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TECHNICAL REVIEW COMMITTEE MEETING MINUTES 29 JUNE 1994 NAS  
JACKSONVILLE FL  
6/29/1994  
MARIE C GENTRY & ASSOCIATES

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**TECHNICAL REVIEW COMMITTEE  
DON ENVIRONMENTAL RESTORATION PROGRAM  
NAVAL AIR STATION  
JACKSONVILLE, FLORIDA**

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Technical Review Committee Meeting  
Building 749  
Naval Air Station, Jacksonville, Florida  
June 29, 1994, commencing at 9:15 o'clock a.m.

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P R O C E E D I N G S

9:15 o'clock a.m.

June 29, 1994

- - -

MR. RASPET: Good morning everybody. I'm Bill Raspet. I'm with the Naval Air Station here in Jacksonville. I'm with the Facilities and Environmental Department, Environmental Division, and I am the installation restoration manager.

I would like to welcome you all here today and I appreciate your attendance.

A couple of procedural things first, if I may. I hope everyone has had a chance to sign in. We are taking stenographer information here so that we can get an accurate record of what's happening, so if you signed in, then the correct spelling of your name will appear in the record.

Bathrooms are -- if you go out this door, just follow it all the way around and there are bathrooms at the end of the hall. There's a Coke machine at that same location. Coffee and doughnuts are available in here.

When you do speak, and we do encourage -- this is an interchange between the TRC members, or, if you're not a member, we certainly would like to hear what you have to say, your concerns. Anything that we're doing

1 right, we would certainly like to hear that also.

2 The one thing I would ask when you do speak is  
3 if you could identify yourself, because our  
4 stenographer, obviously, would not know all the people  
5 here and then she can place the name by the comments.

6 At this point in time I would like to ask  
7 Captain Resavage to say a few words. He is our new CO  
8 here, he's been here about a year, and what he's told me  
9 is he likes to see dirt moved.

10 And, with that, sir, if you would like to say  
11 a few words.

12 - - -

13 CAPT. RESAVAGE: Welcome to all of you. I've  
14 bumped into some of you before in some of the earlier  
15 meetings, and what Bill said is absolutely true, I do  
16 like to see dirt moved. I'm very impatient as far as  
17 paralysis by analysis, which is what we have been doing  
18 in this trade for a long time.

19 I understand that we have to do the  
20 preliminary work so that we go in the right direction so  
21 at least we don't waste our money and find out that we  
22 should have done something else. So I understand that  
23 we need to analyze what we're doing to get a good  
24 product at the end. However, I have become very  
25 impatient over the last ten months waiting for the dirt

1 to get moved and start getting things cleaned up.

2 I think that some of the contracts that have  
3 been let recently, I think we're about to enter into  
4 this phase here and we're starting to see the end  
5 results, and I think the Phase I and II hasn't resulted  
6 in tangible results and I actually want to see things  
7 getting cleaner and see the phase to return to a more  
8 pristine situation. And I know it's going to take some  
9 time. Some of the fine lines I'm sure you're going to  
10 go over today before the final resolution is done.  
11 However, I'm very optimistic that the lion share of the  
12 contamination, the source of contamination is out there  
13 in fairly short order, and hopefully most of it by the  
14 time I'm still here. But I know because of the  
15 technology that it's going to take us years to actually  
16 finish everything that we need to do.

17 But, again, I echo Bill's words, we're looking  
18 for your inputs. We take it very, very seriously here.  
19 We're trying as hard as we can to be in good spirit with  
20 the environment. We haven't always done that in the  
21 past and we recognize that. Some of it may have been  
22 due to mischievous acts by certain individuals, but I  
23 think most of it was done out of ignorance. We can't  
24 claim ignorance anymore because we know the right thing  
25 to do and we're trying to do that.

1                   We're trying to keep everything okay. We're  
2 more than happy to have people take a look at what we're  
3 doing here and to also render opinions if they think we  
4 should be doing it in a smarter or more efficient way.

5                   I guess probably the next time this meeting  
6 will be in a different form and that may be politically  
7 sensitive to some of you here. I'm not sure if you're  
8 unhappy that other folks will have access to these  
9 meetings and have an input. That's what we've been  
10 chartered to do and, in fact, what we will do. Other  
11 agencies also have an interest in the environment and  
12 the local community will be invited to the following  
13 meetings and we will be more than happy to hear their  
14 input. I don't think that's going to allude what you  
15 folks are doing here at all, it's just going to be  
16 another voice in the process. We feel we're going in  
17 the right direction as far as restoration goes.

18                   There was an article in the paper today. I  
19 don't know if you all had a chance to see it today. It  
20 was talking about Cecil Field, trying to get people to  
21 help them by being on committees to oversee the cleanup  
22 of that field and they've had overwhelming response to  
23 their request for assistance from outside eyes to kind  
24 of look over their shoulders to see if they're doing the  
25 right job and not too many people have stepped forward

1 at this point and said that they're interested. I hope  
2 that won't be the case for us. You folks, just by your  
3 attendance here, show that you care about the  
4 environment and what we're doing here. I hope the rest  
5 of the community enters in once we open the door.

6 - - -

7 MR. RASPET: Thank you, sir.

8 We had scheduled this morning Joel Murphy, who  
9 is with the Southern Division of Naval Facilities  
10 Engineering Command, who was going to be presenting some  
11 information on the actions that have occurred in the  
12 last year and year and a half. Unfortunately, he has  
13 become ill and will not be able to provide that, but  
14 Fred Bragdon with ABB Environmental will be writing his  
15 presentation with a number of other personnel to try to  
16 bring us up to speed on what's going on over the last  
17 year or so here at the installation. As Captain  
18 Resavage had indicated, we are looking to turn some  
19 dirt. We have a couple of cleanups or interim cleanups  
20 that are coming on line and we'll be discussing those  
21 issues today and try to get some of your input.

22 Fred?

23 - - -

24 MR. FRED BRAGDON: Thanks, Bill.

25 This was a rather short notice. I'm only glad

1 that Joel was not planning on singing.

2 It's been quite a while since we've had one of  
3 these meetings and we really have done a lot of work.  
4 If I can get everything straightened out here because we  
5 were just going over some of these just ten minutes ago.  
6 This is actually one for the OU-2 area, but I think it  
7 will serve as a good reference.

8 I want to start with OU-1. We are nearly done  
9 with our study. We are presently -- OU-1 is located  
10 down in this area. This is the old base landfill.  
11 Since we talked last, we have conducted a drilling well  
12 installation program that consisted of 55 wells and some  
13 of the wells were in close to the landfill, others were  
14 across the base and this whole program came under the  
15 heading of background flow modeling water quality.

16 In addition, we expanded based on the  
17 groundwater investigation. We expanded the surface  
18 water sediment sampling. We did another 29 locations  
19 and most of those were again downgradient around the  
20 landfill and then five locations around the base to give  
21 us some idea of background conditions.

22 Probably the most exciting of the programs  
23 we've done in terms of actually narrowing down what the  
24 impact at OU-1 is was a study using a DPT technology,  
25 which is a direct push. A truck comes out, pushes a

1 probe into the ground and we can get either soil or  
2 groundwater samples at almost any point.

3 We are restricted to depth with the Hawthorn  
4 formation because the penetration cannot really go  
5 through that.

6 So these DPT samples range from about 20 feet  
7 to -- I think the deepest one is over 65 feet in this  
8 area.

9 Now, the purpose of this was to get  
10 groundwater samples to analyze them in the field for  
11 total volatile organic compounds and use that data to  
12 help us select where we wanted to put wells to help us  
13 define the plume. So we wanted some of the wells to be  
14 in the nondetect area just outside the plume and some  
15 inside.

16 We did 33 more paired wells -- well, 32 plus a  
17 single, which was next to an existing well.

18 So we have some in the background or  
19 upgradient area out across the golf course, down through  
20 the housing over by the hospital and we had 32 pairs.

21 The data that we got from this -- these  
22 samples were sent offsite for a regular CLP analysis.  
23 It really gave us a nice feeling about the screening  
24 data. When we had a well inside the plume it showed  
25 detect. We really didn't have any surprises.

1                   This is the latest and greatest. We don't  
2 think it's going to change. The boundary of  
3 contamination. This is a zero line. We have a hundred  
4 PPB here. We have some hot spots of a thousand, one  
5 over by the fourth tee and one right at the edge of the  
6 housing area. We had another hot spot in this area  
7 depending on how we put this data together. There may  
8 be another hot spot of over a thousand right in this  
9 area. The problem is the screening data said it was  
10 over a thousand, the CLP lab data said it was not, but  
11 the DPT samples come from a six-inch zone right on top  
12 of the Hawthorn formation and the well comes from about  
13 a seven-foot zone once you put your screen in. So it  
14 may or may not be real.

15                   Anyway, this is what we think the picture is  
16 and when I'm done talking about OU-2, I will ask my  
17 planner from USGS to carry us a little bit further and  
18 show you what the data for the groundwater modeling  
19 shows and what's happening in this area.

20                   Any questions before we leave OU-1?

21                   Do you want to do that now?

22                   Hal Davis is going to give his presentation.

23                   - - -

24                   MR. HAL DAVIS: I work for the USGS and I'm  
25 doing the groundwater flow modeling for OU-1.

1                   This slide, this overhead, shows the area that  
2 we are simulating with a model, and to orientate you,  
3 this is the southern end of the base, this is the St.  
4 Johns River, and this is the shoreline of the St. Johns  
5 River.

6                   OU-1 sits in here. The red in the center of  
7 the slide, that's where the liquid product is. What the  
8 black lines, these lines, these show the path the  
9 groundwater will take based on the groundwater flow  
10 model, and what's impacting OU-1 is there's a  
11 groundwater divide over here, so the water around or in  
12 OU-1 is moving generally in this direction towards some  
13 small unnamed creeks. You can't really sit it too well,  
14 but there's a creek that comes up through here and the  
15 water is moving underneath OU-1 and toward that creek.

16                   I have another -- the next slide I'll show you  
17 is a close-up of this area right there.

18                   Again, this is a liquid product. This is the  
19 outline -- the gray outline is the outline that Fred  
20 just showed you. That's where the groundwater  
21 contamination exists. And basically what we see is the  
22 groundwater is moving in this direction across the site  
23 and then it's discharging into a couple of small creeks  
24 that are east of the site.

25                   MR. JERRY YOUNG: My name is Jerry Young. I

1 work for the City of Jacksonville.

2 Is this groundwater actually coming out in the  
3 surface of these unnamed creeks or is it flowing under  
4 them and following the contour below the surface?

5 MR. HAL DAVIS: No. It's discharging into the  
6 creek.

7 MR. JERRY YOUNG: Okay. So on a previous  
8 sampling that ABB has done in the creek would have  
9 revealed the level of contaminants; is that correct?

10 MR. FRED BRAGDON: Yes, that's correct.

11 MR. HAL DAVIS: Those are volatiles and the  
12 creek is only about an inch thick, inch deep, so they're  
13 probably not going to stay in the creek water very long.  
14 I don't know what the sample showed.

15 MR. FRED BRAGDON: Very little volatile, some  
16 semi-volatiles.

17 MR. JERRY YOUNG: You get a few semi-volatiles  
18 in there and I don't think -- correct me if I'm wrong,  
19 if you found any excessive metal -- but you're right  
20 about the volatiles.

21 MR. HAL DAVIS: We went out and measured the  
22 creek flow and there was no -- it had been several weeks  
23 since it had rained. And generally these creeks begin  
24 in these areas that are dry up here, and as you move in  
25 this direction, as you walk along, you see more and more

1 flow of the creek. So they're draining in that area, so  
2 there's definitely a discharge of groundwater.

3 MR. FRED BRAGDON: Any other questions?

4 (No response.)

5 MR. FRED BRAGDON: OU-2 at the north end of  
6 the base up in this area. We studied this area. We've  
7 broken it up into -- one report was completed about a  
8 half a year ago and that included the fire training pit,  
9 PSC 2 and 41 and 43, which were the sludge disposal  
10 drying beds.

11 The most recent study studied the sludge  
12 disposal area when the beds in the past were full. They  
13 would then take the sludge and spread it out under the  
14 ground here and we thought also in this area, and along  
15 with the study of PSC 3 we looked at PSC 42, which is  
16 the polishing pond.

17 Very quickly what we did at both of the PSC 3  
18 and 42 was to screen the soil samples by collecting  
19 samples and sending it to the lab and just looking for  
20 five metals, a quick turnaround sample, and then come  
21 back and select in-depth CLP samples.

22 The two areas -- this is Parcel 1 of PSC 3,  
23 and essentially the data said there probably was never  
24 any spreading out there.

25 Parcel 2, which is right next to the beds,

1 this appears to be the area that received the sludge  
2 when it was spread on the ground, but it did not cover  
3 the whole area. The same density of sampling at the  
4 polishing pond. We looked at the soils around the pond  
5 and we also looked at the sediment in the pond. These  
6 are the sampling locations. And essentially the samples  
7 around the pond were considerably lower than we found,  
8 let's say, in PSC 3. Really the high hits came in the  
9 sediment where you would expect them. This is cadmium.  
10 We have our inflow. It flows through the system and was  
11 discharged here. This pond now has been deactivated and  
12 it comes directly from the treatment plant to this  
13 structure, so the pond really is just sitting there  
14 waiting for some determination.

15 This is chromium. These are some pretty high  
16 levels.

17 MR. JERRY YOUNG: This is Jerry Young from the  
18 City of Jacksonville.

19 Since we can't read the legend, are those  
20 parts per billion or parts per million?

21 MR. FRED BRAGDON: These are parts per  
22 billion. I think I'm right. Yes, parts per billion.

23 No, I take that back. Parts per million,  
24 milligrams per kilograms. So we're talking percentage  
25 levels in the sediment, two to four percent in several

1 areas.

2 If we look at the sludge disposal area rather  
3 than going through all of the slides -- this may not  
4 come out. It looks wonderful on a print.

5 This is the old domestic drying beds,  
6 industrial drying beds, and I can show you. One will do  
7 -- this is chromium and the -- if I show you lead or  
8 cadmium, it has a very similar pattern. So the  
9 distribution of material in this area was concentrated.  
10 It was not spread uniformly across the whole area.

11 One of the interesting things in terms of  
12 concentration is that the material appears to be  
13 primarily at the surface and has not migrated very far.  
14 This is along that yellow line, our profile line -- I  
15 guess I better get the units. Half a foot, one foot.  
16 We were sampling in six-inch and one-foot units, so we  
17 used a .5. That's actually what we show as our surface,  
18 because that was the average of our six-inch sample. So  
19 we can see that very little gets down below a half a  
20 foot, probably tied up in a lot of the organic materials  
21 and the fine soil particles right at the surface.

22 MR. JERRY YOUNG: Jerry Young from the City of  
23 Jacksonville.

24 What was the predominant characteristic of the  
25 soil underneath the contamination? Was it clay or was

1 it sand?

2 MR. FRED BRAGDON: It's a silty sand,  
3 definitely not clay. Over on PSC or Parcel 1, which was  
4 the north end where I said that it appeared that there  
5 was no spreading, there is some clay material. Probably  
6 it's clay depth there, but these are all hand-dug holes.  
7 The deepest ones were three and a half to four feet.

8 Our charge in doing this, because this was a  
9 focus study, was to look only at the soil and not to get  
10 into the groundwater. So essentially we only looked at  
11 the soils above the groundwater. But that certainly  
12 appeared to be adequate for this area.

13 - - -

14 MR. MIKE PLANERT: Mike Planert with the U. S.  
15 Geographical Survey.

16 Again, we're doing groundwater flow modeling  
17 for the base. And that's a picture of the flow  
18 directions out of OU-2.

19 Again, the sewage treatment plant sits on  
20 groundwater, high groundwater divide. On the runway  
21 there's a drainage ditch that influences the water table  
22 to the south and west of OU-2 and then drainage coming  
23 off of the golf course. So we're sitting on a divide  
24 where to the south and west where they're draining from  
25 the sewage treatment plant and then the predominant flow

1 through OU-2 is from the sewage treatment plant to the  
2 St. Johns River.

3 MR. JOHN BARNARD: John Barnard from the  
4 Timuquana Country Club.

5 You're not showing anything beyond the OU-2  
6 boundary?

7 MR. MIKE PLANERT: Right. Fred is looking for  
8 the slide. The one we got -- the person didn't make the  
9 right one -- it shows flow directions for OU-2.

10 But coming out of here, because of the  
11 drainage that comes out of here, there is another -- the  
12 modeling shows -- this is the drainage that comes along  
13 the golf course over in here, but the model predicted a  
14 divide that ran between the St. Johns River and this  
15 drainage and we did subsequently go out and put three  
16 wells to try and confirm that.

17 MR. FRED BRAGDON: That's correct. One here,  
18 one down here and one over here.

19 MR. MIKE PLANERT: So there is a divide there.  
20 There may be a little bit of flow coming down this  
21 divide off of here, not much. The drainage tends -- the  
22 St. Johns River and this drainage over here tends to  
23 hold the water.

24 MR. JOHN BARNARD: John Barnard, Timuquana  
25 Country Club.

1                   How does this relate -- what is the purpose of  
2 the groundwater study?

3                   MR. FRED BRAGDON: Before OU-2 -- when we  
4 complete RI for the whole site, which will include the  
5 groundwater, and while we were out there, so that we  
6 could get the modeling done early, that's why we were  
7 putting in these other type wells, mainly for the USGS  
8 model.

9                   MR. JOHN BARNARD: So this is going to be used  
10 for future --

11                   MR. FRED BRAGDON: Well, it helps us plan a  
12 lot better in terms of -- when we want to start looking  
13 at the groundwater, it certainly appears the one that  
14 was done around OU-1 appears to conform very well with  
15 the analytical data, so I think those two back each  
16 other up.

17                   It's really kind of important to note that the  
18 domestic and industrial beds are about in this area, PSC  
19 3 is just about in this area, and the polishing pond is  
20 over here, and it's important to note that based on  
21 USGS's model, no flow is going off the base either  
22 toward the country club or toward the homes down here.

23                   Actually, that does show it better.

24                   MR. JOHN BARNARD: Could I get a copy of that  
25 last slide?

1 MR. MIKE PLANERT: This?

2 MR. JOHN BARNARD: Yes.

3 MR. FRED BRAGDON: Sure.

4 MR. MIKE PLANERT: Originally Joel wouldn't  
5 let us do the whole base at one time, and while the  
6 extra wells that we put in, the 50-footer you were  
7 talking about, so we could get water levels through the  
8 whole area, which was this area and the country club to  
9 confirm what the model was showing.

10 DR. DEL DELUMYEA: Dr. Del Delumyea,  
11 Jacksonville University.

12 When you say "groundwater flow," you're not  
13 talking about surface water flow?

14 MR. MIKE PLANERT: No. This would be the  
15 surficial aquifer, about 40 feet depth, the upper 40  
16 feet sediment which lies on the Hawthorn.

17 DR. DEL DELUMYEA: And the depth of the  
18 contaminants in the soil, for example, the chromium, was  
19 only down in the six-inch sample?

20 MR. FRED BRAGDON: Those were only the soil  
21 samples, yes, that's correct.

22 MR. JOHN BARNARD: John Barnard, one last  
23 question. We were told that the soils that came up from  
24 the auger would have to be sent away and analyzed prior  
25 to disposal. I assume nothing came out of that?

1 MR. FRED BRAGDON: I would have to review  
2 exactly what we did with the soils at your site. I know  
3 all activities we screened the soils and anything that  
4 comes up on the augers with the PID, which would detect  
5 volatile organics in the case. When we assume that  
6 we're in the background for clean areas and we don't get  
7 any hits, we assume it's clean. We either leave it  
8 there if we're not in someone's lawn and try and just  
9 rake it out around the hole. But if we do get hits, we  
10 take it away.

11 MR. JOHN BARNARD: So it was transported  
12 offsite?

13 MR. FRED BRAGDON: Are you specifically  
14 referring to the three that were done in your area?

15 MR. JOHN BARNARD: Yes.

16 MR. FRED BRAGDON: I believe it was left  
17 there.

18 The other one I'm not sure of was the one that  
19 was out here. Oftentimes they'll take it away even if  
20 it's clean if it's in an area that looks bad.

21 MR. BILL RASPET: I thought one did come back.

22 MR. FRED BRAGDON: It probably was that middle  
23 one. The other two were in the woods and it would have  
24 been left there.

25 MR. BILL RASPET: It would have gone back to

1 the base. Well, it was screened. It turned out to be  
2 it was not hazardous, so it was just disposed of.

3 MR. FRED BRAGDON: Any other questions? If  
4 not, we'll turn it over to Wayne Britton who will talk  
5 about OU-3.

6 - - -

7 MR. WAYNE BRITTON: I'm Wayne Britton, ABB  
8 Environmental Services.

9 We'll use Fred's overhead here since I didn't  
10 bring another one in.

11 Just to identify, originally OU-3 was the area  
12 about right here. It was down along here, here, and  
13 down to the -- well, actually it was along here. This  
14 is Building 101 down Wasp Street, across Enterprise,  
15 down Wright Street to the river. That was OU-3 when we  
16 first started our investigation last year. When we met  
17 with the TRC we were in the process of doing that and  
18 was identifying that the field work was ongoing at that  
19 point and those were the boundaries that we were looking  
20 at.

21 During the investigation that we conducted in  
22 August and September of 1993, we put in two soil borings  
23 that went 150 feet, continuous split-spoon samples down  
24 into the Hawthorn to try to get an understanding of what  
25 it was from the surface down into the Hawthorn.

1                   In addition, we installed 27, what we are  
2 referring to as piezometer wells in pairs. Twelve of  
3 those were pairs and three other locations were single.  
4 Piezometers were installed along with existing  
5 piezometers. These are in actuality wells -- we call  
6 them piezometers because during the initial scoping work  
7 -- we've only used them up to this point to obtain a  
8 water level. During the RI/FS program we will be taking  
9 samples out of them and so it will be considered as  
10 wells at that point. But there are 27 spread  
11 appropriately around the OU-3 area.

12                   In addition, we also have used the direct push  
13 technology that Fred was talking about, the CPTs. We  
14 put in 63 CPT locations, and as you remember from the  
15 original discussion we had almost a year ago, several  
16 months ago anyway, we had originally decided that we  
17 would put all the way around the perimeter of what was  
18 considered OU-3 CPTs to determine the boundaries. In  
19 doing so, if we were to identify a hit of -- and these  
20 were water samples taken at three different levels in  
21 the upper ten feet from about 30 feet and then at about  
22 50 to 60 feet we took water samples. If we got a hit of  
23 any of the volatile organics, we would then move out.

24                   What happened, as we were doing that  
25 particular test, is we suddenly identified -- this is

1 the dry cleaners in Building 106. Suddenly out in here  
2 we started picking up heavy concentrations of volatile  
3 organics and so we continued to move out, and as a  
4 result, OU-3 boundaries now are considered through here  
5 and so we have now included this block added on, which  
6 when you look at your work plan that several of you  
7 received, you saw where we've expanded the boundaries to  
8 include the dry cleaner or laundry area.

9 MR. JERRY YOUNG: Jerry Young, City of  
10 Jacksonville.

11 As a result of discovering possible  
12 perchloroethylene contamination up around the dry  
13 cleaners, are you doing to assign another PSC number?

14 MR. WAYNE BRITTON: That has already been  
15 assigned a PSC number and we're also going to, as we'll  
16 talk about later today, going through some -- looking at  
17 the removal action in that particular area also.

18 MR. JERRY YOUNG: Okay.

19 MR. WAYNE BRITTON: That is PSC -- I don't  
20 remember the number, but it's been assigned a number.

21 MR. PETER REDFERN: Yes. And the fellow who  
22 would know just left.

23 MR. WAYNE BRITTON: Yes. When Bill gets back,  
24 we'll ask him.

25 Okay. I take it there's no questions on what

1 we identified or what we had done during the field  
2 investigation.

3 MR. JERRY YOUNG: I have some more questions.  
4 Go back to your deep borings.

5 MR. WAYNE BRITTON: Sure.

6 MR. JERRY YOUNG: Jerry Young, City of  
7 Jacksonville.

8 MR. WAYNE BRITTON: One thing about the --  
9 also the CPTs, as Fred said, they went down to 60 feet.  
10 In our particular case at OU-3, we found the Hawthorn at  
11 somewhere around 90 to a hundred feet. We extended down  
12 to -- typically to a hundred-foot depth with the CPT.  
13 In fact, we had one that went all the way to 150 feet.

14 MR. JERRY YOUNG: The deep borings, you said,  
15 went down to 150 feet?

16 MR. WAYNE BRITTON: Yes. Continuous  
17 split-spoon samplings.

18 MR. JERRY YOUNG: Were there casings put in to  
19 prevent vertical contamination?

20 MR. WAYNE BRITTON: Yes, there was. In fact,  
21 even on the piezometers, what we did is --

22 MR. JERRY YOUNG: That was my next question.

23 MR. WAYNE BRITTON: Okay. What we actually  
24 found and quickly -- what we actually found geologically  
25 is that across the, site at approximately this location

1 what was -- if you remember the old map that was done in  
2 -- the 1939 map was the old lagoon area that has been  
3 talked about out there. There seems to be a wedge of  
4 clay. Throughout the site you have approximately a  
5 20-foot depth, you have a clay layer, another clay layer  
6 then down at approximately 50 feet. The only place that  
7 that does not hold true is down here at the southern end  
8 of OU-3. There seems to be the 50-foot is not  
9 continuous. In general, the 20-foot tends to be  
10 approximately 20 feet. It tends to be continuous across  
11 much of the site.

12 So we tried to take a sample above, in the  
13 middle, and then deep. When we put the wells in, we  
14 have a shallow well, then we case into that 20-foot  
15 layer, double case, went down into the next layer, and  
16 if we hit and wanted to go deeper, we would triple  
17 these.

18 So all of the piezometers have been --

19 MR. JERRY YOUNG: So essentially what would  
20 have happened is the piezometers are essentially  
21 permanent monitoring wells?

22 MR. WAYNE BRITTON: They are actually  
23 permanent monitoring wells.

24 The reason they were referred to as  
25 piezometers is because we only intended during the

1 scoping study to take water levels to give us a better  
2 understanding of groundwater conditions.

3 MR. JERRY YOUNG: I understand. Did you also  
4 seek permitting for these wells before they were put in?

5 MR. WAYNE BRITTON: No.

6 MR. JERRY YOUNG: I would request that the  
7 City of Jacksonville -- I would have to check with the  
8 driller -- that was a requirement for the driller, but  
9 I'll have to check with groundwater protection to see if  
10 they did.

11 MR. FRED BRAGDON: In our contract, that is  
12 their requirement to take care of that.

13 MR. WAYNE BRITTON: Yes. And maybe they did.  
14 I don't know that, to be honest with you.

15 MR. JERRY YOUNG: If they did not, the City of  
16 Jacksonville requests the drilling logs and latitude and  
17 longitude on each well.

18 MR. WAYNE BRITTON: Did you receive the RI/FS  
19 work plan for OU-3? I believe you were on the --

20 MR. JERRY YOUNG: No.

21 MR. WAYNE BRITTON: OU-3 was the big one.  
22 They're in it. The boring logs -- what I'm say is, the  
23 boring logs and all of the longitude, latitude,  
24 everything is in that.

25 MR. JERRY YOUNG: It was in there?

1 MR. WAYNE BRITTON: Oh, yes. It's all there.  
2 I mean, as far as the permits, I will have to go back  
3 and check with groundwater protection.

4 MR. JERRY YOUNG: Well, usually when somebody  
5 sets up a piezometer, we usually don't --

6 MR. WAYNE BRITTON: Well, these were two-inch  
7 piezometers.

8 MR. JERRY YOUNG: We're seeing the case --  
9 you're monitoring wells.

10 MR. WAYNE BRITTON: But there's no question  
11 that that's what they were.

12 MR. JERRY YOUNG: Okay.

13 MR. WAYNE BRITTON: I just don't know that at  
14 this point, so I will have to double-check that.

15 MR. JERRY YOUNG: I would appreciate it.

16 MR. WAYNE BRITTON: Okay.

17 MR. BILL RASPET: Jerry, are you asking for  
18 the purposes of just keeping your information data base  
19 together?

20 MR. JERRY YOUNG: That is correct.

21 We have an agreement from the DEP that goes to  
22 the St. Johns Water Management District and comes to us  
23 and we're supposed to keep the records for Duval County  
24 and it makes it rather difficult.

25 MR. WAYNE BRITTON: Well, all of the well logs

1 are in the RI/FS work plan, the completion logs,  
2 everything, the diagrams and the completion logs.

3 MR. JERRY YOUNG: I know that the casing --  
4 we've been over casing a million times. I just didn't  
5 see the logs in there.

6 MR. WAYNE BRITTON: Okay. They would be in  
7 Appendix -- I think probably D and E, something like  
8 that. I believe that's it. Yes. Maybe C, D and E, but  
9 I believe C is the CPT log. I think D and E is probably  
10 the piezometer.

11 MR. JERRY YOUNG: Okay.

12 MR. WAYNE BRITTON: The last time we  
13 presented, of course, we were just at that point getting  
14 analytical results and did not have a complete  
15 analytical profile developed.

16 What we have done was taken all of the  
17 analytical results that have been obtained for OU-3,  
18 historical meaning stuff that Geraghty Miller and other  
19 consulting firms have done since about 1985 and included  
20 all of those with the results that we have obtained  
21 during the 1993 results. In general, as has already  
22 been identified, most of the contaminants that have been  
23 identified are PCE, TCE and its breakdown products,  
24 chlorinated organics, volatile organics. And this  
25 particular figure is somewhat confusing, obviously,

1 because of all of the dots and stuff on it.

2 But what we're looking for is we took and  
3 added up all of the total chlorinated volatile hits that  
4 we got regardless of where in the profile they came  
5 from, and what we actually ended up with is five areas,  
6 and what we're really looking at is these three. This  
7 is greater than 1,000 PPB, greater than 10,000, greater  
8 than 100,000. We have this area around the dry  
9 cleaners, that was almost 20,000, 19,200-plus.

10 This is Building 780, which is now the closed  
11 loop, industrial recycling. However, that was done in  
12 1990. We didn't do anything at this particular time,  
13 but that was a very high hit. That was well over  
14 100,000. 200,000, I believe it was.

15 We have another one which is this area here,  
16 which as far as we know was a former engine and engine  
17 part washing area. It's now paved over but at the time  
18 we believe it may have been unpaved where they just took  
19 and washed the various parts with a solvent. And then  
20 we have what is identified by all as PSC 15, and that  
21 also was a hit.

22 So we have at least -- plus another hit right  
23 at the end of the P3 hangar here, which is again  
24 volatiles.

25 But, as you can see from this, in general we

1 got hits all over the place and most of them in a big  
2 chair with less than ten parts or between ten and a  
3 hundred parts per billion. And in some cases they  
4 included a lot of BTEX and petroleum out along this area  
5 here.

6 We then quickly -- to try to get a better  
7 handle on what we were running into, looked individually  
8 at the depth where we took the samples, which I talked  
9 about. This particular one to start with is the zero to  
10 20 feet location where you see the square. That is a  
11 petroleum hydrocarbon or BTEX hit. It doesn't have  
12 volatile organics associated with it. But, again, we  
13 have the hits where we would have expected it.

14 These are all based on the -- triangles is  
15 equivalent to one times the MCL level which exceeds the  
16 Florida MCL. These, whatever you call them, is ten  
17 times the MCL and the circles exceed a hundred times the  
18 Florida MCL for groundwater.

19 And this is at the zero to 20 feet, which is  
20 above that upper surface of clay. We compared that with  
21 what we found as we went down in depth. This is 20 to  
22 60 feet.

23 Again, we still have some of the chlorinated  
24 showing up. The MCLs still have some BTEX compound that  
25 exceeds the MCL that is right below the clay layer.

1                   Then we have -- as I indicated earlier, we  
2 have like a 50 feet to the bottom clay and we have  
3 greater than 60 feet here. We are hitting. We have  
4 some -- a hit down in this area. It's identified as  
5 BTEX. I personally have a problem that it's actually a  
6 true hit. I don't understand how we're getting BTEX  
7 down at 60-plus feet.

8                   MR. JERRY YOUNG: Jerry Young, City of  
9 Jacksonville.

10                   You used to clean aircraft engines --

11                   MR. WAYNE BRITTON: That it took BTEX down?

12                   MR. JERRY YOUNG: Isn't that Wright Street?

13                   MR. WAYNE BRITTON: Yes, this is Wright  
14 Street, correct.

15                   MR. JERRY YOUNG: Underneath Wright Street  
16 there used to be a drainage system that used to have  
17 leaks.

18                   MR. WAYNE BRITTON: That's correct.

19                   MR. JERRY YOUNG: That drainage system, there  
20 used to be pilings over there -- correct me if I'm wrong  
21 on this. You have seen a whole series of these borings,  
22 contamination marks running up and down Wright Street.  
23 It is entirely possible with the clay formation that you  
24 have been talking about as being near continuous at 20,  
25 but not continuous down farther than the laying of the

1 sewerage pipe went past your clay layer, and when the  
2 pipe cracked, it released it into it lower and that may  
3 be why you didn't see it when you hit.

4 MR. WAYNE BRITTON: My understanding, in  
5 looking at the boring logs and everything for the Wright  
6 Street sewer, was all less than 20 feet. So they were  
7 above the clay layer.

8 MR. JERRY YOUNG: They were above the clay  
9 layer.

10 MR. WAYNE BRITTON: I don't disagree that  
11 there is a possibility. I just find it hard to  
12 scientifically explain how I'm getting that.

13 These hits here are volatile organics.  
14 They're not real high, but they are there.

15 Okay. Are there any questions?

16 MR. PETER REDFERN: Peter Redfern with ABB  
17 Environmental.

18 One other point for clarification I wanted to  
19 bring out, the purpose of the investigation is a scoping  
20 exercise to get a better understanding of the potential  
21 contamination at Operable Unit 3 as a scoping activity.  
22 This is a prelude to a full field investigation that  
23 will take place hopefully starting about 1995.

24 And this scoping exercise was done primarily  
25 to be able to tailor our field investigation program a

1 little bit better than just going out there just  
2 stabbing in the dark, if you will, trying to find it  
3 because of the size - this is 154-acre site - because of  
4 the size and hopefully the use of this facility we had  
5 over the course of the last 50 years, we were a little  
6 apprehensive about just going out there and putting  
7 together a work program without understanding just what  
8 we might be up against. And we are in great hopes that  
9 by having done what we did in the form of the scoping  
10 exercise will help to narrow in our investigation and  
11 focus it better, which we are presently in the process  
12 of doing in Building 106 and 780.

13 MR. WAYNE BRITTON: As far as the -- I didn't  
14 go over the other with you. As part of the RI/FS, we  
15 have recommended going in again with piezometers --  
16 excuse me -- with CPTs, in talking with the State of  
17 Florida and DPA. Using CPTs to further delineate this  
18 volatile organic plume that is under here, because we  
19 have not been able to completely delineate it. And so  
20 we are going to be looking at the area through here all  
21 the way down through here with CPTs in an effort to  
22 further delineate, and then we're also going to put CPTs  
23 around these small hits here to also try to delineate.

24 When we find the leading edge of those CPTs,  
25 then we will install monitoring wells in order to

1 further delineate and to be able to monitor for  
2 long-term monitoring of those.

3 MR. JERRY YOUNG: Jerry Young, City of  
4 Jacksonville.

5 Just as a procedural question, when you're  
6 going to use a cone penetrometer, which is what a CPT  
7 is --

8 MR. WAYNE BRITTON: That's correct.

9 MR. JERRY YOUNG: In most of these areas  
10 you're talking about are parking lots. Do you drill a  
11 hole in the concrete --

12 MR. WAYNE BRITTON: Yes.

13 MR. JERRY YOUNG: -- or the asphalt and then  
14 start your cone penetrometer down?

15 MR. WAYNE BRITTON: What we actually end up  
16 doing is we do two. As you have rightly suggested, we  
17 core a hole, we pull out the core. We then, because of  
18 the problems we've had with OU-3 of having so many  
19 utilities in that area that have never been mapped, we  
20 then have gone in initially with a soil auger down to  
21 approximately five to seven feet to make sure that we  
22 have a clearance. We retract that. Then we go out with  
23 the CPT and then we go down the full depth, what we can  
24 push with the CPT and do a lithological auger. We then  
25 pull out, we find where we want to take samples, pull

1 out, seal that hole, move over two or three feet and go  
2 down to those specific locations with a sampling tube at  
3 the end of the CPT and actually sample. So there's  
4 actually two locations, one to get lithology and one to  
5 get the sample and then those are sealed up routed all  
6 the way to the surface.

7 MS. DONNA CLINE: Donna Cline from the St.  
8 Johns River Water Management District.

9 Along the St. Johns River, I assume you got  
10 MCL --

11 MR. WAYNE BRITTON: The St. Johns River is out  
12 here.

13 MS. DONNA CLINE: And south?

14 MR. WAYNE BRITTON: And south here. We have  
15 one location that is greater, yes, than a hundred times  
16 MCL. Actually it's not right on the river. It's up  
17 near the test cells.

18 MS. DONNA CLINE: What was the source of that?

19 MR. WAYNE BRITTON: I wish I knew. We have  
20 not been able to fully define that. That's going to be  
21 an area that we're going to be going back in and doing a  
22 lot more investigation in this area.

23 As to whether it came from the PSC 15 --  
24 PSC 15, you may remember, was the former sludge and  
25 paint disposal area that was dumped in a trench, and

1 whether that could be a result or whether it's something  
2 else, we haven't identified, but that will be defined  
3 when we're doing the RI/FS.

4 And during the RI/FS, we will also be putting  
5 in additional monitoring wells along the river, along  
6 the shore, in order to be able to verify that there is  
7 or is not anything going into the river.

8 MR. JERRY YOUNG: Question. Jerry Young, City  
9 of Jacksonville.

10 When you say the test cells, isn't that where  
11 engines were run up after maintenance? Is that what you  
12 mean?

13 MR. WAYNE BRITTON: I believe that's what they  
14 were. Is that not correct, Peter, Tom, Bill?

15 MR. JERRY YOUNG: Then there must have been a  
16 fuel source for the engines. Was there ever a known  
17 fuel tank in that area?

18 MR. BILL RASPET: Yes. There is a leaking  
19 fuel tank in that area.

20 MR. WAYNE BRITTON: But these are not  
21 petroleum hits. These are actually volatile organic  
22 hits. They're not petroleum.

23 MR. JERRY YOUNG: Some of your BOCs are also  
24 petroleum.

25 MR. WAYNE BRITTON: Granted. But the types of

1 hits that we're getting in this is probably -- I would  
2 question that the hit that we got in this one here, I  
3 want to say it's almost 4,000 parts per billion. I just  
4 don't think that's a result of a petroleum spill.

5 MR. JERRY YOUNG: 4,000 parts per billion is  
6 four parts per million. Four parts per million to what?

7 MR. WAYNE BRITTON: Volatile organic compound  
8 PCE -- TCE and DCE derivative, TCE derivative. I  
9 actually have the results with me. I'd have to look it  
10 up. It's also in the report plan, but I'll have to look  
11 it up on that particular one.

12 MR. BILL RASPET: And I would just like to add  
13 you used the wrong tense. There was a leaking tank.

14 MR. JERRY YOUNG: I understand. So you're  
15 talking about chlorinated solvents?

16 MR. WAYNE BRITTON: We're talking chlorinated,  
17 yes. That's what they are.

18 Any other questions?

19 MS. GRAZYNA PAWLOWICZ: Grazyna Pawlowicz with  
20 HRS.

21 You are talking about the MCLs --

22 MR. WAYNE BRITTON: Yes.

23 MS. GRAZYNA PAWLOWICZ: -- the concentrations  
24 at the northern part near Wright Street at the greater  
25 of a hundred feet?

1 MR. WAYNE BRITTON: Yes.

2 MS. GRAZYNA PAWLOWICZ: What do you mean the  
3 greater?

4 MR. WAYNE BRITTON: Greater than 100 times the  
5 MCL. It exceeds a hundred times what the MCL --

6 MS. GRAZYNA PAWLOWICZ: I was looking at the  
7 greater than 60 feet. That means how far down, though,  
8 greater than 60 feet?

9 MR. WAYNE BRITTON: I would have to look it up  
10 to be specific. It's probably about 68 feet because we  
11 didn't get anything down lower. At that particular  
12 point you have clay at about 80 feet, 70 to 80 feet, and  
13 so it's above.

14 This is where we found a lot of this stuff is  
15 right at a clay area, which is what you would expect.  
16 But it's greater than 60. I think -- I would have to  
17 look it up, but I think most of them were somewhere  
18 around 65 to 72 at the max that we found.

19 MS. GRAZYNA PAWLOWICZ: Did you look deeper  
20 than this to see if there were negative results?

21 MR. WAYNE BRITTON: We have some wells -- we  
22 have not. We took three -- as was identified from the  
23 scoping, we took three different levels and these were  
24 selected prior to the actual installation. We went down  
25 lithologically and we said, ah, here's a good layer that

1 looks like you could have something, here's something  
2 and here's something, and that's how we selected it.

3 MR. BILL RASPET: Are there any more  
4 questions?

5 MR. WAYNE BRITTON: One of the comments has  
6 been -- that I have seen has been that they would like  
7 some further delineation on the lower part of the -- the  
8 upper part of the Hawthorn during the RI/FS. That was  
9 one of the comments we received in review of the RI/FS  
10 work plan.

11 MR. BILL RASPET: Do we have any preliminary  
12 data that would show --

13 MR. WAYNE BRITTON: Mike, do you want to  
14 address that? We don't actually have a figure on it  
15 because Bill is not here, but he's talking about how  
16 fast water is moving through this OU-3 area.

17 MR. MIKE PLANERT: Yes.

18 MR. WAYNE BRITTON: I can remember some of it,  
19 but if you want to respond.

20 MR. MIKE PLANERT: It's not going to be very  
21 fast because of the low activity.

22 MR. WAYNE BRITTON: It's something like --  
23 what did we figure? I think less than 20 feet a year --  
24 no, less than ten feet a year, or even lower than that  
25 because it -- we looked at some sludge test data that

1 you came up with that you analyzed was less than  
2 three-tenths of a gallon per minute for a sludge test.  
3 So it's pretty slow. It's a relatively tight fraction  
4 down there.

5 MR. BILL RASPET: Are there any other  
6 questions?

7 (No response.)

8 MR. BILL RASPET: Okay. We need to set up a  
9 VCR. We would ask that we take a ten-minute break.  
10 There's coffee there, also some doughnuts, and restroom  
11 facilities. See you back here about 25 after.

12 (Short recess.)

13 - - -

14 MR. BILL RASPET: Partnering is a term that  
15 the Navy EPA, FDEP, the Florida Department of  
16 Environmental Protection, has been using a lot with  
17 SOUTHDIV and the station, and what has been happening  
18 since about last December is that we have tried to find  
19 a better way to do business and that way of doing  
20 business -- or the way of doing business in the past has  
21 been that we've developed a document that we felt was at  
22 least good, we're not going to say perfect, but at least  
23 good and have submitted it up through the regulatory  
24 system for their review. Their review would come back  
25 to us and comments would be provided to us and we would

1 revise our document and then the process would start  
2 again and again and again in some cases, and sometimes,  
3 because we didn't put up together a very good product,  
4 if sometimes we didn't understand the regulators'  
5 concerns and desires for certain information to have a  
6 higher degree of detail and other parts of the document  
7 not.

8 And in some cases what would happen is that  
9 because of the Federal Facilities Act we would end up  
10 with our document not necessarily being up there on the  
11 day it was supposed to be and we could get into a  
12 dispute resolution, which meant that the lawyers of our  
13 base and the lawyers of SOUTHDIV would talk to the  
14 lawyers of EPA and DEP and the amount of productivity  
15 for the end product of getting the site clean was  
16 certainly delayed in that regard. So what we've done is  
17 we've tried to develop a new procedure.

18 Now, I have a tape here that was developed by  
19 the Navy. I want to tell you that these are actors.  
20 The first few people on this tape are actors and they're  
21 trying to do it like a 60-minute or 20/20 type of  
22 presentation, but then you will see some of the people  
23 that are in the room today who will be talking, being  
24 asked questions, and just to give you an idea on the way  
25 we're heading and to the ultimate goal of trying to get

1 things cleaner faster.

2 (Videotape presented.)

3 MR. BILL RASPET: This tape shows you in  
4 concept what is being developed. I'm on the partnering  
5 group. There's a couple of members in here, Dana  
6 Gaskins, Jorge Caspary, who we sit down and we make --  
7 now it's almost every three weeks, three to four weeks,  
8 to try to discuss things, to try to iron out differences  
9 to come to a meeting of mind.

10 If I were to have to give you a vote right  
11 now, I would say it's working, it's going to be working  
12 better, and then I see down the road that products will  
13 be coming out quicker and it will be better products and  
14 I hope that this means, quote, a more efficient  
15 government.

16 Are there any questions about the partnering?

17 (No response.)

18 MR. BILL RASPET: Okay. Next up, I would like  
19 to introduce Dana Gaskins. He's from the Southern  
20 Division and he is going to be speaking on radiation  
21 survey.

22 - - -

23 MR. DANA GASKINS: Thank you, Bill.

24 I'm Dana Gaskins from Southern Division. I'm  
25 glad to be here today. This is the first TRC I've been

1 involved with and it seems to be a working type  
2 relationship. You get good questions and hope you get  
3 the answers you want and the input.

4 What I'm speaking about is the radiological  
5 survey that we are preparing to do here and I would like  
6 to just show the video and then I'll step back up and  
7 give you a little more information and we can go from  
8 there.

9 (Videotape presented.)

10 MR. DANA GASKINS: Basically what we have --  
11 some of these areas that we've looked at or planning on  
12 looking at we do not anticipate finding anything. We're  
13 looking because there's a chance that at some time some  
14 paint may have been disposed of there, some sandblast  
15 grit may have been disposed there that had contaminated  
16 paint in it. Medical waste, there's probably nothing  
17 there. We don't anticipate it. We're looking at it  
18 just to make sure that we can walk away from the site  
19 and say, "Hey, we've looked at it, we've surveyed it,  
20 there's nothing there and we feel confident that that's  
21 the case."

22 We currently have our remedial action  
23 contractor who's provided a work plan to start doing  
24 this work. It's being reviewed presently. We hope to  
25 get it implemented in July and it will take

1 approximately 20 weeks for him to go in and finish this  
2 work.

3 We have propriatorized some of the sites, PSC  
4 26, which is an OU-1, we've got that first because  
5 that's impacting, holding up work out there. We can't  
6 do sampling until the survey is completed. We go out  
7 and take out the meter and the right contractor will  
8 check it to make sure that the soil removed has no  
9 radiation in it and they will take the samples there  
10 where they can keep on going with their field sampling  
11 and get the line of action to complete that.

12 Basically we have PSC 13, which was where the  
13 radium paint disposal pit was. That will be the next  
14 one because that affects the work in OU-3 and we want to  
15 make sure that that's clean and finished. We have two  
16 after that, 17 and 18, which was the last disposal area  
17 and the landfill over at Mulberry Cove. Those will be  
18 the next ones. The ones after that will follow no  
19 specific order. It's just the last group to follow.

20 Yes, sir?

21 MR. JERRY YOUNG: Jerry Young, City of  
22 Jacksonville.

23 Have you done any background readings to see  
24 if you have any phosphate materials here since we have  
25 so much phosphate in Florida and there's natural

1 radiation in the state?

2 MR. DANA GASKINS: We have and I believe  
3 there's going to be more done so that we do have  
4 background levels that we can compare what we're finding  
5 against.

6 MR. BILL RASPET: I can also add that we had  
7 hazardous waste which was sent out to a Colorado  
8 facility that was rejected because of a high radioactive  
9 level. It was sent back here to the station. We had  
10 our radiological support office and it turned out it was  
11 the roof rock on top of the roofs down there that had a  
12 high radium 226 level in it that had caused the  
13 rejection.

14 So, yes, we are aware that the background  
15 levels here either in the ground or actually out of the  
16 ground can be a problem here in terms of radioactive.

17 MR. DANA GASKINS: Any others?

18 MR. BILL RASPET: Thank you.

19 Well, we are ahead of schedule. Obviously I  
20 wasn't sure how many questions there were going to be.

21 What I would like to talk about now is go into  
22 Item No. 7, which has to do with some other hazardous  
23 issues that I just want to bring people up to speed on  
24 of what's occurring here. We're talking predominantly  
25 PSCs. Everybody knows what PSC is; correct? We

1 sometimes use these acronyms and I want to make sure I'm  
2 not using something that people aren't aware of.

3 Last February we had a hazardous waste  
4 inspection by the Florida Department of Environmental  
5 Protection. During that inspection some tanks which  
6 were used in our old plating shop were found to still  
7 contain liquids in it and considered hazardous waste  
8 storage and, therefore, a violation. We had a consent  
9 order that has been signed, but in the process of  
10 realizing that we had these tanks there, it was decided  
11 that we need to get those removed out of there, the tank  
12 served us no purpose, so over the last -- since about  
13 July of last year we have been demolishing those tank  
14 systems there with a contractor, pulled out about 90  
15 tanks, about 56 of them were hazardous waste tanks.  
16 They have now all been removed out of the site.

17 The only thing that still remains to be done  
18 is some piping and there were six concrete in-the-ground  
19 tanks that still are at the site. The building is  
20 ultimately going to be demolished and all things will be  
21 removed from the site and we are hoping for a clean  
22 closure under a RCRA permit.

23 The other one is that we -- up at Hangar 1000  
24 we had two tanks which were under a consent order that  
25 we just pulled those two tanks out this past -- well, in

1 the past three months. We do have some other piping  
2 there that still presents a problem to us that we want  
3 to pull out of there and we are hoping to close those  
4 under a risk base closure under a permit.

5 Just recently we found a tank near a pesticide  
6 building which was found to have a small amount of  
7 liquid in it that was found to be a -- Aldrin was one of  
8 the products in it. I think a total of no more than 15  
9 gallons was taken out of the tank and we are looking to  
10 amend our closure permit to remove that tank out of the  
11 ground also and close that tank under the clean closure.

12 These tanks unfortunately seem to be buried in  
13 the ground and sometimes we don't know that they exist.  
14 Our policy now is obviously to find them and, if they  
15 have no use, we want to get them out of the ground,  
16 removed, and get the sites cleaned up very quickly  
17 because obviously they could be potential sources of  
18 contamination.

19 Right as we speak there is a hazardous waste  
20 inspection going on on the station by FDEP and EPA, just  
21 to let you know that. You can see sometimes how we can  
22 time these TRCs. Obviously some of us would rather be  
23 in other places right now than here in terms of trying  
24 to help with the hazardous waste inspection, but this  
25 just happens to be the way of the world.

1 I would like to see if there's any questions  
2 about our hazardous waste issues.

3 (No response.)

4 MR. BILL RASPET: Okay. The next agenda item  
5 that I would like to get into is something that is our  
6 Restoration Advisory Board. Now, as Captain Resavage  
7 has spoken to this morning, we have understood that  
8 there are some people on the TRC that have some concern  
9 about the conversion. Before I can talk about the  
10 conversion, I think I need to talk a little bit of what  
11 the Restoration Advisory Board is to be when it becomes  
12 established. It is directed by our higher headquarters  
13 that we do convert over to the Restoration Advisory  
14 Board.

15 What its design is is to try to get more of  
16 the public involved in advice to the station and to  
17 provide the public's view on what we're doing, how we're  
18 doing it, and where they might think the station should  
19 go on all issues having to do with the clean-up. It  
20 serves as a forum for discussion and exchanges of  
21 information. The state and the federal agencies, the  
22 Duval County agencies, HRS, the St. Johns River Water  
23 Management District, all those still are integral parts  
24 of the RAB. They were members of the TRC. They  
25 certainly will still be members of the RAB.

1                   It talks about stakeholders, and obviously we,  
2 as the public -- the St. Johns River Water Management  
3 District representative asked about that high reading  
4 down here at Black Point. Obviously I think her concern  
5 was going to, well, if you've got high levels there, is  
6 it going to get into the St. Johns River and when will  
7 it and at what levels and what then are the affects on  
8 that, and obviously for us that sail on the river, those  
9 that fish on the river, we're all stakeholders in the  
10 problems we have here at the station because the quicker  
11 we can get them solved on the station, the quicker the  
12 sources of pollution that may travel to other receptors  
13 will be diminished and the sooner we can get it cleaned  
14 up and the stakeholders then can feel more comfortable  
15 in their pursuits in the environment.

16                   The compliments of the community needs  
17 initiatives. We are looking for members of the local  
18 community. Captain Resavage spoke of the newspaper  
19 article this morning that Cecil Field has been trying to  
20 obtain members of the RAB. 500 or 600 letters have gone  
21 out.

22                   We hope the community is more interested here.  
23 I can't speak for Cecil Field even though I have worked  
24 there, but I would hope that the community would be more  
25 interested. I think we at least owe the community the

1 opportunity. I certainly will not be dragging any  
2 community members in here by the hair. Obviously, with  
3 my size, I think that would be hard to do. It would  
4 certainly be somebody who would want to join, but we  
5 would certainly bring them in with open arms.

6 There are responsibilities for the RAB. We  
7 would expect them to come to the meetings. If they want  
8 to be a member, we would like them to attend meetings so  
9 that they can give us their input.

10 The RAB, we will be asking for a co-chair.  
11 Captain Resavage is now the chair person of the group.  
12 We would see that there would be a co-chair also with it  
13 that would then help to balance the Navy interest and  
14 the community interest. We hope that the benefits would  
15 increase understanding of the committee. We think we  
16 have a good community relations program now. We have  
17 been told we do. Miriam Lareau, sitting in the  
18 audience, is certainly the one who should take credit  
19 for that. But everything can be improved and it may not  
20 be -- you know, the expression "If it ain't broke, don't  
21 fix it," well, you can also use it, "If it ain't broke,  
22 you can improve it," and maybe this is our desire to try  
23 to improve the community relations.

24 What I am asking at this point in time is that  
25 we think about the RAB. I would invite -- I don't see

1 really anyone from the community at present in the  
2 audience, unless I'm missing someone.

3 Is there anybody from the community,  
4 nonregulatory agency, here in the meeting today?

5 (Two people responded by raising their hand.)

6 MR. BILL RASPET: I think of you in terms of,  
7 I guess, the university, but you're right, you're not  
8 regulatory.

9 Well, obviously, both of you within the area  
10 of Duval County would certainly be members that we would  
11 highly like to have on the RAB, and obviously you are  
12 TRC members, so you would, and possibly as co-chairs  
13 also.

14 But other than those two, we really would like  
15 to see the RAB expanded. We would like to improve upon  
16 our community relations and try to get the public's  
17 input into this.

18 If you know of people that might be interested  
19 that have an interest in environmental matters that  
20 would be interested in being on the RAB, please let  
21 either myself or Miriam Lareau know. We will probably  
22 be doing a mailing. We will probably be investigating  
23 other methods of announcing this, and we would hope we  
24 would get a response, and with that response we would go  
25 forward and create this RAB.

1                   In operations, I don't see it much different  
2 than the TRC. It will provide us a little funding for  
3 people in the RAB who might need to get some specific  
4 training or who have an interest in a certain area that  
5 we could provide some training, but predominantly I see  
6 this as just being a evolution of the TRC as opposed to  
7 this brand-new animal called the RAB.

8                   Yes?

9                   MS. CHRISTI VELETA: I'm Christi Veleta with  
10 the Environmental Protection Board.

11                   I have a couple of questions regarding the  
12 RAB.

13                   MR. BILL RASPET: Yes.

14                   MS. CHRISTI VELETA: How many people from the  
15 community are you looking for?

16                   MR. BILL RASPET: The guidelines we have is to  
17 see what kind of an interest we do have. Obviously, if  
18 you look at Cecil Field, there's not a large interest.  
19 If we were to receive hundreds of applications, we would  
20 certainly have to par that down. I think it's just good  
21 management. You can't have meetings that are so large,  
22 but I would certainly see in the order of ten to fifteen  
23 people.

24                   MS. CHRISTI VELETA: Okay. The second  
25 question is, it's been my experience with the

1 Environmental Protection Board that if you want to get  
2 people from the community to be involved in these sort  
3 of things, then holding a meeting during the day is not  
4 really conducive to that because that eliminates a lot  
5 of people. So will these meetings be held at other  
6 times so that it would foster the community involvement?

7 MR. BILL RASPET: Yes. We've talked about a  
8 Tuesday to Thursday time frame, we've also talked about  
9 a Saturday time frame with the idea that certain people  
10 do not like to venture out after dark and would prefer  
11 to come on the weekend.

12 So, yes, that has been discussed.

13 I would assume that once we get names of  
14 interested people, we could discuss when the best times  
15 would be for them and try to work out the best time for  
16 the majority concerned.

17 Yes?

18 DR. DEL DELUMYEA: Del Delumyea, Jacksonville  
19 University.

20 I was also on the TRC at Cecil Field and I was  
21 at the meeting where they talked about the conversion  
22 from the TRC to an RAB, and at that time I kind of  
23 rolled my eyes and went "uh," because I don't know that  
24 it was adequately explained to me what the difference  
25 is. I've sat on TRCs before and I appreciate the fact

1 that they are technical in nature and there are things  
2 where I can input and comment on a particular technical  
3 aspect of a chemical measurement or whatever.

4 It made it sound like the Restoration Advisory  
5 Board was looking at what we were going to do after the  
6 technology had already been done, after the clean-up had  
7 been initiated, looking at the long-range plans of, for  
8 example, Cecil Field, turning it into a industrial park  
9 or whatever. At that point in time, from a technical  
10 standpoint, my input has basically ended, especially  
11 since I've moved another 45 miles farther away from you  
12 all in the last month or so.

13 Is it my impression that there is a  
14 fundamental change between the TRC and RAB?

15 MR. BILL RASPET: With Cecil Field you've got  
16 a base that's closing and I know they want to get people  
17 on it because of the possible future land use issues  
18 there.

19 As far as I'm concerned, there would not be a  
20 large difference between the TRC and the RAB. There  
21 would still be the technical issues. We may spend a few  
22 minutes in terms of a discussion of explaining an  
23 acronym, TCE, to an individual who does not know what  
24 that stands for, but I give the public credit for being  
25 -- getting more and more environmentally conscious and

1 understanding a lot more things that I don't foresee  
2 that the technical nature of the TRC would be watered  
3 down by the RAB. I think we can still have our normal  
4 meetings, we can still have the same presentations up  
5 there, and we would then be in a position where they  
6 might be a couple of extra questions, which certainly  
7 questions are never harmful, plus I would always be  
8 available to talk to certain members who might need to  
9 have a little more in-depth explanation of certain  
10 issues that would come up.

11 No, I do not see it as a different animal.

12 MS. MIRIAM LAREAU: Miriam Lareau, Public  
13 Affairs Officer.

14 Just to add to what he said, what the RAB is  
15 looking for is that the term "stakeholder" is now  
16 considered parties that are potentially affected by the  
17 restoration activity at any installation. They would  
18 like to bring in the general public as part of the  
19 process of the solution. Let's face it, they don't  
20 understand what's in the process most of the time. So  
21 we want to bring it in as part of the process of  
22 resolving the issues here and make them part of the  
23 situation. I don't see that that's going to affect the,  
24 quote, TRC structure. It's going to be in addition to.  
25 There's a different perspective from all the technical

1 angles that we've got here today.

2 MR. JERRY YOUNG: Jerry Young, City of  
3 Jacksonville.

4 I am against switching from the Technical  
5 Review Committee to the RAB. And I have two basic  
6 reasons. One involves -- if it's not fixed or broke --  
7 "If it's not broke, don't fix it." And the reason why I  
8 say that is because this TRC, I think, is a model for  
9 others across the nation. And the reason I say that is  
10 several areas. One, you all didn't get that  
11 environmental order two years ago because you weren't  
12 dealing with the community already. You have on-base  
13 meetings with the folks that are in the housing units  
14 here, you have off-base meetings at the Holiday Inn for  
15 the people who surround this base and everybody gets a  
16 very good input and also a very personal experience when  
17 they do perceive that they have a problem, whether the  
18 problem is their drinking water wells or whether it is  
19 run-off from the base or any one of a hundred different  
20 issues that you can probably address from the site.

21 And another thing is, while you're doing all  
22 this outreach, you have got the same input that you  
23 would normally have or you expect to have from the RAB  
24 and, therefore, since you have the system down and the  
25 system is working and we are one of the few TRCs that

1 has figured out how we're going to close the site. In  
2 other words, we have put it in writing that when we get  
3 to a certain point, we need certain criteria and  
4 everything else like that. This is what we're going to  
5 do to close the site and we have closed at least one and  
6 maybe three. Correct me if I'm wrong.

7 And now what we're looking at is to change the  
8 horse in the middle of the stream when we have a very  
9 good functioning body that has a very positive outlook  
10 in the community.

11 Now, the second thing is, the reason why I  
12 don't think we ought to change, is the law. I also  
13 understand -- as a retired Naval officer, I understand  
14 what's happening whether it's Norfolk, Virginia or  
15 Washington, D. C. on the line saying that you must do  
16 something, but I also know what the law is written down,  
17 and unless this base is scheduled for closure, the  
18 federal law reads right now there shall be a Technical  
19 Review Committee and not a Restoration Advisory Board.

20 The Restoration Advisory Board was passed by  
21 Congress when it was established that they were going to  
22 close bases by the direct process, and, therefore, Cecil  
23 Field is an appropriate place to have an RAB.

24 I understand that the Naval Station Mayport is  
25 also going for one, but they are not a superfund

1 facility and, therefore, they're not required to have a  
2 Technical Review Committee.

3 So there is no federal law that gives Mayport  
4 specific legal guidelines. In other words, they can  
5 operate under either format and it's voluntary either  
6 way.

7 Whereas, here at Naval Air Station  
8 Jacksonville, we fall under the 1986 SARA, which is the  
9 Superfund Amendments Reauthorization Act, that  
10 specifically set up a Technical Review Committee, and I  
11 believe that we ought to continue to have a Technical  
12 Review Committee here because it is both legal and  
13 required.

14 MS. MIRIAM LAREAU: Miriam Lareau, Public  
15 Affairs Officer.

16 On issue of the law, I got the requirements  
17 under the executive order of the Superfund limitation.  
18 The RAB policy calls for the existing TRC or similar  
19 groups to be expanded to become RABs rather than create  
20 a second committee as long as the RABs meet the  
21 statutory requirements of the TRCs. That's how we're  
22 looking at that statutory regulation.

23 MR. JERRY YOUNG: Jerry Young, City of  
24 Jacksonville.

25 So you're dealing under a Presidential

1 Executive Board?

2 MS. MIRIAM LAREAU: Correct.

3 CAPT. ROY RESAVAGE: Captain Resavage, CO of  
4 the base.

5 Our understanding previously is that this  
6 isn't open to our interpretation any longer. We're  
7 going to follow the executive order. As a matter of  
8 fact, the limitation that we have to meet is the  
9 requirement that we have to shift.

10 To your former statement that you don't think  
11 it's time to change horses, Jerry, I don't think it's  
12 the analogy of not changing horses, it's that of one  
13 more person in the wagon that the horse is pulling.

14 The TRC is going to remain in force. Unless  
15 I'm completely out in left field, I don't see the  
16 charter of this body changing. We need to fill up a  
17 couple of more seats with interested citizens and all  
18 we're going to do is help the education process. We're  
19 going to educate them about what we're doing and try to  
20 allay any fears that they may have. But as far as what  
21 you folks are trying to accomplish, I don't see that  
22 changing one iota. If this thing turns out to water  
23 down or dilute the efficiency or effectiveness of this,  
24 then we would have to do a very serious review of the  
25 whole process here and find out whether this thing is

1 going to be reassessed at a later date.

2 But, you know, the marching orders that we  
3 have and all the talking we've done before, again what  
4 you have, and I thank you for the compliment for what  
5 the base and the TRC has been doing here, I think we're  
6 going to continue to march on and hopefully elect some  
7 other people that make us feel better and have an even  
8 better relationship to compliment our newsletter of our  
9 town meetings and so forth.

10 And also just as we had the new Miss America  
11 come out to the base here several months ago, it's kind  
12 of almost the same thing here. We bring in a different  
13 perspective, have you thought about this and other  
14 people are doing that. I'm not saying that we embrace  
15 the recommendation.

16 So I really don't see this changing. I think  
17 what Bill said may be the case. The meetings might get  
18 stretched out here. They're not scientists, like  
19 myself, sitting here trying to figure out what you're  
20 talking about. You're going to have to suffer through  
21 that and educate us a little bit. But I think the flow  
22 of your meeting should be very, very similar.

23 From my perspective, every time something  
24 comes out, any time something is found on the base  
25 whether it's radiological or whatever it is, our film

1 was made up, everybody wants to know what's going on and  
2 it's very easy to be a critic, but it's very hard to be  
3 an artist. It would be nice to get some of the critics  
4 to come here and pick up a paint brush and start  
5 painting a mural with all the scientists here, I think  
6 would be the best way to do things and what needs to be  
7 done. So I want to reduce the number of critics and  
8 increase the number of artists.

9 MR. BILL RASPET: Yes?

10 MR. JOHN BARNARD: John Barnard, Timuquana  
11 Country Club.

12 I've been involved, I guess, about a year and  
13 a half and I was asked to get involved because of my  
14 association with Timuquana Country Club and some ongoing  
15 negotiations, and one of the first things I asked for in  
16 the TRC meeting was a clarification of my role, because  
17 I am an engineer also and I have some experience in  
18 environmental work. I was told I was a community  
19 liaison. At that time it was made clear and specific.

20 I also live very close to the base and I'm  
21 also a member of the sailing club off to the other  
22 direction of the base.

23 Just some general comments. These meetings  
24 are very technical. I think you're going to have a hard  
25 time getting the general public to come and understand.

1 I have great difficulty in understanding even with more  
2 than ten years experience. It's a very complex subject.  
3 You've got a challenge ahead of this.

4 I'm very interested in this because I do live  
5 in the area, I'm a member of the country club, and I  
6 have chose to attend.

7 CAPT. ROY RESAVAGE: I don't see the community  
8 knocking down the doors filling the available seats.  
9 What everyone is telling us, we have to offer that  
10 opportunity. It will also be interesting to see how  
11 many people come the second time that do come the first  
12 time.

13 But hopefully there will be one or two that  
14 are interested parties that are educated that can offer  
15 something. If not, we have lost nothing by offering it  
16 to them.

17 MR. BILL RASPET: Are there any other  
18 questions?

19 (No response.)

20 MR. BILL RASPET: Well, it is 11:30. I would  
21 say that we break for lunch now and then we'll carry on  
22 with the rest of the agenda this afternoon that remains.  
23 There is a room reserved over at the O Club. For those  
24 people who would like to eat at the O Club, on the back  
25 of your agenda is a menu if you wish to look at that and

1 figure out if you wanted to go over to the O Club.  
2 There's also a pizza place here on base, McDonald's, a  
3 couple of other places to eat. You're certainly welcome  
4 to go off base and security should lead you back on.

5 By the way, did anybody have trouble coming in  
6 the base this morning?

7 It is possible to walk there going out this  
8 way and down. It's fairly hot. So if you're parked in  
9 this parking lot, if you go down here to the first  
10 light, make a right turn, and the O Club is about  
11 three-quarters of a mile down on your left-hand side.

12 (Whereupon, at 11:30 o'clock a.m., the  
13 luncheon recess was taken.)

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A F T E R N O O N S E S S I O N

12:50 o'clock p.m.

June 29, 1994

- - -

MR. BILL RASPET: Well, if we can get started again.

A little more information to pass to you. There are additional four new PSCs that are coming on line here at the base. Most people probably are familiar with the operation of the DRMO, that stands for Defense Reutilization Marketing Office, that take materials in and store them and try to sell it to the public or donate them. Obviously, when people turn things in, they may not be in the best shape and obviously there probably have been some discharges, so that has become one of the PSCs. That will be No. 46.

No. 47 is the pesticide shop that's just up the road here that had been used for a training facility, basically people would come to the base and learn how to apply pesticides for various pest management practices. One of the techniques they used was they had a sand pile that was built on a cinder block and they would demonstrate how you would inject chlordane underneath that cavity they had for effective control of termites.

So we feel that there might be a possibility

1 of chlordane contamination at that site.

2 One of the ones that we've already talked  
3 about today is our dry-cleaning shop. That's going to  
4 be No. 48 and it basically is dry-cleaning. I think  
5 everybody can see the scenario on how to get  
6 perchloroethylene down into the ground there.

7 And the last one is a battery charging  
8 facility that was run by the Naval Exchange system.  
9 Basically they had cars and batteries there and one of  
10 the procedures they would use was to wash out the floor  
11 of the shop using water out onto the grass there, so  
12 we're thinking there may be some acid maybe. Well, not  
13 so much acid contamination currently but heavy metals,  
14 lead predominantly, at that site.

15 So those are the four new ones that are going  
16 to be coming up on line. There may be an expansion of  
17 the one I just spoke of, the pesticide shop, because of  
18 that hazardous waste tank that we just addressed during  
19 the -- when we were talking about hazardous waste  
20 violation, that if we include that, we can investigate  
21 all pesticide operations at one time.

22 I think that basically -- Are there any  
23 questions about those sites?

24 (No response.)

25 MR. BILL RASPET: The next topic I want to

1 talk about or have talked about is a new procedure that  
2 the Department of Defense is going to delve into in  
3 terms of funding, and currently what happens is we put  
4 in our requirements based upon funds available and the  
5 other catastrophes, given Hurricane Hugo, the San  
6 Francisco earthquake, can impact on the funding given  
7 that there aren't a war at the time, we get a certain  
8 level of funding. That's hard for the budgeteers to  
9 work on and it makes it hard for us to, in a lot of  
10 cases, figure out what we can expect in the near future.  
11 So what is being looked at is a level of funding concept  
12 and that will be a certain amount of dollars allocated  
13 each fiscal year. Now, that sounds good given that you  
14 have a certain -- that that amount of money will pay for  
15 most of the work you want to be done at the DOD system.

16 The problem that is coming to be, or potential  
17 problem for this base, if we want to look at ourselves  
18 in a little crystal ball that, quote, we're the most  
19 important, is that there is going to a granting of funds  
20 based upon the degree of risk for the environment --  
21 potential environmental damage, and that is going to be  
22 done throughout the whole Department of Defense system.  
23 So we will be competing for these level of dollars  
24 between the Air Force, Army and Navy and sites which  
25 have a high ranking to them, high risk, which was the

1 original concept under CERCLA and when you had the site  
2 rankings to say did I have -- does my site meet the NPL  
3 standards, do I have enough -- do these points add up to  
4 that magic 28.5 and, if so, I become an NPL site, and  
5 that means the EPA would say, "NPL sites, you need to do  
6 something within six months because you are the most  
7 dangerous when we look at the whole big scheme of things  
8 in this numerical assessment."

9 So that concept is coming into DOD and they're  
10 saying with these number of dollars, we're going to look  
11 at those specific sites.

12 Dana, did you have a feel -- you've gone  
13 through a little bit with the Navy on what sites may  
14 rank high here at NAS Jax.

15 MR. DANA GASKINS: Right. OU-1, PSC 26, is  
16 the highest rank site we have here. It drops down. We  
17 have a printout of just Navy sites that were put in and  
18 the next site we have is, I believe, OU-3, and it's like  
19 five or six pages back, and it will drop down, I  
20 believe, after that PSC 42 is in there, I believe that's  
21 probably next, and then they tail off after that. And  
22 OU-1 and OU-3 are rated high sites. When you start  
23 getting out to like PSC 41 and 43, they are ranked low.

24 So it's going to be like Bill was saying, a  
25 fight for the money and it's going to be site based

1 versus installation based. So whatever the site is  
2 we're trying to remediate will be the one that they look  
3 at. They won't look and say, well, Jacksonville is on  
4 the NPL, they will look at the site and say PSC 41 is a  
5 low priority; therefore, you don't get the money. This  
6 place in Norfolk gets it because they are a site and  
7 they're trying to remediate this high or higher on the  
8 list. And it will be an ongoing process as we  
9 investigate more sites. The ranking can change both  
10 outside of Jacksonville and in Jacksonville if we get  
11 additional information that can be fed into the system,  
12 which may move the site up or down and the dollars will  
13 be doled out based on that.

14 DR. DEL DELUMYEA: Del Delumyea, Jacksonville  
15 University.

16 Just a generic question: How do you find new  
17 sites?

18 MR. BILL RASPET: How did we find new sites?

19 DR. DEL DELUMYEA: Do you have people here on  
20 the base actively seeking places that they have not  
21 found until now?

22 MR. BILL RASPET: Well, the battery charging  
23 shop would be a case in point. We went down there to  
24 discuss some hazardous waste issues with the people and  
25 in the discussions, in that light, we said, okay, what

1 do you do with your battery acid, and, of course, they  
2 were not taking it out of the batteries, they were  
3 leaving it in and turning the batteries into the  
4 facility. Well, then the question came up, well, you  
5 know, what about acid on your hands and things like  
6 that, and they said, "Oh, that's not a problem because  
7 we wash that off onto the floor." Well, then the next  
8 question is, "Well, what happens after it's washed out  
9 onto the floor," and it's washed out of the building  
10 onto the ground.

11 So in some cases it's just a matter of talking  
12 to the right person at the right time.

13 The pesticide tank that we recently discovered  
14 was basically that somebody saw it on the drawings and  
15 said, wait a minute, this doesn't say heating oil tank,  
16 this says -- let me see. Yes, it was a pesticide waste  
17 tank and went out and investigated that and found out  
18 that it was -- it had been pumped before and we had some  
19 documented records that showed it had been pumped, but  
20 there was still some liquid left in it. And it's things  
21 like that that we find in some of these issues.

22 It could be a piece of equipment going out to  
23 the field and doing some work and digging up something.  
24 Right now the ABB is doing record searches and also  
25 doing work and actually going out and doing some site

1 screening on sites that we know, but obviously, in  
2 talking to people and going out to a site and seeing  
3 something, they may discover a potential site also.

4 MR. DANA GASKINS: For instance, the site that  
5 we're trying to give to the city, someone went out and  
6 looked at it and it was stated that that's gasoline, old  
7 service station there. Whether it is or not, we really  
8 don't know at this time. But it will be looked at and,  
9 you know, that happens to be a site already but it would  
10 change the description of the site, because what it was  
11 before and what it would be then is new information.

12 Some of the sites that were put in on this  
13 list, some sites were not out in because the information  
14 is not there yet. It will be added when the information  
15 becomes available.

16 DR. DEL DELUMYEA: Thank you.

17 MR. BILL RASPET: That site that we're trying  
18 to give to the city is the westside regional part that's  
19 just across Roosevelt Boulevard there. It has become  
20 more of a passive recreation ball field, et cetera.

21 Next? Greg, are you ready to present?

22 I would like to introduce Greg Brown from ABB.

23 He'll be talking -- now we're back on schedule  
24 with the agenda, right after lunch for OU-1.

25 - - -

1 MR. GREG BROWN: Everybody, my name is Greg  
2 Brown and I work for ABB as an environmental engineer.

3 I have been asked to speak extemporaneously on  
4 the subject of interim remedial action at OU-1, the old  
5 LNAPL source area.

6 I'm not sure exactly how much background  
7 information everybody has, so I'll briefly try to  
8 describe the investigations that have occurred out  
9 there, our findings and recommendations and the current  
10 status of the interim remedial action.

11 Approximately about this time last year we had  
12 completed our focused remedial investigation of what we  
13 have identified as the LNAPL source area, and this is an  
14 area where we discovered a floating product on the  
15 groundwater and did a more extensive investigation to  
16 determine what the extent of this floating product was.  
17 And roughly -- I don't have the visuals to describe a  
18 specific location, but if you all can see this map here,  
19 the LNAPL source area is approximately north of Child  
20 Street and the portion of OU-1 that's adjacent to the  
21 golf course and we found areas of floating product  
22 between an existing surface water ditch to the north and  
23 Child Street. We also found some LNAPL to the north of  
24 the storm water ditch as well.

25 And we completed the RI and produced a

1 feasibility study report where we went through an  
2 analysis of alternatives and identified a trench  
3 technology for recovery and extraction of the LNAPL at  
4 that location.

5 We prepared a technical memorandum that  
6 describes our required performance specifications based  
7 on the site characterization and engineering parameters  
8 observed at that site and have used that as the  
9 performance specifications that have been used by the  
10 Navy's remedial action contractor to develop work plans  
11 for gradual implementation.

12 We have also prepared a proposed plan that  
13 describes our recommended remedial action at that site.  
14 I understand currently, and I will defer to Miriam to  
15 provide the details at this time as to the status of the  
16 proposed plan. It's currently been made available to  
17 the public and we're currently in a review status  
18 awaiting for public comments, and once those comments  
19 come in, we'll be able to address those comments and  
20 proceed on to preparation and signature of the interim  
21 record or decision for implementing the remedial action  
22 at the site.

23 And I understand also that we -- that the  
24 right contractor has finalized their work plans for  
25 implementation of the remedial action and that probably

1 within a month or two, once we have gone through public  
2 review and comment period and have signed the interim  
3 record decision, we'll be able to start the construction  
4 phase in which we'll install the trench system and start  
5 on that recovery.

6 That in a nutshell is the interim remedial  
7 action at the LNAPL area.

8 What I would like to do is open up to  
9 discussion any comments or concerns or questions that  
10 you would like to address.

11 MS. DONNA CLINE: Donna Cline, St. Johns River  
12 Water Management District.

13 Could you briefly describe the trench  
14 technology and why that was chosen?

15 MR. GREG BROWN: Well, we looked at a number  
16 of alternatives. One was to look at the use of sumps as  
17 an alternative extraction system. We found that  
18 although the technology could be used, it wasn't  
19 efficient. It would require many, many sumps in order  
20 to cover the area that we have estimated where LNAPL  
21 exists, and between the piping and the number of pumps  
22 and surface recovery systems that would be required, we  
23 screened that out as not being practical or efficient.

24 The trench technology permits an effective  
25 recovery system. It also keeps our secondary equipment,

1 such as pumps and piping, to a minimum, so it's more  
2 cost effective.

3 MR. BILL RASPET: Do you want to speak of the  
4 piece of equipment that we're looking at using to  
5 install that system?

6 MR. GREG BROWN: Yes. The trenching system  
7 that we're looking at -- the way I would describe it,  
8 it's sort of like a huge Ditchwitch, because it  
9 minimizes the amount of excavation that's required so  
10 that we don't have to worry about shoring or site  
11 sloping the excavation. It basically has a shoe and it  
12 can dig trenches up to a depth of 15 or 20 feet  
13 depending on the specific unit that's used and it has  
14 metal sidings which are able to be excavated down into  
15 the ground by a continuous belt shuttle system, and  
16 while it's being moved forward through the ground, it  
17 can simultaneously lay piping for groundwater extraction  
18 and also fill in voids with granular remedial like  
19 gravel or sand. So the excavated material is kept to a  
20 minimum.

21 It's a fairly ingenious and practical way to  
22 install the trench system like this. And our site  
23 specific conditions, I think, are -- it's encouraging  
24 that the site specific conditions are such that this  
25 type of technology is very practical.

1 MR. BILL RASPET: The dirt that's excavated  
2 will be some sort of peat gravel put back in, but the  
3 excess dirt is going to be left there. At first water  
4 will drain back into the ditch and then that dirt will  
5 be taken back across, staying in the same OU across the  
6 street and stockpiled in the OU-1 and await remediation  
7 once we go into it more -- the RI/FS for soil or  
8 groundwater. It will be temporarily stockpiled there  
9 for probably about a year and a half or so.

10 MR. GREG BROWN: The chemicals of concern that  
11 are in the material that we'll excavate from the  
12 trenches are very similar to what we're finding south of  
13 Child Street in the landfill area itself. So we believe  
14 that by temporarily stockpiling on site, we'll be able  
15 to maintain economies of scale in the future by  
16 incorporating this material into our final remedial  
17 action for soils south of Child Street.

18 MR. BILL RASPET: Any other questions?

19 (No response.)

20 MR. GREG BROWN: Thank you very much for  
21 listening.

22 So I guess we'll jump from OU-1 up to OU-2.  
23 OU-2 we have been implementing in phases  
24 addressing specific areas to be considered to be  
25 potential sources of contamination to the site and we

1 have done up to date two focused remedial investigations  
2 that -- first identified -- or first I guess I should  
3 back up. I'm not sure how familiar everybody is with  
4 where OU-2 is located.

5 It's the area primarily up here to the north  
6 where the wastewater treatment plant is located. It  
7 also extends somewhat along the boundary here.

8 This is the primary area of OU-2 we've  
9 investigated thus far. The wastewater treatment plant  
10 is located here and you can see the outlines of the  
11 treatment vessels and it's composed of PSCs 41, which  
12 are domestic sludge drying beds, 43, which were the  
13 industrial sludge drying beds. There's also another  
14 area, PSC 3, where much of the sludge that was  
15 accumulated here in the domestic sludge drying beds and  
16 the industrial were also deposited on the ground surface  
17 here as a disposal means. And there's also connected  
18 with this treatment process has been the polishing ponds  
19 which took the effluent from the wastewater treatment  
20 plant and acted as some additional tertiary treatment  
21 for the wastewater before discharge to the St. Johns  
22 River.

23 And last year we completed -- focused our eye  
24 for the domestic sludge drying beds and the industrial  
25 sludge drying beds. We also investigated the fire

1 training area, which is PSC 2 and this is somewhat  
2 independent of the wastewater treatment plant but it's  
3 in the general location. So at the time we decided to  
4 investigate this area as well.

5 And more recently we have completed a second  
6 remedial investigation, focused remedial investigations  
7 for PSC 3 and 42 and we have -- for the first group of  
8 three PSCs we have completed the RI/FS and it's  
9 currently going through revisions. We've received  
10 regulatory comments and comments from the Navy and we  
11 should be able to finalize the focus RI/FS for those  
12 PSCs soon, the next week or two.

13 And the remedial alternatives that were  
14 proposed for these first three sites, for the sludge  
15 drying beds we have proposed on-site stabilization  
16 solidification on site. And for the fire training area  
17 we have proposed excavation treatment with a low  
18 temperature terminal absorption and redepositing the  
19 treated soil on the site.

20 We are not quite as far along with the other  
21 two PSCs. We have completed our field work and we have  
22 received our analytical information from the  
23 laboratories and we're currently in the process of  
24 writing the RI/FS for those two sites.

25 We have a draft proposed plan. It hasn't been

1 submitted to the public for review yet, but once we get  
2 the RI/FS completed, go through regulatory review and we  
3 have concurrence on our recommendation, we will then  
4 submit the proposed plan for public review and comment.

5 Just to back up -- I'm kind of jumping ahead  
6 of myself. The chemical contaminants that are concerned  
7 on these sites, for PSCs 41 and 43 and for the polishing  
8 ponds, 42, and also for PSC 3 are primarily metals,  
9 specifically chromium, cadmium, nickel and lead are the  
10 major contaminants that are concerned.

11 For the fire training area, the primary  
12 concerns there are petroleum, contamination due to fuel  
13 substances that have been burned there.

14 MR. JOHN BARNARD: I'm not familiar with the  
15 transportability for metals relative to soil. Do they  
16 adhere to clays or are they to be transported to --

17 MR. GREG BROWN: Under natural conditions, my  
18 experience and knowledge has been that metals are  
19 relatively immobile, that they can be transported with  
20 any other chemical speciation. Under natural conditions  
21 they tend to not move as quickly as some organic  
22 compounds.

23 However, over a period of time, it could  
24 present a hazard due to either direct contact with the  
25 contaminated soils either through ingestion or

1 inhalation or some type of exposure pathway. There's  
2 also the possibility, although we haven't seen it at the  
3 site, for the metals to be a continuous source of  
4 contamination via leaching of the groundwater.

5 We'll be looking at all those issues over the  
6 long term when we complete the RI/FS.

7 MR. JOHN BARNARD: Leaching is a low  
8 probability?

9 MR. GREG BROWN: Yes. It's a possibility, but  
10 I don't think it's necessarily probable, but that's one  
11 of the issues that we will address in the long term  
12 RI/FS.

13 DR. DEL DELUMYEA: Those are metal waste as  
14 far as sludge from the plating from the -- paint  
15 stripping?

16 MR. GREG BROWN: Yes. I don't want to get  
17 into too many details. I guess I should explain. The  
18 industrial wastewater treatment sludge beds and the  
19 domestic beds and also the polishing ponds are RCRA  
20 units that are currently under permit for closure and  
21 the waste that went into them are considered listed  
22 hazardous waste. So, technically speaking, from a  
23 regulatory point of view, the wastes are considered  
24 hazardous waste.

25 DR. DEL DELUMYEA: Just getting into the form

1 of the material, meaning the soluble paint chips?

2 MR. GREG BROWN: Right. And it's listed waste  
3 because of that process that you described.

4 MR. BILL RASPET: You could also have some  
5 plating waste that came out from the painting shops.  
6 This whole industrial treatment system was fed from a  
7 -- there's a number of processes. Certainly we see  
8 paint chips on the ground and in the sludge drying beds.  
9 I would think that most of them tend to be more  
10 immobilized.

11 MR. FRED BRAGDON: For example, we did some  
12 analyses of the sediment and surface water in the  
13 polishing ponds and there are chrome -- let's take an  
14 example. Chrome ranging from 15 to 21 or 23,000 PPM.  
15 In the surface water the chrome was 21 to 25 PPB. And  
16 this is true for most of the materials. So I think the  
17 stuff is pretty set and it's not very leachable. The  
18 other thing we checked for was sediment. We didn't  
19 check the water.

20 MR. GREG BROWN: I would also like to mention  
21 too that we have taken a number of samples and analyzed  
22 them by the EPA's TCLP process to determine whether or  
23 not there's a characteristic hazard at the site. And  
24 correct me if I'm wrong, Fred, but we haven't seen  
25 anything that exceeded regulatory criteria for that

1 test.

2 MR. PETER REDFERN: At 41 and 43, there were  
3 three locations to be extracted, three or four, and none  
4 of which indicated any concern, and at PSC 3, which is  
5 the sludge drying area, we had chromium content, as I  
6 recall, and there was no leaching characteristics there  
7 either.

8 MR. JOHN BARNARD: What's the timing on the  
9 groundwater investigation for this site?

10 MR. PETER REDFERN: Let me address the  
11 groundwater. That part of the site line RI/FS and part  
12 of it PSC 4, which has not been addressed as yet. PSC 4  
13 is Pine Tree planting area. As Greg just pointed out,  
14 it's southwest of PSC 3 and it also runs down the  
15 perimeter road as well, because of the drainage swell  
16 that runs down along that road that might be some  
17 concern.

18 PSC 4 has the soil that has not been  
19 investigated as yet and we have not been asked to do  
20 that, but it is my understanding that that will take  
21 place assuming that the money is pulled from Washington  
22 as part of the site groundwater evaluation as well and  
23 take over the actual operable unit at that time. Once  
24 that is finalized, we can then wrap the whole thing  
25 together for the entire operable unit.

1                   But heretofore all we've been doing is focus  
2 investigations to remove soils that have been in the  
3 past presumed to have been creating major problems with  
4 groundwater. As it turned out, PSC 3 is sludge mass  
5 which is approximately the top six inches of soil.  
6 Technologically and human healthwise, it does not pose a  
7 risk. The calculations we've done so far indicate that  
8 there's no risk. We don't know what effect it has on  
9 groundwater.

10                   MS. DONNA CLINE: Donna Cline, St. Johns River  
11 Water Management District.

12                   You said, though, that the sludge drying beds  
13 of the soil instead of a listed waste?

14                   MR. GREG BROWN: The culture media inside the  
15 sludge drying beds is, you know, engineered material  
16 that is a dewatering media for the sludge. It's mixed  
17 with hazardous constituents that compose the listed  
18 waste and therefore is considered listed waste itself.

19                   MS. DONNA CLINE: How is that going to be  
20 treated?

21                   MR. GREG BROWN: We're looking at  
22 solidification/stabilization using either cement or kiln  
23 dust mixture in order to mobilize the metals and also to  
24 create a monolithic type capsulating unit that would  
25 minimize surface exposure and reduce leaching.

1 MS. DONNA CLINE: Is that going to be done on  
2 site?

3 DR. DEL DELUMYEA: Can we cap it later?

4 MR. GREG BROWN: Currently we're looking at  
5 demolishing the physical unit rather than some concrete  
6 structures at the sludge beds that we would  
7 decontaminate or either dispose as hazardous waste  
8 offsite. But the culture media itself would be treated  
9 on site and then returned to the excavation and then the  
10 site would be graded to reduce infiltration of rain  
11 water and then probably, in all likelihood, some  
12 monitoring would be required at that time.

13 MS. DONNA CLINE: Thank you.

14 MR. GREG BROWN: So that's OU-2 in a nutshell.

15 MR. ASHWIN PATEL: Ashwin Patel with the DEP.

16 Does the department propose a plan which is  
17 approved by the department which will allow on-site  
18 stabilization?

19 MR. GREG BROWN: The current RCRA closure  
20 permit application has a specified technical  
21 requirement, but it also provides an application of  
22 CERCLA requirements that we go through CERCLA use, RCRA  
23 or apply ARARs to the remediation, then the permit  
24 application could be modified to reflect the CERCLA  
25 recommendation. The final selection is spelled out

1 under the law.

2 MR. ASHWIN PATEL: Is it going to apply for  
3 modification?

4 MR. GREG BROWN: I think it would in order to  
5 -- it would require either an ARAR waiver or a  
6 modification. In fact, I can refer to the specific page  
7 for that. It's discussed in the permit where it says  
8 that once the final CERCLA remedy has been selected that  
9 the permit application would be modified as appropriate  
10 to reflect the selected remedy that's identified in the  
11 ARAR.

12 MR. BILL RASPET: The concept is that in the  
13 permit application that was submitted it talked about a  
14 cap over the beds, and if the cementing of the whole  
15 material would meet the performance standards of that  
16 cap, then there was an equivalency there that was being  
17 spoken to. But this is one of the issues that we wanted  
18 to touch base with you to see your feelings on that.

19 MR. ASHWIN PATEL: But I would look at the  
20 detailed plan before I could comment on it, but at this  
21 point, and based on the current policies that we have,  
22 if we stabilize this waste and decide to leave it in  
23 place of public design, we would start at the top of it.

24 MR. BILL RASPET: But not a liner beneath?

25 MR. ASHWIN PATEL: It would permit a liner

1 underneath it.

2 MR. BILL RASPET: That was one of the issues,  
3 yes.

4 Okay. We will possibly set up a time with you  
5 and bring you some information and discuss this at  
6 length.

7 MR. GREG BROWN: Thank you very much for  
8 listening to me. I hope the information is useful to  
9 you. If you have any questions, I'll be glad to stay  
10 after the meeting and talk to you individually, if you  
11 wish, about any details we may not have covered.

12 MR. BILL RASPET: Thank you.

13 Our last speaker today is Peter Redfern. He  
14 is from ABB Environmental. He's going to be speaking on  
15 some of the vapor extraction system that's going to be  
16 used, planned to be used down at OU-3, which is the  
17 NADEP area and around the dry-cleaning shop.

18 Peter?

19 - - -

20 MR. PETER REDFERN: Essentially I want to  
21 explain that we've been asked by the Southern Division  
22 to explain a plan of action of removal measure at  
23 Building 106 and 780, which is located in Operable Unit  
24 3. 106 is the dry-cleaning area and 780 is the  
25 recycling for the solvents for the stripping hangar that

1 they use. And apparently -- and, Bill, you can probably  
2 provide more information, that when they were excavating  
3 the foundation for this building they encountered a lot  
4 of solvents that created some major problems.

5 Well, based upon the current information that  
6 we have of Operable Unit 3, which is derived from our  
7 fuel screening, there is very little information that we  
8 have around Building 780. What we have seen in Building  
9 780 doesn't indicate high levels of contamination, but  
10 that's by virtue of the placement of the CPT points and  
11 it's not an indication of actual conditions necessarily.

12 MR. WAYNE BRITTON: We did not do anything  
13 right at 780.

14 MR. PETER REDFERN: No, I know. We did  
15 something, I think, adjacent or near to it, but nothing  
16 at 780.

17 But during -- for those of you who have  
18 received -- who are on the TRC who have received the  
19 scoping work plan that was sent out, in there I believe  
20 that there were six sites that were mentioned as being  
21 highly contaminated locations and the top two locations  
22 were Building 106 and Building 780.

23 With that in mind, Southern Division asked us  
24 to put together a plan of action to conduct an interim  
25 removable action at that site. That interim removal

1 action initially will consist of ABB going out and  
2 conducting some soil vapor readings around those two  
3 locations.

4 For purposes of making a determination as to  
5 whether or not soil vapor extraction is a viable option,  
6 it is a rather innocuous method of remediation in that  
7 it doesn't have any effect on groundwater. All it's  
8 doing is removing the vapors from the zone, between the  
9 beta zone and the bottom of the concrete or asphalt.

10 To get into more specifics around the type of  
11 remediation that we're posing, I would like to ask Mark  
12 Kauffman to come up. Mark is from our Arlington,  
13 Virginia office and is the engineer who is responsible  
14 for putting together the initial plan that we have  
15 proposed to the Navy.

16 We are fully hopeful to get this interim  
17 removal action scoping work done hopefully sometime by  
18 the end of July, if not, by the first part of August,  
19 and at that time we will know better whether or not this  
20 type of soil vapor extraction will work, because the  
21 types of soils that are existing in the area may not  
22 lend themselves to this type of action. If that's the  
23 case, then we're going to drop back to square one again  
24 and try and come up with a secondary approach.

25 With that, I'll let Mark give you a --

- - -

1  
2 MR. MARK KAUFFMAN: Well, I guess first of  
3 all, the reason we picked soil vapor extraction/air  
4 spotting is because it's pouring in solvents that are  
5 volatile first of all and become more volatile as you  
6 dechlorinate them. So we thought as we combined  
7 technology that has dechlorination and collecting  
8 volatiles, that would be ideal to remediate the soil and  
9 the groundwater.

10 Well, first of all, that's the vapor  
11 extraction portion of the technology. What you do is --  
12 since this is asphalt and concrete in a relatively good  
13 seal there, and this is the water table. This zone, the  
14 beta zone, has course bases which theoretically fill  
15 with volatiles. We'll be doing the soil gas survey, as  
16 Peter mentioned, to determine what type volatiles are  
17 there if they're there at all. This method here would  
18 be to collect those volatiles that are there, just a  
19 simple vacuum blower, some vapor treatment, and then air  
20 discharge and then there would be an injection flow of  
21 air just to reclass the course base and keep the  
22 circulation a little bit better.

23 These are typical wells. We probably have a  
24 series of, however many, we felt it necessary. We have  
25 a better idea for the design.

1 So that's the first step.

2 DR. DEL DELUMYEA: Box diagrams are  
3 interesting from the conceptual standpoint, but a box  
4 that says "vapor treatment," when you're talking about  
5 dechlorinated, are you dechlorinating something like  
6 trichloride?

7 MR. MARK KAUFFMAN: The theory is that the  
8 more volatile compounds are less chlorinated compounds  
9 and we haven't designed the exact vapor treatment to use  
10 yet. I think we're proposing activated carbon for vapor  
11 phasing series to start off; for example, before,  
12 between and after the carbon to make sure we're okay.  
13 And you can also use a catalytic conservation unit just  
14 to completely destruct anything. Carbon monoxide is one  
15 of the vapors.

16 DR. DEL DELUMYEA: Just to refresh your  
17 memory, the landfill vapor extraction process met all  
18 kinds of public comment, all dissatisfied, by the way.

19 MR. MARK KAUFFMAN: That's something the  
20 people will be focusing on.

21 DR. DEL DELUMYEA: Yes, people will be  
22 focusing on that.

23 MR. MARK KAUFFMAN: Thanks.

24 Actually, I guess, before I take this down, if  
25 you read about this technology -- I noticed somebody

1 brought some fact sheets on air spotting.

2 Typically your more -- how do I want to phrase  
3 this? The compounds tend to be floating products  
4 similar to what we're talking about, I guess, at OU-1.  
5 You have high concentrations here so you have a lot of  
6 volatilization. Chlorinated compounds are denser than  
7 water, so they tend to sink. So the way to enhance that  
8 is you bubble air down into the lower groundwater units  
9 so that we can get some volatilization down below, plus  
10 you get a little bit of mixing. So you break up the  
11 grading and get more volatilization.

12 That's one of the reasons that we are going to  
13 test out air extraction. This shows some air injection.  
14 We get a little mixing, we collect the vapors and we go  
15 ahead and add that to our vapor extraction unit. There  
16 are different theories about what actually occurs in the  
17 subsurface when you have silty clay and heavy soil,  
18 whether or not you really get bubbles or whether it's  
19 just a stream of air that causes rapids, and we hope to  
20 do a little more studying of that through literature and  
21 some other positive case study that we've done, plus  
22 when we do our RIA we'll gain an awful lot of  
23 information about how to set it up and how to evaluate  
24 whether we want to go forward with it. It's more of a  
25 site remediation.

1 I guess one other aspect, and that's about all  
2 I have, is there's some biological activity that goes on  
3 also. When you start introducing air into the  
4 subsurface, hydrochlorinated compound interim that we  
5 degrade with nethradatros (phonetic), which I believe is  
6 what they're called, and what that means is that if we  
7 get a degradation of chlorinated compounds that are  
8 there, they'll end up as vinylchloride, and that's it.  
9 To get vinylchloride, to go ahead and degrade it for  
10 ethylene, you need aerobic microorganisms.

11 So we're not sure whether conditions are  
12 anterobic or aerobic. We'll find that out during our  
13 studies and during the soil gas survey, and we're not  
14 sure whether we need to enhance the activity that's  
15 ongoing. If we do, this air can be an inert gas -- any  
16 inert gas to continue to have an aerobic type action, or  
17 you can bleed oxygen into the subsurface and you get  
18 more aerobic activity. So we'll see that based on the  
19 pilot test too, which way you want to enhance it to get  
20 more degradation.

21 Any other questions on the technology we're  
22 proposing?

23 MS. DONNA CLINE: I've got a question. That  
24 treats the groundwater. Does that also treat the soil?

25 MR. MARK KAUFFMAN: Well, the vapor extraction

1 removes the volatiles from the soil and then supposedly  
2 the soil base would volatilize the extracted material  
3 and as you circulate air in and you replace the void  
4 space, you could actually cleanse the soil.

5 I mean it obviously is all theoretical. We  
6 have no testing data from this site and how this  
7 technology works. We don't know how quickly we can move  
8 air through the subsurface, so the RIA, you know, at the  
9 minimum will have vapor collection, like landfill gas  
10 collection, where we collect any kind of chlorinated  
11 vapors that are developed and hopefully we will be able  
12 to keep it going.

13 MS. DONNA CLINE: Is that sandy soil there?

14 MR. MARK KAUFFMAN: This is silty sand. I  
15 mean, that's one of the questions, too, obviously. It's  
16 not as porous as some of the sludge, but you get a real  
17 good air flow.

18 MR. BILL RASPET: I would like to point out  
19 that this type of process is a presumptive remedy with  
20 EPA. So they have said that this methodology has shown  
21 itself to be successful in a number of cases and,  
22 therefore, you don't necessarily have to go through all  
23 the steps to go through this process. So it would tend  
24 to show evidence that it may work. If our conditions  
25 are such that we're one in a hundred that don't work,

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well, this is part of why we want to go a little bit further in our study before we put a lot of dollars in our basket to run with this through the whole NADEP site.

Any other questions?

(No response.)

MR. BILL RASPET: We have finished our agenda items. I want to throw it open to the floor. If there are any other issues, any discussion aspects, questions, concerns, this is a forum for it. If not, I would call this meeting adjourned and thank everybody for attending and we will be having another one of these in -- I won't say the near future, but within the next six to nine months, I would say.

So thank you all for attending.

(Whereupon, at 1:48 o'clock p.m., the meeting was adjourned.

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