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PROPOSED PLAN FOR IR SITE 26
FORMER NAVAL AIR STATION MOFFETT FIELD
PUBLIC MEETING

REPORTER'S TRANSCRIPT OF MEETING

MAY 16, 2013

Mountain View Senior Center
266 Escuela Avenue
Mountain View, California

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

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A T T E N D E E S

FACILITATOR:

SCOTT D. ANDERSON - U.S. Navy Base Realignment and  
Closure (BRAC) Environmental Coordinator for  
Former Naval Air Station Moffett Field

CONSULTANTS & REGULATORS:

STEVE HALL - AEI (presenter)

NEIL HEY - CB&I

CAROLYN M. HUNTER - Tetra Tech

YVONNE W. FONG - U.S. Environmental Protection  
Agency (EPA)

MEG STEMPER - AMEC

PUBLIC AUDIENCE:

PETER STRAUSS - Center for Public Environmental  
Oversight (commenter)

---oOo---

1 MOUNTAIN VIEW, CALIFORNIA, THURSDAY, MAY 16, 2013

2 7:04 P.M.

3 ---oOo---

4 MR. SCOTT ANDERSON: Welcome to the Proposed  
5 Plan public meeting for the amended groundwater cleanup  
6 remedy for IR Site 26 at Moffett Field. We appreciate  
7 your attendance.

8 For the meeting schedule, we're going to go  
9 over an overview of the Navy's IR program. Steve Hall  
10 is going to be presenting the Proposed Plan summary.

11 We are going to break out into a poster board  
12 session where we have got a series of I believe it's  
13 ten poster boards, if you'd like to go around and take a  
14 look at that. And then either during the poster board  
15 session or then afterward, we are going to have a formal  
16 public comment period.

17 To summarize, the meeting purpose is that we  
18 are going to summarize the Navy's Proposed Plan to amend  
19 the current groundwater cleanup remedy for IR Site 26,  
20 and the purpose of this meeting is to obtain public  
21 comments to evaluate the community acceptance of our new  
22 proposed remedy.

23 Meeting guidelines. Please hold your comments  
24 until after the presentation, respect established time  
25 limits. So I don't think we are going to have a problem

1 with that tonight. Listen and respect all participants,  
2 and turn off cell phones and pagers.

3 For the public comments, the reason for this  
4 meeting is to allow the public to comment on our  
5 Proposed Plan for Site 26. Comments can be provided in  
6 either written or verbal form. Written comments can be  
7 filled out tonight and given to us or that they can be  
8 mailed, and the comment period ends May 29th.

9 And to provide verbal comments tonight, there's  
10 a -- we have a court reporter here that you can -- will  
11 either, you know, be giving -- be able to take the  
12 verbal comments; or you can come up -- if you don't feel  
13 comfortable providing a comment in front of the group,  
14 you can come up and provide comments directly to the  
15 court reporter.

16 And then the Navy -- we won't be responding to  
17 comments tonight, but we will be responding to those  
18 comments in the Responsiveness Summary in the Record of  
19 Decision.

20 Okay. And the IR program is the Navy's program  
21 for cleaning up of the BRAC sites; and it's part of the  
22 BRAC -- we are part of the program -- the BRAC Program  
23 Management Office, or PMO Office, West in San Diego; and  
24 then we also get support from Southwest Division also in  
25 San Diego.

1           The purpose of the program is to identify,  
2           investigate, assess, characterize, and remediate  
3           hazardous substances; to reduce the risk to human  
4           exposure and also to the environment from past Navy  
5           operations from hazardous material releases; and the --  
6           and also our program is to be consistent with the CERCLA  
7           program, or the Comprehensive Environmental Response,  
8           Compensation and Liability Act.

9           And the ultimate goal for the Navy during this  
10          BRAC process is to, one, transfer property and to move  
11          sites ultimately to closure.

12          The CERCLA -- The Site 26 CERCLA process. And  
13          we started out with a preliminary assessment site  
14          inspection which identified the -- the Site 26 area as a  
15          site, went through the remedial investigation and  
16          feasibility study. And then after that a remedy was  
17          selected, and that is presented to the public in a  
18          Proposed Plan and then documented in a Record of  
19          Decision.

20          And then where we're kind of at now is in the  
21          Remedial Design/remedial action. So originally we had a  
22          Remedial Design/remedial action of the -- of the  
23          original ROD, and we -- and which consisted of  
24          pump-and-treat, ICs, and groundwater monitoring.

25          Then we went into the reme- -- remedi- --

1 remedy -- excuse me -- optimization phase, and that's  
2 kind of where we're -- where we've circled back. As  
3 part of that remedy optimization, it was determined that  
4 things could be done better than were currently being  
5 done.

6 And so that loops us kind of back around to the  
7 feasibility study stage. We conducted ano- --  
8 additional feasibility study of new alternatives, and  
9 then a selected remedy was -- remedy was selected, and  
10 that's where we are now. We're at the Proposed Plan  
11 public meeting stage, and then our new remedy will be  
12 documented in a Record of Decision.

13 And then hopefully, ultimately we'll get site  
14 closure. With -- with this site with groundwater, that  
15 may be a number of years off, but that's the ultimate  
16 goal.

17 And now I'm going to pass it off to Steve Hall  
18 who will be presenting the Proposed Plan summary.

19 PRESENTATION

20 BY STEVE HALL:

21 Okay. These are basically the different items  
22 we'll be talking about during the presentation:

23 Background of the site plus what's the site  
24 conditions.

25 The remedial objectives, chemicals of concern,

1 and cleanup goals, those are what were in the original  
 2 ROD, the 1996 ROD.

3 What work's been done on investigation,  
 4 cleanup, and evaluations. Of course, why the existing  
 5 pump-treat system was shut down, the different studies  
 6 that went on to come up with a better alternative.

7 The treatment progress to date, both at the  
 8 time that the system was shut down and now currently  
 9 after all the treatment -- treatability studies.

10 Comparison of the different alternatives,  
 11 presentation of what the Navy solicits input from the  
 12 regulators is proposing to change the remedy into, and  
 13 then how to provide comments, okay.

14 All right. Moffett Field originally opened in  
 15 1933 as Naval Air Station Sunnyvale. It was primarily  
 16 supporting the lighter-than-air program, the  
 17 dirigibles. That was one of the main components of the  
 18 military at the time. And it went over to the Army Air  
 19 Corps between '35 and '42 at the onset of World War II,  
 20 went back to the Navy and became Naval Air Station  
 21 Moffett Field.

22 With the onset of RCRA and CERCLA in the '80s,  
 23 Department of Defense began taking on the duties of  
 24 evaluating what type of hazardous releases and  
 25 contamination was existing at Department of Defense

1 facilities: the Army, the Navy, the Air Force.

2 So in '84 there was initial assessment.

3 Operable Unit 5 was created, which is to -- groundwater  
4 east of the runway, to keep it separate from what was  
5 determined to be a very large plume on the west side of  
6 the facility.

7 1986, the Installation Restoration Program,  
8 which was the internal DoD process -- formalization of  
9 the process, which also is how they brought in CERCLA to  
10 keep it under DoD control.

11 '87, the results of the assessments were put in  
12 the ranking, and Moffett Field went on the National  
13 Priority List. But basically it became a Superfund  
14 site.

15 Then assess the -- the waste management  
16 facilities, waste storage facilities, the treatment  
17 facilities, primarily the UST areas where the waste was  
18 stored and also then the runoff and wash that went to  
19 the wastewater ponds, these being the two principal  
20 source areas for what ultimately became of concern at  
21 Site 26.

22 We'll just slip on through, okay? I think  
23 everybody knows this. Remedial investigation,  
24 feasibility study. Next slide, next slide.

25 MS. HUNTER: Okay.

1 MR. HALL: Moffett Field closed.

2 Record of Decision in 1996, and with that the  
 3 east aquifer treatment system was designed and put in  
 4 place, began operation in January 1999.

5 By July 2003, it was clear that everything had  
 6 stabilized. There was no more change happening from the  
 7 pump-and-treat. So the system was shut down to evaluate  
 8 what was going on, why weren't they seeing any further  
 9 improvement, what other options were possible if it  
 10 needed to switch to something else.

11 So 2008 -- 2003 to 2008 there was an evaluation  
 12 done -- we'll go over what the results were -- then  
 13 treatability studies, which led to the Focused  
 14 Feasibility Study to where we are now, Proposed Plan for  
 15 a new remedial method.

16 Okay. Site 26 [indicating] over on the area  
 17 east of the runways. Original Operable Unit 5 was  
 18 everything over east, but it was -- OU5 was strictly for  
 19 the groundwater; and the main impacts of groundwater  
 20 were the area that became IR Site 26. It keeps it  
 21 separate from the bigger plume, which now the MEW  
 22 Superfund site.

23 Groundwater was impacted through maintenance  
 24 operations, fuel management, and fire training.  
 25 Basically the USTs -- they stored the fuel, but they

1 also stored the waste rinsate, the solvents, the waste  
2 oils, runoff from the runway area; and wash from  
3 everything went to the wastewater treatment ponds, which  
4 of course leaked to the groundwater, became clear that  
5 there were impacts as they began doing the assessments.

6 In the 19- -- early 1990s, the USTs were closed  
7 out for excavation around the USTs. So the groundwater  
8 remained the primary issue. The wastewater ponds were  
9 closed, and a formal management program was put in  
10 place. The wastewater ponds closed; the formal program  
11 put in place to manage the runoff from the runway areas.

12 So the plume, as characterized in the remedial  
13 investigation, was fairly sizable. The groundwater at  
14 the site occurs in sands. The upper aquifer is only the  
15 upper 30 feet. It's just called the Upper A Aquifer.  
16 The lower A is from 30 to 45 feet.

17 The sands trend north/south. These are  
18 basically channel sands from the mountains to the south  
19 as water flowed to the bay. They were deposited.  
20 Periodic floods would deposit fine-grained material  
21 around them. So we have these long, thin ribbon sands  
22 that are surrounded by silts and clayey silts.

23 COCs present in two separate plumes: Primarily  
24 this portion up here [indicating] where the blue line  
25 is, this water is saline in the groundwater. It's above

1 3,000 milligrams per liter TDS. So it's not drinkable  
 2 like that. So whereas this portion down here  
 3 [indicating] the water is better quality. It's a  
 4 potential drinking-water source.

5 So the way the two plumes were handled to be  
 6 separate. The area where it's potentially drinking  
 7 water has got to be cleaned up to meet drinking-water  
 8 standards.

9 Next slide, please.

10 Remedial action objectives that were laid out,  
 11 finalized, and presented in the ROD: Protect human  
 12 health by preventing unacceptable exposure to  
 13 contaminated groundwater, maintain the present and  
 14 future beneficial groundwater uses that's usable for --  
 15 potentially usable for drinking water, has to be  
 16 maintained for that purpose, and protect environmental  
 17 receptors from potential exposure.

18 And that's primarily -- some of the storm water  
 19 ditches, period of times when the groundwater gets high,  
 20 it does discharge into the storm water ditch. So that  
 21 was a factor that had to be looked at. Okay.

22 Chemicals of concern. Health risk assessment  
 23 found primarily the chemicals of concerns are dissolved  
 24 chlorinated solvents, primarily PCE and TCE. The PCE  
 25 is -- highest concentrations are around Hangar 3 where

1 the main storage facilities were and the operation  
2 facilities were, whereas the TCE is primarily where the  
3 storm water ponds where rinsate and runoff and  
4 everything would flow into the ponds and have dissolved  
5 TCE in them.

6 The DCE, the dichloroethene, is primarily a  
7 degradation product. 1,2-DCA, there are a few things  
8 which DCA is directly used as a solvent form; but in  
9 general, this was an additive in leaded gasoline. And  
10 then vinyl chloride is just a degradation product from  
11 the others degrading.

12 An ecological assessment determined that the  
13 maximum concentrations that were detected back in the  
14 late '80s and early '90s were low enough that they did  
15 not create ecological risk or below ecological  
16 benchmarks. So basically moving forward it was for  
17 health impacts as far as human health of the -- of the  
18 water that's going to be used for drinking-water  
19 purposes.

20 Next.

21 And cleanup standards, or drinking-water  
22 standards, maximum contaminant levels: 5 ppb for PCE  
23 and TCE, 6 ppb -- 6 micrograms per liter, parts per  
24 billion for dichloroethylene, and then 0.5 for the DCA,  
25 vinyl chloride.

1 Record of Decision 1996 stated pump-and-treat  
2 with treatment. The treatment was air stripping, and  
3 then it was -- could either be discharged for irrigating  
4 the golf course; or if that wasn't going to work, then  
5 it would go through a permitted outfall, NPDES-permitted  
6 outfall, through the storm water.

7 And then groundwater monitoring to keep track  
8 of the progress of the remedial operation with  
9 institutional controls in order to prevent use of  
10 groundwater that could cause exposure to people.

11 Northern plume being up in a saline groundwater  
12 area where it wasn't suitable for drinking, main thing  
13 was just monitoring it until it naturally degrades to  
14 below-drinking-water levels.

15 So overall, 1999 to 2003, the pump-and-treat  
16 remedy was in place. 2003 it was shut down because  
17 there was no improvement being seen through the  
18 operation of it. An evaluation conducted which --  
19 initial evaluation looking at the data and then  
20 treatability studies of other possible options, and then  
21 brings us to where we are now. We have a proposed  
22 method which brings the Proposed Plan.

23 As far as the effectiveness, to date, the  
24 pump-and-treat system. In -- The samples indicated  
25 that once you account for what's in the water and what's

1 on the sediment, altogether there's an estimate of 20 --  
2 of -- 29 pounds of volatile organics were released into  
3 the environment.

4 Now, the pump-and-treat program pulled out  
5 24 pounds of it. That's approximately 2 gallons if you  
6 brought all this together. It's not a lot, but it's  
7 spread over a very large area. Estimated that just  
8 under 5 pounds remain, but of course the cost to remove  
9 that and treat it gets exponentially more expensive as  
10 you get to lower and lower concentrations.

11 The main factor preventing pump-and-treat from  
12 working was the fine-grained sediments that surround all  
13 the sands. Contaminants got into the ground. They're  
14 in the fine-grained sediments. They are in the sand.  
15 We can pump it out of the sand very easily, but the fine  
16 grain just slowly releases it back into the water that's  
17 in the sands.

18 So based on that, the estimate would be at  
19 least 40 to 50 more years by pump-and-treat alone.

20 Now, I mentioned between 2003 and 2010, there  
21 were a number of studies done. The first several years  
22 it was to evaluate is there natural degradation  
23 occurring at the site? And if so, at what rate?  
24 Examination of it found that yes, it is occurring, and  
25 the plume is stable. Matter of fact, it's shrinking in

1 size.

2           However, for a variety of reasons, it's very  
3 slow. I mean, ultimately we found that is -- the  
4 bacteria that degrades DCE, there's not great abundance  
5 of it. It's there; it degrades, but it will -- it's  
6 going to take a very long time.

7           So some pilot studies were done, treatability  
8 studies, for in situ treatment of the groundwater.  
9 Initially to get PCE and TCE to degrade, you got to get  
10 reducing conditions. The bacteria that do that initial  
11 require reducing conditions.

12           So a hydrogen-release compound was injected in  
13 order to create the reducing conditions. Now, while  
14 this caused the TCE and PCE to degrade, it didn't do  
15 much on enhancing the DCE. So found out that there's  
16 just not a lot of the bacteria that causes the DCE to  
17 degrade.

18           So then looked at some other alternatives. The  
19 abiotic/biotic treatment use a compound called EHC.  
20 Now, what EHC is is zero-valent iron and plant-based  
21 organic carbon.

22           Now, the plant-based organic carbon is -- was  
23 the key nutrient as far as some of the bacteria. So  
24 they put that in. That bacteria is happy.

25           Zero-valent iron under reducing conditions,

1 there's a direct chemical reaction. It breaks down the  
 2 PCE and TCE completely with around an 80, 90 percent  
 3 efficiency. Ten to twenty percent of it is going to go  
 4 to DCE and vinyl chloride and other compounds. Majority  
 5 of it gets degraded.

6 It does cost a lot to do that; but by doing  
 7 both of these, there was the chemical reaction, the  
 8 abiotic treatment, and then enhanced the bacteria with  
 9 the -- with the carbon. It worked. This was a  
 10 successful treatability study.

11 And then looking at the cost of that, because  
 12 zero-valent iron costs quite a bit, they look for a  
 13 simpler way to do it.

14 For this, the emulsified vegetable oil provides  
 15 nutrients, sodium lactate, causes the bacteria -- makes  
 16 it go -- reduces the drive, so they put in those. And  
 17 then also they added the bacteria -- more of the  
 18 bacteria that reduces the dichloroethene, the DCE. And  
 19 again, this study, it worked.

20 Now, they did this at Site 28 over on the other  
 21 side of the runway. The conditions are the exact same  
 22 there as at Site 26.

23 So through the treatability studies, they found  
 24 two methods that definitely worked.

25 Okay. Next slide.

1                   Now, where we're at, this slide illustrates  
 2 this -- these were the maximum concentrations of the  
 3 chemicals of concern that was ever detected. These were  
 4 in the source areas, the hot spots, and the graph  
 5 shows. Now, the 2012, again, the highest concentrations  
 6 are still in the former source areas, but those former  
 7 source area's where the treatability studies were done.

8                   So there was substantial knockdown of the  
 9 concentrations from the treatability studies. Very  
 10 successful. And as result --

11                   Go to the next slide, please.

12                   -- you can see the size of the plume is  
 13 significantly smaller 2012 from 1995, the original.

14                   Also, the northern plume has naturally degraded  
 15 below drinking-water standards. It's done.

16                   So there's just the portion here [indicating]  
 17 left. And the hottest areas are the hot spot where the  
 18 tanks used to be, underground storage tanks. And then  
 19 there's the area here [indicating] that's very resistant  
 20 where the wastewater treatment ponds were. The rest is  
 21 degrading and hopefully will work. Anyway, degrade  
 22 itself.

23                   So next slide.

24                   So on the basis of these treatability studies,  
 25 after reviewing all the data, the way degradation was

1 occurring, the success in the treatability studies, it  
2 was time to go on to a feasibility study, the Focused  
3 Feasibility Study, because we're not considering all  
4 options now. We are only considering what's really  
5 vital, what will get the result.

6 So Alternative 1, there was no action. That's  
7 a base line. You have to do it. Alternative 2 is okay  
8 if we only let natural degradation take care of it.  
9 We'll monitor it, the pace that it goes, and put in  
10 institutional controls. Again, the estimate is 50 to  
11 100 years for that to go the rest of the way.

12 Optimizing the pump-and-treat, which is  
13 basically we continue on, maybe we put in a few more  
14 wells. Still looking at 43 years, maybe a little  
15 longer.

16 And then we have the two methods that worked,  
17 the biotic/abiotic treatment with -- well, we treat the  
18 hot spot and use natural degradation for what's the  
19 residual. Institutional controls stay in place  
20 throughout the treatment process to prevent exposure to  
21 impacted groundwater.

22 And likewise on Alternative 5 biostimulation.  
23 This is the vegetable oil, the lactate, and introduction  
24 of bacteria by augmentation to accelerate the hot-spot  
25 areas.

1           So this is what was looked at in the Focused  
2 Feasibility Study.

3           Next slide.

4           The National Contingency Plan nine criteria  
5 were used to evaluate it -- this is required under  
6 CERCLA -- consists of threshold criteria which must be  
7 met. If it doesn't meet that, it's automatically  
8 eliminated, and that is that it's protective of human  
9 health and that basically it meets all regulatory  
10 requirements. That's everything from the Clean Water  
11 Act, exposure, anything -- Anything that potentially  
12 creates a risk that regulations exist on it has to  
13 comply with.

14           Balancing criteria are the five factors  
15 directly related to control the plume. Is the remedy  
16 long -- What's its effectiveness, long term and short  
17 term? Is it going to reduce the toxicity, mobility,  
18 volume through treatment within expected time frame?  
19 How implementable is it? How easy is it to implement,  
20 to get done? If it is technically not workable, then  
21 it's going to get thrown out.

22           And then cost. If you have two or more options  
23 that work, obviously we are going to be able to achieve  
24 this one.

25           And then the modifying criteria, which is

1 acceptance by the state, basically the state regulatory  
 2 agencies, and then the community. That input is what  
 3 this meeting's about and the comment period. Okay?

4 Also, the Navy does a sustainability matrix:  
 5 What's the carbon footprint, what's the impact on the  
 6 environment as a whole. This happens on every program  
 7 that's done within DoD at this point. It's mandated  
 8 back in Pentagon on down. It was done on this.

9 Look at energy consumption, greenhouse gas  
 10 generation, pollution emissions, water consumption, and  
 11 worker safety. Selected criteria's got to be favorable  
 12 under all this. So . . .

13 After doing all that, NCP criteria, the matrix,  
 14 matrices, et al., Alternative 5's the best choice is  
 15 what we came up with, what the Navy chose.

16 We're actively treating groundwater. We are  
 17 actively treating the hot spots. We're not going to  
 18 just wait and let it degrade on its own. We're going to  
 19 accelerate it on.

20 Monitor groundwater to keep track and see about  
 21 the pace, watch the plume as it shrinks, as the area of  
 22 concern gets smaller. If need be, if it stops moving,  
 23 you know, it starts -- slows down in the process, we can  
 24 reinject. Probably will be after the first two or three  
 25 years because when you add this in, the initial

1 additives, after a few years you've basically used  
2 everything up.

3           So it's still -- we still think it's high, it  
4 will be injected again. After a ten-year review if  
5 portions are still not proceeding, we can inject again.

6           And then ICs to remain in place to prevent  
7 exposure. And as required under CERCLA, under  
8 Superfund, five-year reviews, every five years where it  
9 gets reevaluated.

10           And it was selected because it's protective of  
11 human health and the environment. It's an -- actively  
12 treats the groundwater, prevents exposure. It ranked  
13 favorable in the nine-criteria analysis, well, seven so  
14 far. The other two we are in the process of. And it's  
15 more cost effective than Alternative 4.

16           And the pilot study showed it works at Site --  
17 it was very effective at Site 28. Conditions are the  
18 same at Site 26 as 28. It should work outstanding at  
19 Site 26.

20           This shows the conceptual layout as far as the  
21 treatment of the hot-spot areas. This is the area where  
22 all the underground storage tanks were. The red  
23 basically is where PCE plume is, but the high  
24 concentrations are here [indicating].

25           And so the treatment will be done where the

1 highest areas are initially, monitor it when you do  
2 expand next time. I mean, if we have still got concerns  
3 of other areas two or three years, we'll treat the other  
4 areas.

5 Over here [indicating] this is where the  
6 wastewater treatment ponds were. There's high  
7 concentrations of vinyl chloride here. That's what most  
8 of this is here [indicating].

9 Likewise, if the other areas' degradation slows  
10 down or something, we can supplement that with the  
11 bacteria, with the nutrients, and get that area moving  
12 also.

13 But because it is completely controlled with  
14 nobody's going to be using this groundwater, we can  
15 allow -- as we get lower concentrations, we can allow  
16 that to degrade naturally from that point because as I  
17 mentioned way back at the start, the lower the  
18 concentrations are, the higher the cost is to treat it.  
19 And so there's got to be some balance made.

20 Okay.

21 So the comment period runs through May 29th.  
22 Once the comments are in, the Navy with input from the  
23 agencies, they'll come to agreement as far as what is  
24 the remedy. Everything looks like it will probably be  
25 what's been recommended, but depends upon what all the

1 comments are and the concerns.

2 And then there will be a ROD amendment to  
3 document the change to the new remedy. Then it will be  
4 implemented.

5 Comment verbally or in writing. You can do  
6 that tonight. You can mail, E-mail, or fax comments to  
7 Scott. Everything must be received or anything in the  
8 mail must be postmarked by May 29 for it to still be  
9 considered, and then the Navy will respond to the  
10 comments in the Responsiveness Summary, which is  
11 attached to the ROD amendment.

12 And then for more information, go to the  
13 information repository at the Mountain View Public  
14 Library. You can go to Navy Web site, bracpmo. When  
15 you get there, click on "California," and then click on  
16 "Moffett Field"; and the information will come up. EPA  
17 Web site likewise if you enter in "EPA Region 9  
18 Superfund Moffett Field," you'll also get what documents  
19 they have on their Web site.

20 So . . .

21 MR. ANDERSON: And Peter, if you want to -- if  
22 you want to make comments now, you know, we will be more  
23 than willing to take them. If you'd like to take some  
24 time to look at the poster boards and --

25 MR. STRAUSS: I --

1 MR. ANDERSON: -- and provide comments --

2 MR. STRAUSS: -- don't need to. I can make  
3 comments --

4 MR. ANDERSON: Okay.

5 MR. STRAUSS: -- will make them quickly --

6 MR. ANDERSON: Okay.

7 MR. STRAUSS: -- unless somebody else has a  
8 comment.

9 Do you want me to use this mic here?

10 MR. ANDERSON: Can you hear us?

11 MS. HUNTER: Christine, can you hear?

12 MR. STRAUSS: What would you prefer?

13 THE COURT REPORTER: Just as long as you face  
14 me.

15 MR. STRAUSS: I could sit -- I could sit right  
16 next to you.

17 THE COURT REPORTER: That's great.

18 COMMENT

19 BY PETER STRAUSS:

20 My name is Peter Strauss, and I am the  
21 technical adviser to the Center for Public Environmental  
22 Oversight. And that's -- acronym is CPEO.

23 CPEO is the -- is the recipient of a TAG grant  
24 for Moffett Field. That's Technical Assistance Grant.  
25 CPEO has a long history with this site, and we support

1 the proposed remedy for Site 26. This includes  
2 biodegradation enhancement and bioaugmentation and  
3 monitoring natural attenuation. Institutional controls  
4 will -- will follow and will lead to -- that -- and  
5 restrict the use of groundwater that could lead to human  
6 exposure.

7 So I have some minor qualifications to the plan  
8 that I'd like to have clarified.

9 The gentleman mentioned that there were two  
10 tests: One was a biotic/abiotic treatability study, and  
11 one was a -- was what is going to be the proposed  
12 remedy.

13 We recommend that until adequate reducing  
14 conditions are established, the Navy consider the in  
15 situ abiotic/biotic alternative as a contingency  
16 remedy. And in other words, hold it in abeyance.

17 It's not -- The cost differential --  
18 differential was not very great. And for us that would  
19 make -- that would -- that would make a difference.

20 As the remedy is -- Let me say, there's a  
21 vagueness to the Proposed Plan that I believe you can  
22 clarify in the ROD. As the remedy is written, there's  
23 no definitive statement of when or at what point the  
24 remedy will be switched to monitor natural attenuation.

25 In other words, the Proposed Plan says that you

1 expect injections to occur within, you know, two or  
 2 three years; and then afterwards you're going to --  
 3 you're going to shut that -- you're going to -- you're  
 4 going to shut that -- you're going to -- you're going to  
 5 stop injections.

6 We recommend that the Proposed Plan be very  
 7 definitive about when it is appropriate to stop in situ  
 8 treatment and switch the site to entirely to monitoring  
 9 natural attenuation.

10 You know, in one case, it would be fine if  
 11 you're assuming that the treatment areas where -- are  
 12 going to be down to MCLs, Maximum Contaminant Levels.  
 13 Sorry. I don't think that that's what you mean.

14 I think you mean that you're going to treat it  
 15 down to levels that are consistent with other parts of  
 16 the plume so that -- consistent with other parts of the  
 17 plume so that the plume will be degraded for the -- you  
 18 know, for that I -- I think you -- you predicted  
 19 38 years.

20 So we would like to say, you know, you know,  
 21 what -- you know, at what point do you stop treatment?  
 22 And we recommend that you stop treatment at lea- -- at  
 23 the -- at the very least at 50 parts per billion of  
 24 total VOCs.

25 Now, the sustainability section, I -- I found

1 that to be a very good template and went back to the --  
2 to the Focused Feasibility Study and read through that.  
3 And unfortunately, the Proposed Plan doesn't -- doesn't  
4 apply this evaluation to any -- to the -- to the  
5 options.

6 I -- I suggest that you take the table that is  
7 in -- on page 3.1 of Appendix D of the Focused  
8 Feasibility Study and lift it up and -- and show how  
9 those -- how those criteria of water use, power, and  
10 greenhouse gas emissions -- how that applies to each  
11 alternative.

12 Now, I can't personally speak for the residents  
13 of Mountain View, as I am a resident of San Francisco;  
14 but it appears to me that the sustainability is a  
15 community criteria. And I propose that if you can't  
16 evaluate it in the nine criteria, you evaluate it as a  
17 community acceptance criteria, that you include the  
18 sustainability measure as a -- in the -- in the -- in  
19 the concept of community acceptance.

20 And then finally, the Navy, along with the  
21 SERDP program -- that's S-E-R-D-P -- has been very  
22 active in investigating new tools to assess whether  
23 monitoring natural attenuation is occurring, at what  
24 rate, whether the bacteria are present, whether they are  
25 active, you know; and these tools include an array of

1 compounds, specific isotope analysis, and a series of  
2 microbiological tools.

3 I suggest that prior to the five-year review  
4 that the Navy does an assessment of the biodegradation  
5 rate using these tools whether the bacteria is still  
6 there, whether the bacteria is active and, um -- strike  
7 that "um."

8 That's -- That ends my comments. So I hope  
9 that is helpful.

10 MR. ANDERSON: Very good. Very good comment.  
11 I appreciate that.

12 I would like to say I appreciate Yvonne with  
13 EPA for being here tonight.

14 Peter, I really appreciate you taking the time  
15 out of your busy schedule to be here tonight. We  
16 appreciate it. We appreciate your participation in the  
17 RAB and everything you, you know, do for this program.  
18 So we appreciate your efforts. We really do. And we  
19 thank you very much for your comments.

20 I think that's going to kind of close down. We  
21 are -- The posters are there for you to take a look  
22 at. If something else comes to you, I think we should  
23 probably stick around here till about 8 o'clock because  
24 I think in our meeting schedule we have public comments  
25 starting at 7:50, so I think if we stick around till 8

1 o'clock we'll be good.

2 But if you want to -- you know, if you want to  
3 take the time to take a look at the posters and if  
4 something else comes up while we're still here, you  
5 know, we'll welcome any additional comments.

6 But thank you all for attending tonight. The  
7 Navy appreciates it as part of our program, and I'm kind  
8 of excited to see Site 26 move forward. So thank you  
9 all.

10 That's it.

11 *(Whereupon, at 7:46 p.m. a recess*  
12 *is taken until 8 p.m. when the*  
13 *record is closed.)*

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CERTIFICATE OF REPORTER

I, CHRISTINE M. NICCOLI, Certified Shorthand Reporter of the State of California, do hereby certify that this 30-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 20th day of September, 2013.

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