a great opportunity.

24 So we thank you all for coming out tonight.

25 And what EPA will do with our written comments

1 and the comments that Christine is taking down from your  
2 verbal comments, they will be considered when Craig is  
3 making -- EPA is making final decision on the site and,  
4 of course, will become part of our responsiveness  
5 summary as part of our Action Memorandum; and we will  
6 notify you when it's available.

7 And we will also keep you informed of our  
8 public process as we go on through this planning  
9 process.

10 And thank you again for coming out tonight.

11 MR. COOPER: Thank you, everybody.

12 *(Off record at 7:13 p.m., 8/21/13.)*

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CERTIFICATE OF REPORTER

I, CHRISTINE M. NICCOLI, Certified Shorthand Reporter of the State of California, do hereby certify that this 51-page transcript of the foregoing meeting was reported by me stenographically to the best of my ability at the time and place aforementioned.

IN WITNESS WHEREOF, I have hereunto set my hand this 11th day of September, 2013.

  
CHRISTINE M. NICCOLI, C.S.R. NO. 4569