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MEETING MINUTES FROM RESTORATION ADVISORY BOARD MEETING AGENDA FROM
12 FEBRUARY 2004 NAS FORT WORTH TX
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RESTORATION ADVISORY BOARD



CARSWELL AFB TEXAS

ADMINISTRATIVE RECORD COVER SHEET

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RESTORATION ADVISORY BOARD MEETING

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February 12, 2004

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1 MR. WALTERS: What we'll do now is
2 everybody read the minutes. We'd like a motion to
3 approve the minutes to the November meeting.

4 UNIDENTIFIED SPEAKER: Move.

5 UNIDENTIFIED SPEAKER: Second.

6 MR. WALTERS: Thereby the minutes are
7 approved.

8 Now, we have next on the agenda West
9 Worth, Leland Clemons, but I don't see him here. So
10 if he shows up later we will let him speak, but we
11 will move to the election of the community co-chair.
12 So if anybody would like to nominate a person from the
13 community, is that how we do it?

14 UNIDENTIFIED SPEAKER: Yes. Has to be a
15 member first.

16 UNIDENTIFIED SPEAKER: I have a two-part
17 motion.

18 MR. WALTERS: Okay, sir.

19 UNIDENTIFIED SPEAKER: I move that Chris
20 Bach be elected as a member of the RAB board. And
21 second part of it is I move that she be elected as
22 co-chair for the RAB.

23 UNIDENTIFIED SPEAKER: And I will second
24 that.

25 MR. WALTERS: Very good.

1 Chris, stand up. Next meeting Chris
2 will be standing here giving the introduction.

3 UNIDENTIFIED SPEAKER: That's what you
4 get for being the new kid.

5 MR. WALTERS: She is a professor so
6 she's definitely going to check out our reports and
7 ask some neat questions.

8 Okay. So we are going to start with
9 Plant 4. I am going to give a short talk and then
10 we're going to move to Pete Van Metre who will talk
11 about the latest round of sediment.

12 The fish tissue sampling report has been
13 out. And I guess I can get you a copy of that. I
14 guess Bill probably should already have a copy of
15 that. But we can make it a point to make sure Tom
16 Reed gets a copy of the fish tissue sampling.

17 And the Phase One study of the sediment
18 sampling will be coming out soon. And we just
19 finished Phase Two sampling, which concentrated on the
20 cove area by where you live. Then we will have a
21 Phase Three more concentrated effort on Plant 4 over
22 the next couple of years.

23 But since we have some new faces here, I
24 am George Walters. Again, I am the project manager
25 for Air Force Plant 4, which is in yellow.

1 Chuck is going to be talking about the
2 BRAC site that he is transferring and cleaning up,
3 which is primarily the golf course and weapon storage
4 area, which would be off the page about seven miles to
5 the west.

6 And then Mike will be talking Carswell.
7 Mike will talk about Carswell Air Force Base.

8 I just wanted to add that we're very
9 lucky here in Fort Worth. Lockheed's employment is on
10 the way up. You are up to over 16,000. I saw 16,800
11 in a report. Norm can verify the actual number. But
12 last year when I asked you what the number was it was
13 15,000. So Lockheed is obviously bringing in a lot of
14 work for everybody. And all the cars you see parked
15 along the roads and all over the place and interfering
16 with you driving down Bomber Road here, now you know
17 why.

18 The other thing that's of interest here
19 is the Joint Strike Fighter, Lockheed won the largest
20 airplane contract ever awarded by the Air Force. It's
21 all being built here. And all the construction
22 activities you see around the site are obviously
23 activities and they work with the IRP people like
24 myself and my contractors to -- like if I have
25 monitoring holes in the ground, we will have to decide

1 whether we have a monitoring well close by that will
2 be representative or if we have to install another
3 one. Then we work hand-in-hand with Lockheed on the
4 construction activities.

5 Now, in the future you are going to be
6 seeing a lot of monitoring reports. And you saw this
7 in the last briefing, if you looked at it, that was
8 sent to you. But when we talk about a part per
9 million, it's one drop in essentially a bathtub. What
10 we have to look for is part per billion, a thousand
11 times smaller, which is again one drop in an
12 Olympic-size swimming pool. So that's -- and then in
13 the future they will be able to sample parts per
14 trillion. These things are all over the place now.
15 But they will be able to tell you, yeah, we're
16 breathing it now and it's a lot more lower detection
17 levels in the future.

18 So when you see the flume, just know
19 that the leading edge is at five parts per billion.
20 Even though this isn't the drinking water offered, we
21 have to monitor it and in some cases do treatment
22 systems to clean it up to drinking water standards.
23 So right now you see the large east parking lot
24 treatment system, which I will show you a picture here
25 in a minute, and that's treating the large -- about a

1 hundred acres here in the parking lot.

2 Show the PRB plant. Mike is going to
3 show the video. The permeable wall that we installed
4 off the flume that goes off the flight line. We have
5 an experiment going on up here on the north side where
6 you inject vegetable oil in the ground water and it
7 gets the bugs, the bacteria that are natural that are
8 naturally occurring to grow and eat your chemical
9 here, TCE, which is a solvent used for cleaning
10 airplane parts.

11 Over here we have a landfill and it has
12 a chemical TCE as I showed in my previous presentation
13 where we can collect it by buckets and bailing and
14 that's the cheapest way to get rid of it. It costs
15 about 15 or \$20 a pound to remove it when you can find
16 it. It's very hard to find. My parking lot here cost
17 \$6,000 a pound to remove it, because we have to treat
18 so much water, Olympic-sized swimming pool full of
19 water to get out those drops of TCE. Inside the
20 building, which a lot of my presentations in the past
21 talked about our electrical resistance heating.

22 So we are attacking the flume from
23 everywhere. Again, this is your basic pump-and-treat.
24 You will find these all over the country because it's
25 the quick and simple way to get in there where you

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1 drill extraction wells into the ground. You pull
2 ground water up and you run them through these columns
3 that takes out TCE out of the ground water. And then
4 we run it through some carbon vessels so anything
5 released to the atmosphere into the water is clean.
6 We have below drinking water standards.

7 So since the early '90s when we
8 installed a small system for a couple of million
9 dollars, then we upgraded it each year and put more
10 extraction wells. I am guesstimating over the life of
11 the new system and the old system, 20 million, and
12 that's people involved and samples and water. But we
13 removed almost 3,000 pounds of TCE. But we had to
14 remove over a million gallons of water. That's just
15 an idea of how that pump-and-treat is working. It
16 will be running a long time. Concentrations are
17 coming down around the site. But to get to our goal
18 of 400 parts per billion it will be quite a few years.

19 That be it for me. That was all I was
20 going to talk about on actual activities at Plant 4,
21 because you heard lot of briefings from me over the
22 last couple of years. But if anybody has any
23 questions about active remediation on Plant 4 or
24 anything else we are doing I can talk to it.

25 Next up, though, will be Pete Van Metre

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1 from the USGS. If you want to go ahead and hook this
2 up while -- Pete Van Metre is from the USGS out of
3 Austin, Texas. Pete's the sediment sampling guy. He
4 travels all over the country sampling sediments.

5 MR. VAN METRE: Mud is my life.

6 MR. WALTERS: Mud is your life. And he
7 is going to be giving us the data from the second
8 phase of what -- the first phase concentrated all over
9 the lake. Second phase concentrated on those areas
10 that turned out to be closer to Plant 4 in the cove
11 where we have outfalls, and some other studies he did
12 where we had sediment sampling up through the streams
13 to see if anything far away was coming in past Plant
14 4.

15 And recently he just got the data so we
16 don't have a report yet on this current data. And he
17 doesn't have a handout. So you will get me a handout
18 and we will put it in the meeting minutes when we send
19 it to them? Will that work, Pete?

20 MR. VAN METRE: Yeah. That would be
21 fine. On what I am presenting tonight?

22 MR. WALTERS: Uh-huh.

23 MR. VAN METRE: Okay.

24 Thank you, George. I want to just start
25 out by telling you who we are. We are with the U.S.

1 Geological Survey out of Austin, Texas. The USGS is
2 federal and has a presence in all the states in the
3 country. And we do quite a bit of cooperative work
4 with other federal agencies and with state and local
5 agencies.

6 We are non-regulatory and nonpartisan
7 and we just do earth science. And we're doing this
8 work at the request of the U.S. Air Force.

9 The issue here for the lake is PCBs,
10 poly chlorinated biphenyls. They were detected in
11 2000 in fish tissues in the lake based on USGS
12 samples. USGS samples dated to the Texas Department
13 of Health and did their risk assessment with those and
14 concluded the fish were at levels that pose a risk to
15 people eating them. So they issued an advisory, not a
16 closure on the lake but an advisory. And the Air
17 Force was concerned about where the PCBs might be
18 coming from. And so they asked us to investigate
19 sediments in the lake.

20 PCBs are now band set of compounds.
21 They are a whole bunch of closely-related organic
22 compounds, organic chemicals. So the biphenyl means
23 that it has two carbon rings that are stuck together
24 and the poly chlorinated means all around the outside
25 there are chlorine atoms in different combinations and

1 mixtures.

2 And so there are 209 possible ones, each
3 called a congener, but all together they are just the
4 group of PCBs. They are kind of like in my mind like
5 a synthetic motor oil. But they are an oily liquid
6 that its biggest characteristic is it doesn't conduct
7 electricity. So they had a lot of uses inside
8 electric power transformers and other things like that
9 and also hydraulic and pump motors. And you can see
10 some of the other uses here. This is off the EPA
11 website that's a real good resource for a lot of
12 background information for things like this.

13 So we went out in January 2001 and
14 sampled bottom sediments all over the lake. This is a
15 map showing the concentrations we got in bottom
16 sediment. The two top centimeters of the sediment.
17 It's about one inch. And N.D. means we didn't detect
18 it. Nondetection. These are parts per billion. And
19 the one area that showed up as elevated concentrations
20 is Woods Inlet, this area right here along side of Air
21 Force Plant 4. This is Meandering Road Creek coming
22 in from here.

23 So we got one sample that was 139. And
24 these are around 20 or so, and then 10 or less out
25 through the main part of the lake. They are pretty

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1 ubiquitous, PCBs. In fact, people with low level
2 methods have measured them in the Arctic and in ice
3 cores in Greenland and things like that, but at very
4 low levels. And even these are not very high levels
5 compared to urban lakes around the country. But the
6 flip side of that or the real point is they are at
7 least high enough that fish in the lake have PCBs in
8 them.

9 UNIDENTIFIED SPEAKER: Could you
10 elaborate on what you consider an NCL or action level
11 on PCBs? You said that's not out of line.

12 MR. VAN METRE: It depends on what
13 you're concerned with. The sediment quality
14 guidelines -- the consensus-based sediment quality
15 guidelines that are the most accepted that I know of,
16 it's about 670. So it's quite a bit higher than that.

17 But the sediment quality guidelines are
18 mainly concerned with toxicity to ventricle organisms
19 or other aquatic organisms. And for PCBs it's not
20 really a problem of toxicity as much as it is
21 bioaccumulation up the food chain. So even at very
22 small levels it will accumulate up the food chain into
23 the fish and into bald eagles and people too. And
24 that's where they cause a problem.

25 So -- and the concentration -- the

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1 relationship between sediment concentrations and fish
2 varies a lot in different water bodies. So we did a
3 lot of work over at Mountain Creek Lake in the
4 mid-'90s too and there was a PCB issue there as well,
5 and a fishing closure on Mountain Creek Lake for PCBs.
6 And in the more contaminated part of Mountain Creek
7 Lake they were running 200 to 300 in the surface
8 sediments.

9 So this is -- you know, we've also done
10 work out in the Donna Canal in South Texas. And we've
11 seen numbers on this range. But there the
12 concentration -- the sediments are in suspension in
13 the canals and they seem to get the fish to a much
14 higher concentration there. So there is not -- nobody
15 that I have seen in any government agency has tried to
16 come up with an action level for concern to the fish
17 because it varies so much of how much they will
18 accumulate.

19 So based on these data, the report on
20 those George said will be available soon. It's
21 already been approved -- written and approved by the
22 USGS, but it's waiting to be printed. So hopefully in
23 the next few weeks or months we will be seeing those
24 copies and have those available.

25 So we came up with a Phase Two study

1 that we had two main objectives was to map the extent
2 of PCBs in Woods Inlet. Because right now we just
3 have those couple data points that didn't give us much
4 detail, and then try to determine sources of the PCBs
5 to the lake. And here the main question is whether
6 they are coming largely from Air Force Plant 4 or from
7 the urban area around that whole side of the lake.

8 And urbanization is a real -- almost any urban area
9 has some PCBs in it. So it's a pretty valid question.

10 To do that, we came back out and did a
11 lot more of the sediment coring work in the inlet,
12 pretty much the same approach as the first time but we
13 switched it all down and just in the inlet there. And
14 then we also did some specialized storm water sampling
15 in the little creeks that drain -- Meandering Road
16 Creek and a couple of other little creeks that drain
17 into the inlet.

18 And what we are doing that's a little
19 different is we're collecting real large volumes of
20 water and filtering them so we get enough sediment
21 that we can analyze it directly like you would a
22 bottom sediment sample. The PCBs are real
23 hydrophobic, which means they are not at all soluble
24 in water. They won't dissolve in water. And so they
25 tend to stick to the sediment or accumulate in

1 tissues.

2 So if you just take a regular water
3 sample and send it to a lab, you probably won't detect
4 them. So we did this high volume suspended sediment
5 sampling. And the other thing we did is got the lab
6 to do a special chemical analysis of PCBs where this
7 -- I didn't put the term in there -- congeners. So
8 they were measuring a whole bunch of those individual
9 PCB compounds instead of giving a total PCB
10 measurement. In fact we got both. This will let us
11 hopefully fingerprint different types of PCBs in the
12 different samples to say where they are coming from.

13 I won't dwell on this too long. But
14 these are just a couple of pictures of what a sediment
15 core looks like when we get it. This is from out in
16 Woods Inlet. So there was about five or six feet of
17 sediment. About six feet of sediment had been
18 deposited there since the lake was built in 1914. And
19 it accumulates over time. So down here in the bottom
20 where it gets pre-reservoir soil, the sediment was laid
21 down in 1914. Up in here you are probably 1950 and
22 then 19 -- or 2002 right at the top.

23 So once we slice this up in these little
24 sections like this, we can assign age dates to the
25 core based on what I just said plus bring new profiles

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1 from weapons testing, and then we can measure the
2 chemistry of each of those slices and get some idea of
3 how much PCBs or DET or whatever were released to
4 environment back in 1955 or '75 or whatever. And
5 that's -- we did that at three sites out there along
6 with 17 sites where we just got the surface samples.
7 And here are the numbers.

8 So these are total PCBs. The squares
9 around here are where we got those long cores like you
10 just saw in the pictures. The rest of the numbers are
11 just the top two centimeters of sediment. And here is
12 Meandering Road Creek coming in. The highest
13 concentration was right up in front of the -- where
14 the lake is right up there against Meandering Road
15 Creek. We sampled up the other tributaries here just
16 to see if we saw a difference there.

17 This is the Texas National Guard armory
18 there, and we see lower concentrations in there. And
19 then this is this west arm of the lake that we call
20 this Griggs arm because it's the name of the park over
21 there. And you can see these concentrations are
22 decreasing as you go down the bay. In fact, you can
23 draw pretty nice contour lines in here. You're in the
24 '20s there and in the teens there and then on out here
25 are lower.

1 So in concentration profile, it looks
2 like the main source is up Meandering Road Creek.

3 UNIDENTIFIED SPEAKER: What does that
4 drainage area consist of?

5 MR. VAN METRE: I have got a map of the
6 drainage area, I think the next slide after this one.
7 So I will show you that in just a second. These are
8 the trend profiles down those three long cores. So
9 this is the one that is in front of Meandering Road
10 Creek with the peak 55 centimeters or almost two feet
11 below the top of the sediments at 650 parts per
12 billion. And that's dropped off to 33 parts per
13 billion at the very top. So that 33 -- the 33 is that
14 33 right there. Okay.

15 And then in the -- out in the middle of
16 the inlet we see a real similar pattern, but not
17 nearly as high a peak. And over on the west side,
18 that Griggs arm, much lower concentrations back in
19 time. So, I mean, there are a lot of things you can
20 get from this. One is how fast have they been
21 decreasing over the last 30 years. This is a pretty
22 typical profile of PCBs in an urban lake core too.

23 So the question is if they're higher
24 over in this arm, this is the Meandering Road Creek
25 water shed, the green -- the two green shades here.

1 This is the water shed of the little thing by the
2 Texas Guard facility. And then this is the water shed
3 coming in this west arm, and this is water shed of the
4 whole thing and red line around the outside.

5 And so the five yellow stars on here are
6 where we did the storm water sampling. So on
7 Meandering Road Creek we sampled here and then right
8 at the mouth so we can get above and below where
9 anything from the Air Force Plant 4 might be coming
10 into the creek. We also sampled what are the main
11 storm water outfalls from that side of Air Force Plant
12 4 right there. And it comes in to the hillside right
13 above the creek. So it gets into the creek right
14 about there. So it would be affecting that site as
15 well.

16 And then we had a site right on each of
17 these two little tributaries. So you can see some
18 idea from map in the background where the urban
19 development is.

20 This is a couple of pictures here of how
21 that sampling looks. We put out what we call -- what
22 we call (inaudible) samplers. That's about as low
23 tech as you can get. It's a steel drum that would
24 make a nice barbecue with a great big plastic bottle
25 in there, 25-liter plastic bottle with little intake

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1 tubes that go out of it. So whenever it rains and the
2 flow comes up in the creek, it will fill that bottle
3 up. And then we take that 25 liters and we filter it.
4 And that's a picture of us filtering some of the water
5 in these great big stainless steel filters. It's a
6 Teflon memory filter. And we do several of those so
7 we can get enough sediment that the lab can do a good
8 analysis on it.

9 This picture is right at the lower end
10 of Meandering Road Creek just before it goes through
11 the culverts area into the lake. We sampled three
12 storms. We had a long dry period after we got the
13 samplers put in through last spring and early summer.
14 But we finally got a wet period in here and sampled
15 all three storms within about a little over a month
16 there.

17 And here is what we saw. Now, we left
18 the numbers on there that are the lake bottom sediment
19 samples up here in white. And some of these data are
20 brand new to the point of having just gotten them from
21 the lab by fax this morning because we got right down
22 to the wire on hopefully presenting this to the
23 meeting.

24 The blue are the concentrations in the
25 suspended sediments in each of these samples. The

1 story. It was coming out of that Air Force Plant 4
2 outfall. We see PCBs of about 100 or about 200 if you
3 look at the total, which is comparable to this number.
4 So it's pretty clear they are coming in. It may not
5 be the only place right along that bank, but that's
6 pretty clear that that's -- that's where they are
7 coming in to Meandering Road Creek is off the
8 facility.

9 And at the lower site here, that's below
10 both, you know, getting this plus this we see this
11 mixture of numbers that some of them are -- I'd really
12 look at the parenthesis numbers over here because they
13 are more precise.

14 Just another couple of more lines of
15 evidence. These are -- each of those sites after the
16 three storms we also took a stream bed sediment
17 sample, which means the mud laying in the bottom of
18 the creek after the flow has gone by, within a couple
19 of days after it. And here we have a couple of first
20 numbers back from that. The upper Meandering Road
21 Creek site were very low concentrations. Some of the
22 congeners again at the lower site were in this 50 to
23 100 range. That, you know, looks like what we were
24 seeing out there.

25 And then finally I wanted to show you

1 one other thing. I mentioned fingerprinting using
2 these individual compound and congeners. And the way
3 you do that is you look at them in proportion to each
4 other. And they have these fairly distinctive
5 patterns. This is one of the settlement cores that's
6 over in the west arm we call the Gruggs arm. And here
7 are five of the main congeners in the -- in the 25 or
8 so that we measure. And each of these lines is a
9 different sample going down the core.

10 So over time over on that side we see
11 this real distinctive shape of how these things relate
12 to each other. When we go over on the other arm, the
13 Meandering Road Creek arm, we see this much different
14 shape. And, again, we see all the samples over in
15 that site look like each other as far as their
16 chemical signature.

17 And then this is the core that's in the
18 middle of it all. We see some of the shape -- we
19 really see a fair amount of shape of these guys with
20 this peak in the center instead of this steady rise.
21 And we can look at the same thing using the suspended
22 set chemistry samples. So here again the blue lines
23 here are the top two samples from that core over on
24 Meandering Road Creek side. And the yellow is the
25 sample that came out of the Air Force Plant 4 outfall.

1 And so that's where we stand right now.
2 We just got these back and we will have to put a
3 report together with these. And we are already
4 talking with George and with others on the -- involved
5 with the facilities out here about what to do next.
6 And I think the obvious thing is to try to figure out
7 specifically where inside that outfall area, that
8 drainage area, the PCBs are and getting into the storm
9 water flow. But that's -- that's where we stand now
10 and it's a pretty clear story really.

11 MR. WALTERS: Brought to you the data
12 before it's made its way via e-mail. I saw the data
13 this morning.

14 MR. VAN METRE: This is fresh off the
15 presses.

16 MR. WALTERS: Decided y'all needed to
17 see it. And we have a project for next year to look
18 on Plant 4 and bring all the EPA people together with
19 TCAQ that knows some stuff about PCBs from around the
20 state of Texas and good contractors that have studied
21 this stuff before and hopefully in a smart way be able
22 to backtrack and look for any source areas. The
23 amount of money we are going to be spending here on
24 this next project will be more than the three last
25 projects we have done combined. So I want to make

1 sure how we spend it is used properly.

2 MR. VAN METRE: Yeah. Maybe just as a
3 one-more comment, looking at things in a little longer
4 term, you know, we have already seen a big decrease
5 over the last 30 or 40 years. So we are already down
6 here even with the source strength that's there now.
7 And this is -- it takes a long time for these things
8 to get out of the system to get buried and isolated
9 for the fish concentrations to go down. That is right
10 there. That's about two feet below.

11 Where people think about bioavailability
12 of contaminants in the sediments they usually are
13 thinking about that top, I don't know, five to 15
14 centimeters, a foot or less. Actually a half a foot
15 or less. And that's just from what kind of organisms
16 are digging around the sediments and bring them up to
17 the top.

18 MR. WALTERS: I guess one of the
19 questions a lot of people ask is why don't you dredge
20 it, you know, immediately. It's buried. So the
21 highest concentrations are buried. So if you're doing
22 dredging work, you can suspend it up, get it out in
23 the water and push it out further in the lake.

24 MR. VAN METRE: It's also hugely
25 expensive, I would assume, to dredge and dispose of

1 that volume and your money, you know -- and the money
2 doesn't grow on trees. So you're maybe, you know, a
3 lot better off overall to focus on other strategies.

4 UNIDENTIFIED SPEAKER: What are the
5 strategies?

6 MR. VAN METRE: Cutting off the source
7 is one that should help.

8 UNIDENTIFIED SPEAKER: Okay. Then what
9 do you do about the materials that are in the lake,
10 the device? You cut off the source. Now what do you
11 do about the materials from the lake?

12 MR. WALTERS: What's already there?

13 UNIDENTIFIED SPEAKER: Yes.

14 MR. WALTERS: That's when you've got to
15 make the call on whether the higher stuff that's
16 buried -- the nice thing is it's in the cove. You
17 risk stirring it up by any other method out there.

18 The Hudson River, correct me if I am
19 wrong, but in New York made PCBs and apparently dumped
20 quite a bit into the river there. Their goal, I
21 believe, is to get it down to 1,000; is that correct?

22 MR. VAN METRE: I don't know.

23 MR. WALTERS: The Hudson River clean-up
24 is 1,000. So they're multiples and we are ten percent
25 of that. So it's something the EPA with TCAQ will

1 decide after we backtrack and see what the deal is.

2 Again, we don't want to make it worse.

3 UNIDENTIFIED SPEAKER: What does that do
4 as far as utilizing the fish in the lake? You're
5 basically saying to the next generation you are not
6 going to be able to eat any of the fish.

7 MR. WALTERS: How long does it take for
8 fish to biodegrade, if at all? At one time I didn't
9 think any biodegradation occurred. But I read a study
10 recently that it's slow.

11 MR. VAN METRE: Well, they are not
12 really biodegrading much. It's more like they're
13 gradually being buried or becoming less available to
14 new fish. But there is a national fish sampling
15 program that the Fish and Wildlife Service did from
16 the late '60s up until the late '80s. And in fish
17 concentrations and PCBs nationally decreased at a rate
18 of about half every five years, I believe it was. So
19 50 percent decrease every five years. Half-life of
20 five years is what they call that.

21 Whether that applies here, I don't know.
22 But the sediment concentration is decreasing at a
23 similar rate to what we see in other sediment cores
24 all over the country.

25 MR. WALTERS: Paul, did you sample this?

1 UNIDENTIFIED SPEAKER: We didn't. The
2 Corps of Engineers is involved in a study that we are
3 participating in that they did some -- I don't think
4 it was them, but one of the -- I think it was the
5 State actually did the sampling, but that study is due
6 to be out next month.

7 MR. WALTERS: Compare the two fish
8 sampling analysis. I would say we can get you to
9 report on fish tissue analysis, but certain species
10 were below detection level of 50, I think it was. Do
11 you recall?

12 MR. VAN METRE: Oh, from the USGS? I
13 don't remember.

14 MR. WALTERS: The bottom dwellers have
15 higher concentrations. So the State of Texas decided
16 that nobody should eat any fish even if you could tell
17 the difference between a crappie and a catfish.

18 UNIDENTIFIED SPEAKER: I understand
19 that. Just one of the concerns I have is that for a
20 number of years the Corps of Engineers has talked
21 about dredging Lake Worth since there has been so much
22 sediment deposition for last 90 years to get some
23 increased yield out of it. And, of course, those in
24 Fort Worth drink that water and I guess I am a little
25 concerned about it.

1 MR. WALTERS: The water plants use
2 sediment sampling people --

3 UNIDENTIFIED SPEAKER: -- before you
4 comment on the water part of it, it's more involved
5 with the water lab. Basically that's not an issue
6 with the drinking water.

7 MR. VAN METRE: The sediments in the
8 upper part of the lake are very clean too. They are
9 at, you know -- it's one the few places other than the
10 Rocky Mountains remote lakes we sampled that we didn't
11 detect DTP and DDE in some of the samples up there.
12 And I think that's because west of Lake Worth is
13 pretty much undeveloped range land.

14 UNIDENTIFIED SPEAKER: Pete?

15 MR. VAN METRE: Yeah.

16 UNIDENTIFIED SPEAKER: When you said you
17 took three stream bed sediments, did you mean three
18 samples or three locations with one or more samples.

19 MR. VAN METRE: We sampled four
20 locations after each of the three storm events.

21 UNIDENTIFIED SPEAKER: Okay.

22 MR. VAN METRE: So for each one of those
23 suspended sediment samples, we have a stream bed
24 sediment sample, excepted that tank -- not the tank --
25 excepted the Air Force Plant 4 outfall, because that's

1 a cement pipe. So there's not really stream bed.
2 It's concrete so there is not really any stream bed
3 sediment there.

4 The other question of other strategies
5 is a good one. I am not sure there are very many good
6 ones. You either leave it alone or --

7 UNIDENTIFIED SPEAKER: Again, in our
8 discussions with the Corps about the dredging project,
9 I mean, you have to weigh the consequences. And,
10 again, there is a lot of apprehension about what's
11 going to happen to the fish.

12 MR. VAN METRE: We do have a pretty good
13 idea from this sampling, though, where the PCBs are.
14 It's a pretty isolated part of the lake.

15 MR. WALTERS: Phase One, the long cores
16 we have any highest peaks that were buried?

17 UNIDENTIFIED SPEAKER: If you could go
18 back to that concentration slide, the question came up
19 about the drinking water end of it.

20 MR. VAN METRE: She unplugged it.

21 MS. ROCHFORD: We can bring it back up.

22 MR. VAN METRE: Phase One sampling we
23 did long cores up Woods Inlet, but down kind of at the
24 lower part of it. And the peak in that, that was the
25 one that was 13 at the top. And I think the peak

1 there was maybe 150 or something like that. But out
2 in the main lake where we took -- we took a long core
3 up at the upper end of the lake and didn't detect PCBs
4 in it at all, even in the older sediments.

5 And we took another one down here at the
6 dam, and it had PCBs. But the peak there I think was
7 probably pretty low. I don't remember offhand, but we
8 can look that up easily enough. But I think it was
9 well under a hundred.

10 MR. WALTERS: The question is how long
11 does it take for sediment to settle out if they were
12 to stir it up by dredging?

13 MR. VAN METRE: I am not really a
14 dredging expert. I don't think it -- I think they go
15 to pretty great lengths to try to keep from just
16 stirring up huge clouds. They can put skirting or
17 berms or whatever around the area they are dredging.
18 I think they try pretty hard to control how much of it
19 they scatter. But I don't really know that much
20 detail about it.

21 MR. WALTERS: And if you would like the
22 report, give Stella here your name and we will send
23 it.

24 MR. VAN METRE: The lake Woods Inlet
25 map.

1 UNIDENTIFIED SPEAKER: The lake map.

2 MR. WALTERS: A lot of states have --
3 all states have PCB. They have, you know,
4 recommendations on how many fish long, what the
5 species are and obviously welcome to go through the
6 State Department of Health and see if you can convince
7 them to allow fishing of certain species or a certain
8 amount.

9 UNIDENTIFIED SPEAKER: Just for
10 everybody's edification, the inlet for the water
11 supply is over here. Of course, all the
12 concentrations are over here. So, again, this is
13 where we take our water from Lake Worth.

14 MR. VAN METRE: Yeah. And I think it
15 was said that PCBs are so hydrophobic that unless
16 you're going to suck a bunch of sediment in and not
17 filter it out before it comes out people's pipes they
18 are not going to be there.

19 UNIDENTIFIED SPEAKER: That doesn't
20 happen.

21 MR. VAN METRE: The way they tell that,
22 the way they quantify that, how hydrophobic they are
23 is a partition. And it's between an organic solvent
24 and water. And they will measure the PCBs or any
25 other contaminant in the two phases together. And for

1 PCBs that difference is on the order of a million
2 times or more. Ten to the sixth or ten to the
3 seventh. So that means that, you know, if you detect
4 them in the sediments, they're going to be at six
5 orders of magnitude lower concentration in the water.
6 Something along that range.

7 UNIDENTIFIED SPEAKER: Is that -- is
8 that concentration down there by the number 13 -- up a
9 little bit higher. No, down. Right there.

10 MR. VAN METRE: That's 139.

11 UNIDENTIFIED SPEAKER: 139.

12 MR. VAN METRE: Yeah.

13 UNIDENTIFIED SPEAKER: Now, that seems
14 to be right in the lake in front of the water inlet
15 where --

16 MR. VAN METRE: It is. You can see the
17 inlets right there. But that's not where they are
18 coming from.

19 UNIDENTIFIED SPEAKER: You don't think
20 it's coming out of there?

21 MR. VAN METRE: No. We think it's
22 coming down the creek because --

23 UNIDENTIFIED SPEAKER: Down the creek?

24 MR. VAN METRE: Yeah.

25 UNIDENTIFIED SPEAKER: Well, if it's

1 coming down the creek, it could have been generated by
2 that old dump area then, or part of it.

3 MR. VAN METRE: The landfills along the
4 creek?

5 UNIDENTIFIED SPEAKER: Yeah. There used
6 to be an old dump there where all the equipment is
7 now.

8 MR. VAN METRE: Yeah, that 139 is right
9 where that 47 is that we measured now. Although when
10 you take two gab samples like that a couple of years
11 apart, how the hundred doesn't mean the 139 is now
12 down to 47 necessarily. But that's where that sample
13 was. And, see, we get up even higher concentrations
14 further up towards the end of the bay there, up
15 towards the creek.

16 UNIDENTIFIED SPEAKER: Was there not
17 some data generated when the work was done on that old
18 dump site that accumulated PCB concentrations?

19 UNIDENTIFIED SPEAKER: They used to have
20 -- they used to have some kind of paint booth or noise
21 suppressor where they sprayed water into that concrete
22 engine run stand. And they cooled it down, the
23 exhaust, with water and it run back into the lake
24 right there at where the -- where the road goes down
25 to the lake. And the water run into the lake from

1 there. Possibly that higher concentration could have
2 come from that area where they were washing down the
3 exhaust gasses to suppress the noise from that engine
4 test run.

5 UNIDENTIFIED SPEAKER: I don't know
6 whether they are still doing it.

7 UNIDENTIFIED SPEAKER: They are not
8 doing that any more.

9 MR. WALTERS: Right.

10 UNIDENTIFIED SPEAKER: But they cut that
11 out.

12 MR. WALTERS: Right.

13 UNIDENTIFIED SPEAKER: For years there
14 was a huge volume of water. It just run clean down
15 into the lake all the time from Lockheed Martin.

16 MR. VAN METRE: One other thing --

17 UNIDENTIFIED SPEAKER: Can you tell from
18 the PCB samples that it has increased over the last 20
19 years?

20 MR. VAN METRE: No, it's decreasing.

21 UNIDENTIFIED SPEAKER: It's decreasing?

22 MR. VAN METRE: Yeah. This is a -- this
23 is how we tell that. These are three of those long
24 cores, that are real long tubes that are like this
25 long. And so you are going back in time as you go

1 deeper into sediments on this thing. And you can see
2 that it was at much higher concentrations further back
3 in time.

4 So when we do our age-dating on this
5 thing, we estimate that these samples right in here in
6 both these cores were deposited in about 1960. And so
7 as time has passed we see concentration really
8 decreasing. And that's expected because they were
9 banned in the '70s.

10 UNIDENTIFIED SPEAKER: Now, years ago
11 decreasing back in time, you know years ago they used
12 to oil down the gravel road all the way around the
13 lake with a high oily substance.

14 MR. VAN METRE: That could have -- it's
15 possible.

16 UNIDENTIFIED SPEAKER: They quit doing
17 that after they paved the road around in 1950, I think
18 they paved it. But before that it was gravel. And
19 then in the summer when it would get real dusty,
20 they'd come out there and knock off the dust with this
21 oil. And eventually it would run in the lake, you
22 know, the runoff when it rained.

23 MR. WALTERS: We will make a note of
24 that and we will sample under the asphalt when we do
25 sampling. That's good to know because the City is

1 planning on repaving the road and they will strip off
2 what's there. And actually when they do that work we
3 can hopefully have somebody take a grab sample of
4 that.

5 UNIDENTIFIED SPEAKER: You mentioned
6 there is a data out there that indicates what was in
7 those dump sites.

8 MR. VAN METRE: Yeah.

9 It was quantified as air core 1254.
10 That's one of the common ones in the denapple samples
11 that I saw from our earlier reports. And we usually
12 in most lakes we see the quantification by air core is
13 not real precise at all. But we'll usually see mostly
14 air core 1206. That's a little heavier one, a little
15 different one. And these samples we do see a
16 predominance of 1254.

17 But the congener pattern from the
18 individual congeners would be an even better way to
19 match those up. But, yeah, it should -- it should be
20 -- it sounds like from their data and what we're
21 seeing already, that it was one air core which would
22 really help narrow that PCB signature and make it
23 easier to fingerprint it.

24 UNIDENTIFIED SPEAKER: And, again, if
25 that's the source, then you would look at it and say,

1 well, maybe you've already identified where it came
2 from and take the appropriate action isolating that.

3 MR. WALTERS: The trick is with this
4 sediment sampling out of the storm drain, that's kind
5 of a new one to us. We have sampled, you know, and we
6 didn't know anything was going into the lake. But
7 with this new latest sampling, you have some low level
8 stuff upstream. So that's where we will be
9 concentrating our next study on.

10 MR. VAN METRE: Certainly a smaller
11 place to look than we started with two years ago.

12 MR. WALTERS: Any other questions? And
13 you can talk to him afterwards. If you came in late,
14 I hope you weren't here for the sediment sampling
15 briefing. You can talk to Pete later and he will have
16 handouts that will come in the meeting minutes when we
17 send them out.

18 Any other questions for Pete? Or
19 otherwise you can talk to him later. You can get his
20 phone number and call him up.

21 Next up is Chuck Pringle who is going to
22 talk about BRAC and the Carswell work.

23 Are you ready, Chuck?

24 MR. PRINGLE: I am Chuck Pringle. I work
25 for the Air Force Center for Environmental Excellence.

1 I am from San Antonio. I also am representing the Air
2 Force Real Property Agency. And I am the service
3 center for the real property agency. Their job is to
4 investigate, remediate, close base sites and to
5 eventually transfer them.

6 So I will be talking about that. And
7 basically I work down in San Antonio. So I guess I
8 work this thing, right?

9 Got to love them computers. Sometimes I
10 like the senior electrons that go through them because
11 all the e-mail I get takes its time getting there so
12 you don't have 20 or 30 hundred when you come back to
13 work after you've been gone for a while. Kind of sets
14 off your day.

15 Anyway, in the fiscal year '04 for the
16 Government starts in 1, October and goes through
17 September. Last year I wasn't funded a lot of money
18 because of priorities that were some other bases
19 across the United States that had higher priorities
20 and bigger problems than we had. And I have been
21 thinking maybe I need to create more problems out here
22 so I can get funded more frequently and maybe it
23 worked this year. Who knows.

24 Anyway, with the weapons storage area
25 which basically if you look at the map and you go

1 west, this direction, the weapon storage area is out
2 there and it's roughly about 247 acres. We have done
3 an environmental survey out there and we've got
4 closure on the weapons storage area, with the
5 exception EOD site, which is explosive ordinance
6 disposal site.

7 When the people were working on the
8 active base, they would go out there and they would do
9 training as far as working on explosives and all that
10 type of thing. So it was a training site. But the
11 weapons storage area cleared by the EPA and Texas
12 Commission for Environment Quality, TCEQ, we needed to
13 close out the EOD area.

14 The Air Force real property agency
15 originally wanted that to be an agricultural
16 clearance, which we have done. Since then they have
17 decided to change that to residential with the idea of
18 affording that land to people who are interested in
19 residential settlement and that type of a thing.

20 So what we did is we have this project
21 here, basically go back and change the residential --
22 or the agriculture to a residential safety clearance.
23 When you go up to the Department of Defense Explosive
24 Safety Board, and all services have to do that, in
25 order to get a clearance you have to tell them what

1 your future use is. We told them it was agricultural.
2 We got the agricultural. But now that we're doing
3 residential, we have to go back out again and do
4 another investigation, which basically is like the
5 first one. The difference is for agricultural you
6 have a clearance down to 12 inches. For the
7 residential you have to go down a minimum of ten feet.

8 So we will go out there with ground
9 penetrating radar and check on -- to see if we have a
10 problem.

11 Back in 1995 Hill Air Force Base out of
12 Utah had an EOD unit that came out there and did an
13 investigation. They actually went down to 20 feet.
14 And if they came across any anomalies, they dug it up
15 and took it out. So I am anticipating that this
16 survey that we are after we will probably find
17 nothing. Because if Hill did their job, that's fine.

18 We also had a contractor that went out
19 there who looked at that area specifically not as much
20 as in-depth as the Hill people, but to also look to
21 see if they could find anything and they didn't find
22 anything. So we have already had two people look at
23 it and this is the third people to be going out there.

24 We just awarded a contract for that.
25 And that's going to be Western Solutions. We have

1 already seen their work plan. And I am anticipating
2 next month in March they will be out there with their
3 equipment to go out and do a survey. They will be
4 using a couple different types of ground penetrating
5 radar to more or less confirm what they find or don't
6 find hopefully. So I'm glad that that's on the way.

7 And once we get that information back,
8 then we will take the information that they got,
9 assuming they find nothing, we will produce a FOST,
10 which is a finding of suitability to transfer, and
11 supplement the environmental baseline survey. And we
12 will send it up to the regulatory folks, EPA and TCEQ,
13 to look at that and see if I agree with the
14 information that we got and all the findings out
15 there.

16 That will come back to the Air Force
17 Real Property Agency. And then they'll go out -- that
18 particular site will go out for -- go through the GSA,
19 the General Services Administration.

20 So right now the schedule is basically
21 the summer probably the August-September time frame
22 that this thing will be offered out to the public
23 through GSA for sale. That would be 247 acres.

24 And the WSA is cleared for residential.
25 Once we get the COD thing in there, then the whole

1 thing will be ready for residential and we will go
2 from there. Then that land will be gone.

3 The next one is a sanitary sewer system.
4 On the base here you basically have the Naval Air
5 Station. At one time, Carswell, the boundaries were
6 larger. The naval air station kind of comes in here.
7 Across the naval air station in their cantonment area
8 where they have all the buildings and all that, they
9 have a sanitary sewer system in there.

10 We've done an investigation in there and
11 we've found 12 sites where we need to dig up,
12 basically we found metal, which aren't very mobile and
13 all that. And we're going to go in there and dig up
14 those 12 sites and cleanup and be on our way.

15 And we're hoping to have this project
16 awarded next week. That will be going to Shaw. They
17 did the investigation. And basically we are hoping
18 that that will be cleaned up probably by July, August,
19 September, time frame too. And we are working with
20 Joe Ebert where he is doing the clean up on the naval
21 air station for all the Air Force sites.

22 Now, the 68 sites on there, 60 of them
23 pretty much cleaned up. I had 19 sites. This was the
24 last one. Eighteen of them are closed. Once those
25 two are closed, we are hoping to transfer them over to

1 the Navy, and then the major part of this land will
2 belong to the Navy.

3 And that brings me to other
4 concentration. Down here you basically have the golf
5 course. And this is more or less considered BRAC land
6 or off-base site. This is where the concentration
7 from the real property agency is.

8 We are going to go out there and do a
9 five-year review which will actually look at the total
10 base with concentration on the BRAC site here
11 particularly. And we will also be doing another
12 project, golf course monitoring. And both of these
13 are -- I use the word Hydro Geologic because they have
14 been out here I guess six or seven years. They're
15 kind of like corporate memory. They work for George.
16 They work for Joe. They work for me. So it's better
17 for them to go to most of these sites because they
18 could probably tell you everything you need to do know
19 about the site and some things you don't want to know
20 about the sites.

21 So we are going to have them looking out
22 here basically for the monitoring system, which will
23 be behind the permeable reactive barrier right here,
24 which the purpose of that was installed to stop this
25 sloan from the TC going in here. In five years review

1 will look at the total base with the concentration
2 here so that we can transfer this sometime in the
3 future.

4 The golf course probably won't be
5 transferred this year, but it will probably be
6 transferred next year or the year after that depending
7 on how things work out and all that.

8 One of the things we are doing in
9 support of that is we are doing the focus feasibility
10 study. And that's a cost sharing between Joe and
11 George and myself to see what's going on basically in
12 the golf course area to see if we can transfer it.

13 As you know at Plant 4 that they are an
14 MPL site, which means they have a ROD, a record of
15 decision. And they work under the superfund EPA
16 primarily. Their ROD says they need to keep this
17 flume on federal property.

18 What we need to do is transfer this
19 land. So I need to move the boundary from back here
20 up to here. And since they have a rough for this
21 flume, we're working right now to come up with an
22 investigation there that we have done a risk
23 assessment that the levels within there won't be a
24 problem to anybody. They will be protected. And we
25 would have to modify their ROD to move the boundary

1 in.

2 So between the focus feasibility study,
3 we're looking at the options of can we transfer the
4 land, what is it going to take, how long is that going
5 to be and how much money is it going to cost and all
6 that type of a thing. And then we will join up with
7 the ROD, put the two of those together and try and
8 accomplish what's called an OPS, which is operating
9 properly and successfully.

10 What that means is that George is
11 working over here trying to clean this up. Our PRB
12 who is Walls is working over here. And we also have
13 some bugs that are working pretty good here and
14 probably on the rest of the base. We have to go in
15 and do an analysis to prove that they are functioning
16 and they are doing what they are supposed to be doing.
17 And then sometime in the future we will get to the
18 maximum contamination level for TC, which is
19 five-parts per billion.

20 So with the focus feasibility study
21 selecting a method to get there, with the ROD of
22 moving the boundary in so we can transfer, if we can
23 accomplish the OPS, then we will be able to transfer
24 the golf course area hopefully in the near future and
25 all that.

1 So the program here, like I said in the
2 beginning, Real Property Agency is to investigate,
3 remediate and then transfer land. So we are basically
4 working towards all this to transfer the land to the
5 WSA area, back to the Navy in here, and also
6 eventually through the golf course area. So all your
7 property here is this will be transferred hopefully to
8 the West Worth Redevelopment Authority, since they
9 have the golf course on it. And they also have some
10 investment down here with the Home Depot and that
11 other facility.

12 In addition to that there is a 12-acre
13 site right over here that we are also working on,
14 which is down in this part over here where Leland
15 Clemons the, CEO of the West Worth Redevelopment
16 Authority has an investor that wants to go out there
17 and build townhouses. So we have done an
18 investigation in that part. And we found there was no
19 TCE in this particular area, which is good, but we did
20 find some fuel contamination.

21 And I don't know if y'all are aware of
22 it, but back in 1997 there was a fuel spill probably
23 south of here. Because right through this area there
24 are two pipelines running in there. One was by Pride.
25 The other one was by Chevron. Chevron was for the gas

1 stations. Pride was basically bringing the jet fuel
2 onto the base.

3 Both of those have been abandoned since
4 1993, but apparently there was some residual left in
5 the Pride line. We think that the Pride line is the
6 one that contaminated our 12 acres and we're now
7 working towards proving that. We have done an
8 investigation within the 12 acres to indicate that we
9 don't have any risk there right now. But we have to
10 find the source, and that's what we are trying to do
11 with the Pride report. Because if the source is going
12 to cause problems later on in the future, we need to
13 be able to determine that now because we can say,
14 well, our land is clean right now. As far as not
15 being a risk to anybody, we still need to clean up the
16 fuel, which will probably biodegrade in time.

17 But if the source is going to resurge
18 again and keep contaminating that, we are trying to
19 isolate that source, whatever it is, and clean it up
20 accordingly. So we're working with the regulatory
21 people on that.

22 In the meantime, Leland Clemons is
23 actually doing a sublease on this, which is going to
24 occur very shortly. And the investor is going to
25 start building his houses sometime within the next

1 year and all that, because we don't have the problem
2 there right now.

3 But we are going too. So for me I need
4 to also produce an OPS which is explain the source for
5 the fuel, where it came from. It didn't come from the
6 Air Force because there is nothing in this area that
7 would cause that. It had to come from some other
8 source. And since we're down of where that spill was,
9 the spill supposedly went this way, but we found some
10 other fuel over here, which would indicate it's coming
11 from either the pipeline or the baseline that's
12 underneath the pipeline, which I suspect is bringing
13 it down there. We will try and transfer that too.

14 So right now we're just doing the
15 sublease. Leland is doing that. The investor is
16 going on. And we the Air Force will continue on and
17 clean it up. If we can find the source, then we will
18 probably find the person who is responsible for it and
19 then we will be more than happy to send them the bill
20 accordingly. And if they can't pay for it, then I am
21 sure that we the Air Force will take whatever is
22 necessary to clean up that site and all that.

23 So that's another site we are working
24 on. And Leland Clemons, as far as I know, has all the
25 information he needs right now to go ahead and do the

1 sublease and they're working on that. They'll
2 probably have it any day if it hasn't already
3 occurred.

4 Again, I've already talked about the
5 off-site weapon storage area up here. So these are
6 the lands that we're looking at transferring this
7 year. And we will probably transfer the rest of the
8 base over here to the Navy that has to do with that.

9 So if I am talking too fast let me know.
10 Sometimes people say I should be a snake oil salesman.
11 I am not sure, but I do talk fast at times.

12 On this area over here in weapons
13 storage area, radiological maintenance place. Back in
14 the '50s and '60s when the Atomic Energy Commission
15 was responsible for our bombs, A-bombs, H-bombs,
16 whatever, and they were a weapons storage area, some
17 of the bombs you can take the trigger out of the bomb.
18 And the guys would wipe them down and make sure that
19 they didn't corrode and they would function properly
20 and all that.

21 Well, the gloves and the clothes they
22 used and their shoes and all that stuff and possibly
23 respirators were allowed to be buried in the ground
24 some place. In May of this year we found out through
25 information that was classified that became

1 unclassified from the Air Force Safety Center in New
2 Mexico that some of the weapons storage areas,
3 especially if it had facilities, that they may have
4 buried some of these here clothes there, which is low
5 level radiation.

6 If they buried them correctly and you
7 went out there and took your Gagocounter, you wouldn't
8 get any readings. So we've had two surveys out there
9 where we suspected the ditches are. We got no
10 reading. But in March we are going to have another
11 group that's going to come back and look and see if
12 something actually was buried there. And if there
13 was, they are going to dig that out of the ground and
14 get rid of it.

15 But right now there is more and more
16 indications that we probably don't have something
17 buried there. So that's going to also happen in this
18 March. People are going to go out there. And they
19 have already been out there, looked at the site visit
20 to get their radar to make sure that they can check
21 and see whether we've got something buried there.
22 Like I said, if they find it, they're going to dig it
23 up and get rid of it.

24 So once that is gone and once we do the
25 EOD over there, that's waiting to get the WSA charged

50

1 off. And at this point it looks good and we're not
2 being pushed very hard to get that transferred and all
3 that, so that they can move on and all that.

4 One other thing with the weapons storage
5 area. About two months ago, I think the gentleman's
6 name is Mr. Hale. He works with Tarrant County. He
7 wants to put a water line through the weapons storage
8 area coming from the lake and bring well water out to
9 that area out there and I guess clean it up and use it
10 for distribution sometime in the future.

11 We have told him until we do the
12 investigation from this and also from the EOD that we
13 would like him to kind of wait and all that. But he
14 would like to run a line through there. And I think
15 his line was supposed to be like nine feet across. So
16 he is running a big water. That will bring water to
17 that particular area over there. And I don't know all
18 the plans since I haven't had a chance to talk with
19 him and all that. But I am indicating probably for
20 residential purposes that is probably a good idea.

21 So after we get done with that, we'll
22 get back and contact him, and hopefully that will help
23 to move the WSA and make it more of a prime piece of
24 land as far as residential acceptance by somebody.

25 Any questions?

51

1 These are the projects I was basically
2 talking about. In the first quarter this year we have
3 already awarded this contract. Like I said, they will
4 be out there next month looking at this. In the
5 second quarter, which is the quarter we are in right
6 now, this one right here for the ground water and also
7 for the five-year performance review were awarded
8 yesterday.

9 This other one will be awarded next
10 week. And this one we're going to do by the end of
11 March. These are all the projects that are pretty
12 much supporting everything that I've given you for as
13 far as going out there cleaning up sites we need, the
14 weapons storage area, the sanitary sewer system,
15 looking at the golf course and all that for the
16 purpose of transferring them in the future and all
17 that.

18 So this is a banner year for me because
19 last year I didn't get any money. This year I've got
20 more than enough money. And we're charging off
21 accordingly. So with that hopefully at least this
22 year by September the 30th we will have a weapons
23 storage area, the -- most of the base ready for the
24 Navy to pick up when they want to sign for it. And we
25 will be looking at the golf course area, hopefully

1 next year, the year after that, and we will be working
2 on FOST finding suitability of transfer and OPS
3 working with the regulatory folks and all that.

4 So like Joe who has got 60 of his 68
5 sites working himself out of a job, I am doing the
6 same thing. I think it's his influence. So if you
7 want to blame somebody, it's probably him. Him or
8 Mike.

9 Other than that, anybody got any
10 questions? Comments? Suggestions? Nothing?

11 Thank you. You've been very good.

12 MR. WALTERS: Next up is Mike Dodyk.
13 He's going to be talking about the about work he is
14 leading on Carswell Air Force Base. Dodyk.

15 MR. DODYK: I am Mike Dodyk. I work for
16 AFCEE, but I am assigned here right to the Naval Air
17 Station Fort Worth Joint Reserve Base. I am the
18 resident engineer in charge of the installation and
19 restoration program here at former Carswell. I want
20 to give the updated activities since our last meeting.

21 Okay. A little history on environmental
22 restoration. The Air Force is responsible for the
23 clean up of all the environmental contamination that
24 occurred prior to October 1st, 1993. That's when
25 Carswell Air Force Base was still an active base.

1 A total of 87 sites were identified that
2 required investigation and closure. And under the
3 environmental regulation these sites are identified
4 either as solid waste management units or areas of
5 concern. We have 68 on base and 68 SMUs and 19 areas
6 concerned.

7 Now, George always shows his aerial
8 photo of Lockheed, so I finally came up with one of
9 Carswell. The green ones are solid waste management
10 units. The larger ones are the landfills. They
11 encompass a lot of areas. There's various landfills
12 right in here, here and somewhat along the river.

13 Now, the smaller green ones are the
14 various other things. Waste accumulation areas,
15 underground storage tanks, oil water separators and
16 other unique things. We also have the areas
17 concerned. I guess Chuck talked about the FAM camp.
18 We have a ground maintenance yard here, a fuel area
19 there. Areas concerned where identified as a serious
20 problem as much as the solid waste units.

21 Site closure update again. We said we
22 had 87 sites. So far we have investigated and we
23 achieved closure on 82 of these sites. The most
24 recent one since the last meeting that we got that we
25 submitted a facility investigation report on SMU 49,

1 we submitted that to the TCEQ and they approved it for
2 closure under risk standard two. And they approved
3 that in January. So we only have five sites
4 remaining. Of those five sites we hope to get four of
5 them closed out by the end of this year.

6 The field activities that have taken
7 place, the ground water monitoring wells we have a
8 tremendous -- about 600 wells on base which we have
9 monitored the ground water there. And some we find as
10 we achieve closure on the sites we don't need them any
11 more. They will deteriorate. They are in the way of
12 some construction activities. They get run over by
13 the lawn mower. They break the lawn mower blades. So
14 we decided to take some of them out, the wells that
15 aren't necessary. And so far we have 200, the ground
16 water wells we have decommissioned during the October
17 and January time period.

18 We also conducted quarterly ground water
19 sampling at the former base gas service stations,
20 which we identify as AOC1 in our reports. And that
21 occurred during January. Also because the
22 pump-and-treat system at AOC1 was operating we had
23 problems with two of the wells, so we redeveloped the
24 wells to enhance the ground work distraction. We
25 weren't pulling as much ground water as we had

1 intended to.

2 Give you a little picture of the wells
3 commissioning. We go out with this little bobcat and
4 actually pull the pipe casing out of the ground. If
5 there is a pad on top we will take that out. We will
6 pull the pipe right out of the ground. We will then
7 break up whatever pad is on the top. And then we will
8 fill -- there is still a hole in the ground. We pour
9 what's called venite, which will totally seal that
10 well hole so that no water from the surface can get
11 down into at the aquifer.

12 So we've done this 200 times over the
13 past few months. We also this is our AOC1. The green
14 fenced-in area, that's the treatment system. It's a
15 pump-and-treat system. We have six wells in this area
16 that we are pulling water out of the ground. And
17 we're running through this treatment work to actually
18 strip the gasoline products off of it. And then the
19 water is then dumped into the city sewer. Two of the
20 wells we had problems with, so we installed new wells
21 in here. And they have replaced the existing wells.

22 And that thing is operating. And,
23 again, that right in that area is where we sampled for
24 this area.

25 Now the big thing, our permeable and

1 reactive wall, as Chuck has talked about, that wall
2 was installed in the April-May time frame of 2002 to
3 remediate the ground water that was contaminated,
4 namely this green flume here that's contaminated with
5 TCE. It's installed. And every three months we go
6 out there and sample the ground water upstream, in the
7 middle and downstream in the wall to measure the
8 performance.

9 Quarterly sampling, we did that back in
10 November. We just finished it last week here in
11 February. And, again, it's scheduled for the May time
12 frame.

13 We can conclude from our samples that
14 the PRB, the permeable reactive wall is successfully
15 remedied of TCE. I will give a little visual
16 demonstration of how it's performing. Okay. There it
17 is. It's located on the southeast corner from the
18 runway there. There is the wall right there. It's
19 right at the edge of the golf course. As you can see
20 the decreasing color shows the decrease in
21 concentrations of the TCE contaminant that's in the
22 ground water.

23 We had this same thing before. But,
24 again, now we are going to have the next meeting we
25 will have the February sampling event on there. So

1 hopefully it will get even smaller than what you see
2 here.

3 Upcoming work, our fieldwork in the
4 spring, we have additional sampling. We have to take
5 soil samples, subsurface soil samples at 28 which is
6 landfill one, and 54 and 55, which are the storm
7 drainage system on base. Also we have that vegetable
8 oil experiment over on the northern flume here. So
9 we're going to take ground water samples there to see
10 how that -- it's a demonstration project injecting
11 vegetable oil into the ground. It's supposed to react
12 to the TCE. So we're going to take the ground water
13 samples to see how well it's working.

14 Again, we're also going to do ground
15 water sampling at the reactive wall and at the gas
16 station. Documents that we prepare, we're going to do
17 a draft historical report. Our contractor is
18 preparing them and will be submitting them to us for
19 review in May.

20 Again, I said we just submitted our work
21 facility investigation report on SMU 49. We submitted
22 that to the regulators and we got approval of that.
23 The next step would then put -- we recommended closure
24 under risk standard two. On Tuesday's paper you read
25 the classifieds you will see there was a public

1 announcement about it that proposed to close it under
2 Risk Standard Two. And if anybody has any questions,
3 the announcement does show where you can voice your
4 concerns, questions or complaints to the TCE
5 headquarters in Austin.

6 The only other document we are waiting
7 on, again the focus feasibility study of the southern
8 flume of the southern lobe of the TCE flume. That's
9 currently being prepared. And so things are pretty
10 much winding down. I believe that is it.

11 Does anybody have any questions?

12 If you want further details, be sure and
13 pick up the fact sheet which goes into more detail on
14 the sites and projects that we have ongoing right now.

15 George, it's all yours.

16 MR. WALTERS: Well, we decided to skip
17 outreach. It's getting kind of late. And we will
18 give you an update on things conducted over the last
19 couple of days around schools and job fares.

20 UNIDENTIFIED SPEAKER: Environmental
21 fares, local schools.

22 MR. WALTERS: Next on the agenda is
23 setting the May meeting. The second Thursday in May?

24 UNIDENTIFIED SPEAKER: Sure.

25 MR. HAWKINS: George, I do have a

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1 briefing I need to give. Carswell program update
2 on-base. It might be of interest. It won't take but
3 five minutes at the most. My name is Mike Hawkins and
4 I'm the community involvement person from AFCEE,
5 Carswell on-base. And as you just heard from Mike
6 Dodyk, the cleanup here is winding down.

7 As you all know there are three agencies
8 participating in this cleanup. So Air Force Plant 4,
9 Real Property Agency and AFCEE. Since our cleanup
10 responsibilities are nearing an end, we are going to
11 be working to phase out of our participation in the
12 RAB. This kind of gives you an outline of the areas
13 that you have seen tonight. Those work by Plant 4 and
14 then the former Carswell Air Force Base here, which is
15 what Mike Dodyk just briefed you on.

16 So tonight -- I think we got a little
17 out of order here. What we are going to be doing is
18 phasing out of the RAB -- well, we're missing a few,
19 but that's okay.

20 So as we phase out of the RAB, we are
21 going to use our community relations plan update as
22 the vehicle to gather community concerns and
23 information that they want to tell us as we begin to
24 -- to leave the RAB.

25 Let's see if we -- the first step is to

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1 notify the RAB community members and regulators of our
2 intent to leave the RAB. That's what we are doing
3 now.

4 The second step is in March -- starting
5 March 22nd, we are going to be conducting community
6 interviews here in the area to determine, again, what
7 kind of interest people have in our continuing
8 involvement in the RAB so we can formulate the plan as
9 we phase out.

10 We will brief the interview results at
11 the May RAB. We will update the community relations
12 plan after that. And then we will outline our level
13 of participation. We will be available on an
14 as-needed basis once we leave the RAB to make sure
15 that if community members have concerns they can still
16 be in touch with us.

17 So if you would like to participate in
18 our interviews, what we'd ask you to do is contact
19 either Brittany Watts, who will be working with me on
20 the interviews, or myself. And there is a copy of the
21 briefing, the complete briefing I think, and you can
22 pick it up on your way out and it will have these
23 names and numbers for to you contact.

24 Now, I'm going to quit at that point.
25 Does anybody have any questions?

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1 There is a complete copy of the
2 briefing. It's a little bit longer, has a little more
3 information. And the phase-out time line is more
4 completely delineated in the briefing. But
5 essentially that's what we are going to be doing. As
6 the cleanup is finished, we will be phasing out of the
7 RAB over about the next 18 months. We anticipate that
8 August of this year will be the last technical briefing
9 if everything goes as planned. And after that we will
10 be available as needed to talk to the members of the
11 community. Okay.

12 MR. WALTERS: Very good. Thank you.

13 MR. HAWKINS: Brittany, why don't you
14 stand up. She will be working with me to do the
15 interviews when we come back in March.

16 MS. WATTS: Call me if you want to
17 schedule an interview or you know somebody who does.

18 MR. WALTERS: Anybody have the second
19 Thursday in May's date?

20 UNIDENTIFIED SPEAKER: May 13.

21 MR. WALTERS: May 13. Sounds like a
22 good one.

23 UNIDENTIFIED SPEAKER: It's a Thursday
24 not a Friday.

25 MR. WALTERS: A lot of times we ask for

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1 agenda for the next meeting. If anybody has anything
2 they want to put on here that they want more updating
3 on or you just want us to give you a normal update on
4 what we've been working on over the next period of
5 months we can do that. And our phone numbers, I
6 believe if you don't have them and you want to call
7 sometime over the next three months and ask us
8 questions you can do that too.

9 And open it up for open discussion or
10 questions from anybody else or we can adjourn and you
11 can ask specific questions to any of us. Open
12 questions for the public?

13 Not seeing any, I move that we adjourn
14 the meeting.

15 UNIDENTIFIED SPEAKER: Second. I get to
16 second now, don't I?

17 MR. WALTERS: Meeting adjourned.

18 (Meeting concluded 7:24 p.m.)

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1 STATE OF TEXAS)

2)

3 COUNTY OF TARRANT)

4 I, Connie Gilfeather Certified Shorthand Reporter in
5 the State Texas, do hereby certify that the foregoing
6 constitutes a true and accurate transcription of my
7 stenographic notes in the above proceeding.

8 Further the exhibits constitute a full,
9 true and correct copy of the Restoration Advisory
10 Board Meeting held on February 12, 2004.

11
12 WITNESS MY OFFICIAL SIGNATURE on this the ___
13 day of February, 2004.

14

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16

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18

19

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