KELLY AFB
TEXAS

ADMINISTRATIVE RECORD
COVER SHEET

AR File Number 3224.1

KELLY RESTORATION ADVISORY BOARD

TECHNICAL REVIEW SUBCOMMITTEE

DATE: August 9, 2005

TIME: 6:30 p.m. to 9:30 p.m.

PLACE: Environmental Health & Wellness Center
911 Castroville Road
San Antonio, Texas

PRESENT:

Dr. David Smith, TRF Facilitator

RAB MEMBERS PRESENT:

Community Members:

Mr. Robert Silvas, Community Co-Chairman
Mr. Sam Murrah
Ms. Armando Quintanilla
Ms. Esmerelda Galvan
Mr. Rodrigo Garcia
Mr. Armando Quintanilla
Mr. Nazirite Perez
Ms. Coriene Hannapel

Government Members:

Mr. Gary Martin, GKDA
Ms. Linda Kaufman, SAMHD
Mr. Mark Weegar, TCEQ
Mr. Greg Lyssy, EPA

REPORTED BY:

Randall E. Simpson, CSR
Federal Court Reporters of San Antonio, Inc.
10100 Reunion Place, Suite 310
San Antonio, Texas 78216
(210) 340-6464

PROCEEDINGS

DR. SMITH: Okay. If I could go ahead and get us started.

MR. QUINTANILLA: If we don't have a co-chair for the military side of it, let the record reflect that.

MR. SILVAS: Let the record reflect it.

DR. SMITH: My understanding was that TRS does not have a chairperson. You're the chair.

MR. QUINTANILLA: That's not what the minutes here say.

MS. CODERRE: Actually, it's part of your packet that we'll be going over later. What the RAB requested was that we designate a community chair to this meeting, which Mr. Silvas volunteered to do during an Executive Committee meeting, and then reiterated that at the last Restoration Advisory Board meeting, and that is referred to as item number 2 in that first letter in your packet, where Mr. Silvas was added as the chair to the TRS meetings; and Mr. Silvas agreed during that meeting that he would provide then the verbal reports to the following RAB regarding the issues that were discussed here at the Technical Review Subcommittee meeting.

MR. QUINTANILLA: That's all well and

good, but you know since the beginning, the custom and the practice has been that we have, you know, a co-chair at all our TRS meetings. This is since when we were with Dr. Lanay (phonetic) at St. Mary's University.

MR. SILVAS: A senior representative from AFRPA from the time I joined, and then last volunteered for the community co-chair, there was a government representative too.

MS. CODERRE: Well, in order to keep this meeting going and to discuss the issues we have before us this evening, Mr. Silvas, I think that's probably an issue that you might want to discuss with Mr. Antwine at the next Executive Committee meeting. So we can move on with the agenda, and David I'll turn it back over to you.

MR. QUINTANILLA: There's some decisions that have to be made jointly. That's the reason we need both of them here.

MS. CODERRE: The Technical Review Subcommittee is about reviewing documents. The decisions are made in the Restoration Advisory Board forum. That's why as the chair of this meeting, which you volunteered to chair this meeting, Mr. Silvas, and the decisions then get brought before the full voting body of the Restoration Advisory Board, which the next

meeting will be in October.

MR. QUINTANILLA: That's too long.

MR. SILVAS: We'll address, I guess, it at the next Executive Committee meeting.

DR. SMITH: That will be fine.

MR. GARCIA: I can't hear you.

(Announcement in Spanish.)

DR. SMITH: Thank you, sir. Okay. Just real quickly, let's take a look at the agendas. The agenda, as you see before you, has the introduction, which has agenda review, packet review. The Administrative component, the particular items on the agenda are zone 4 and 5 update, followed by a question and answer session; and a groundwater treatment plant presentation, again followed by a question and answer session.

The items in the packet, really fall down into two categories. The bulk of the packet are really the slides for the presentations. The second piece is the response to the RFIs and the action items, and those will primarily be covered under item C, D and E in the agenda.

RAB members, I believe you received read-ahead packets. The only things that have been added to those packets, because they were not available

at the time that they were sent, were the maps and the monitoring data, which will be part of Mr. Buelter's presentation, as well as the last two letters in the RFI section. As I said, Ms. Coderre will go through those pieces one at a time as we work our way through it.

The first item in the administrative section of the agenda is the BCT update, followed by the spill summary report. Ms. Landez, I believe is going to do that.

MS. LANDEZ: Let me get the easy one out of the way. We haven't had any spills since last reported at the July RAB meeting. We haven't -- since we haven't had a TRS meeting, I'm going to provide updates for the June, July and August BCT meetings. At the June meeting, we discussed -- we updated progress in the different zones, and zone 1, lackland Air Force Base came over and discussed spills over there, a corrective measure study project that they're in the process of being awarded, and they're moving forward on working on -- they're looking at their historical investigation and developing their conceptual site model and also conducting a human health risk assessment. They're going to evaluate corrective actions that will be necessary for the Texas waste the land fills.

They're also considering replacing the

current groundwater recovery wells that are in the area collecting groundwater with a groundwater recovery trench, and also adding a permeable reactive barrier in one area to contain the contamination from moving down gradient into Leon Creek.

They're also going to be addressing erosion problems that tend to continue to happen whenever Leon Creek floods. They're going to do that so that it will stop the erosion from occurring along the base.

Another area we discussed was zones 2 and 3. That's in the -- this is zone 2; the industrial area is zone 3. We discussed EPA and TCEQ's comments that we received -- the Air Force received on the zone 2 and 3 CMS. And they are currently preparing responses, and we're also reevaluating some of our remedies based on TCEQ's recommendation at site 17, building 301 and building 360.

For zones 4 and 5, zone 5 is the warehouse area; zone 4 is east Kelly. We're working on removing some redundant groundwater monitoring wells that we don't need, especially those in the city right of way, and we were at that time waiting and now have received a letter associated with the closure of wells in the 1100 area; and also we reported that we'd be

submitting the final Tier 2 Ecological Risk Assessment by the end of July, and we did submit that. Also that we would be hearing and submitting the July 2005 Semi-annual Compliance Plan Report by 21 July. We also discussed the Desmala (phonetic) and working on basically developing the next two-year execution plan between the Air Force and the state.

At the July 19th, 2005 BCT meeting, again the Lackland Air Force Base folks came over and reviewed progress with us. They said that they were beginning their human health risk assessment, and they asked -- they asked TCEQ for some guidance on whether they needed to do a human health risk assessment, if they were selecting a presumptive remedy of the landfill cavity, and the state said yes, they still needed to do it even though there's a presumptive remedy being taken. And they also told us that they were in the process of looking at background -- or comparing their inorganic soil concentrations with those established and approved by TCEQ for Kelly Air Force Base. Let's see -- that that would probably redefine some of the landfill areas that needed to be capped.

For zones 2 and 3, again we continued discussing our responses to comments on the zones 2 and 3 CMS, and we informed the State that there was a

possibility, based on some of the assumptions, that we may go ahead and excavate site MP, the area where we have the slurry wall now containing dean apple (phonetic).

MR. QUINTANILLA: Why is that?

MS. LANDEZ: Why is that?

MR. QUINTANILLA: That's about the second or third time that you're redoing that area.

MS. LANDEZ: Well, because if we leave it as is, there's going to be a long-term tail that we're going to have to continue paying for for a very, very long time. So we're in the process of evaluating is it better to have, you know -- have to monitor that area and maintain that area for potentially forever, or to go ahead and remove it, remove the dean apple (phonetic) and hopefully get done a lot sooner.

MR. QUINTANILLA: Why wasn't that thought of at the beginning? Seems like we're doing something over and over again. It should have been done right the first time.

MS. LANDEZ: That was one of those things that we were trying to do something as an interim measure to fix something.

MR. QUINTANILLA: I remember when presentations were made, they weren't interim, they were

this is it.

MS. LANDEZ: And that's what we did select in the final remedy -- as a final remedy in the CMS; but with further discussions with the State, one of the things that we had looked at, or the way the assumptions were made for comparing the remedies, one was that when we removed the soils from the site, that it would be listed hazardous waste. Going back, we looked at it, it would probably be a better idea -- well, that one, it wouldn't fall under the listed category; and two, that is in the long run cheaper to do that.

MR. QUINTANILLA: Okay.

MS. LANDEZ: Zones 4 and 5, we discussed --

MR. SILVAS: Excuse me. Going back, since you're going to leave the soil there, you're not going to remove it?

MS. LANDEZ: No. We're evaluating whether to remove the soil or not, and it looks like removal of the soil is going to be the better remedy. So --

MR. QUINTANILLA: Could you tell us how much has been expended so far in site A and B?

MS. LANDEZ: I wouldn't be able to tell

you that.

MR. QUINTANILLA: Could you write that down as an action item? We would like to know.

MS. LANDEZ: All right. For zones 4 and 5, we discussed that we put in the wells along the railroad to inject the iron media for the PRB. The equipment has been under repair, and we haven't, you know, been able to get it back yet. At this point in time we're being told --

MR. QUINTANILLA: Is that the Malone Street?

MS. LANDEZ: Yes. That it should be back here and ready for injections beginning August 23rd. Also the Commercial Street PRB site restoration completed, so everything is done there. And also I told the State that we're in the process of preparing the zones 4 and 5 Class 3 modification and CMI Work Plan; that it will be submitted to them by the end of September. Also we discussed --

MR. SILVAS: Excuse me, before you go on. Your presentation you're reading off of, is that in our packet?

MS. LANDEZ: This is just my agenda.

MR. SILVAS: It is not included?

MR. QUINTANILLA: Usually, we get a

summary of all those things that transpire. Are we going to get that summary?

MS. LANDEZ: Yes, you'll get the minutes. We usually provide the minutes.

MR. SILVAS: Do you think in the future you could provide that with the packets?

MS. LANDEZ: The minutes for the meetings that we have, once they've gone to the BCT representative and we finalize them, that's when we provide them.

MR. QUINTANILLA: This is the minutes from when?

MS. LANDEZ: We just finalized the June, the July; and since July was a couple of weeks ago, and of course today's meeting are still in draft. Well, today's meeting hasn't even been done yet.

MR. SILVAS: Do you understand what I'm asking?

MS. LANDEZ: I understand what you just said. When the minutes --

MR. SILVAS: It would help in the future to have these ahead of time.

MS. LANDEZ: When the minutes are final, we will provide them to the RAB.

MR. SILVAS: In a sense, we need to have

them while you're presenting it.

MR. GARCIA: So we can follow along with what you're saying.

MS. LANDEZ: We just had the meeting like an hour and a half, two hours ago.

MR. QUINTANILLA: You had it way back in June.

MS. LANDEZ: Right. I'm sorry, and I didn't provide the minutes to --

MR. QUINTANILLA: You also had a meeting in July, too, did you not?

MS. LANDEZ: Right. The minutes are in draft form. We have not finalized those minutes.

MR. GARCIA: Why does it take so long to process this stuff?

MS. LANDEZ: Because it does. To put the minutes together and then send it to each one of the representatives, to come back, and that's just the way --

MR. SILVAS: Is there something you can do, you need to bring up to your team members, where they will be somehow streamlined and get this done and brought in sooner than what it takes; because it's difficult to follow along with you, without this in front of us. And it seems that, you know, if you're

going to continue to not have those in the package, the presentation is more difficult than ever to follow along.

MS. LANDEZ: Typically, what we do is provide you an update of the meeting we've had that evening or earlier in the day. Then at the next meeting, we provide you that month's minutes.

MR. QUINTANILLA: That's the reason I'm asking for the June and July thing in writing. What you're presenting is what happened in today's meeting with those people. That's fine, today's meeting; but what about June and July?

MS. LANDEZ: Well, June, I'm sorry. I should have given it to CI. That was my fault, I didn't.

MR. QUINTANILLA: July?

MS. LANDEZ: July, they have not -- the minutes are still in draft. They have not been finalized.

MR. SILVAS: Can you make that an action item to look into that to get those done sooner?

MR. GARCIA: We need to change the procedure and get those expedited.

MS. LANDEZ: The minutes that we have -- the meeting that we have the day of the TRS or the RAB,

we will not have those produced until afterwards.

MR. SILVAS: That's understandable.

MS. LANDEZ: Okay. I'll continue on. We submitted the Ricker Facility investigation for the Environmental Process Control Facility to the regulators at the end of June, and we discussed -- we just basically provided an overview to the regulators. We do that as a courtesy so it makes the review easier when they begin to review things. Basically just kind of step them through the document. We also discussed early transfer, and GKDA has given us verbal notice that they are going to submit a letter to AFRPA requesting early transfer of the rest of Kelly Air Force Base.

MR. QUINTANILLA: That early transfer will be what date?

MS. LANDEZ: We don't know that yet. They're going to submit a letter to us, they've told us, by the end of September.

MR. QUINTANILLA: Okay. And we should have this in writing -- this report that you just gave in writing by when?

MS. LANDEZ: At the next TRS meeting. And then today, again, we just updated zones. I don't have anything different that we really discussed. Any other questions?

MR. GARCIA: Mr. Silvas, for the record, I want to have -- I have something to say. In my meetings I've had with Mr. Antwine, we talked about these minutes and we talk about sketchy reports like this, and I told him this had to change. I also told him that you talk about zone 1 through 5 and all this, even long time members like myself who started in this from the beginning, don't have complete plans for zone 1 through 5 and they exist. I know they exist. And when these new board members, some of these have never even heard of zone 1 through 5. When they got their training, they should have been given the basic cleanup documents for zones 1 through 5 so they could start learning about what's going on and these things so they know what they're talking about when we have this.

So I want to make a motion, enter it in the record that I want somebody -- I want this reviewed by people that review the operation for the AFRPA and have them reprimanded or censured or something, because they're not doing their job by training these new board members or giving us information on basic documents like zone 1 through 5, basic summaries on what's happening with the Semi-annual Compliance Report, and other basic documents, and I want that entered in the record that they're not doing their job of providing new board

members, as well as the older ones, with the proper backup documents so we can follow along on all of these things and have the knowledge on all of these things, so when they give us updates like that, we know what's going on. New members like Esmerelda haven't even read zone 1 through 5, and everything that's going on with the basic cleanup documents. That has to be done. I want to make a motion that they deal with it within the next couple of days, or I need to get in touch with Federal officials to have some action taken by somebody else, that way we get the documents we need. Thank you.

DR. SMITH: The motion was --

MR. GARCIA: The motion was that the staff be put on notice that before they give us presentations, for example, on zone 1 through 5, a lot of these new members need to be given -- and old members need to be given complete documents on items that are being discussed, like zone 1 through 5 so they can fully understand what these cleanup plans were, so when we get updates like that, we know what was in the basic plan and what is happening with the basic updates; and since this has not happened, I want to make a motion that we deal with Federal officials somewhere, and we address AFRPA issue that they're not providing sufficient training and sufficient documentation for us to study to

do our job. Any second to my motion, or any discussion?

MR. QUINTANILLA: I would like to amend it first. Amend it in a way that Mr. Silvas will present what you just said to Mr. Antwine at the earliest possible date and ask him to correct it. Will you accept the amendment?

MR. GARCIA: Yes.

MR. QUINTANILLA: I second it.

MR. SILVAS: A little more discussion. I can see the frustration, because again the reports, like the ones that have been here throughout the beginning have seen the documents, and as he said, you start out with a plan and then suddenly the plans have changed and the new members haven't been kept up to date from the beginning to where we're at now at this juncture. So I can see, you know, new members should have that information, as well as the members that are here today. That has to be addressed, because if there's changes in what plans were initiated, those plans should be discussed and put on the record. And that's been --

DR. SMITH: Mr. Weegar, had his hand up first.

MR. WEEGAR: I guess a comment I would have is if -- Rodrigo, if you're looking for every RAB member to have the complete documentation of everything

that's been done in zone 1, 2, 3, 4, 5, we're talking about tens of thousands of pages of information that --

MR. GARCIA: Zone 1 through 5 are little books about this thick.

MR. SILVAS: Summaries.

MR. GARCIA: The summaries are about this thick, zone 1 through 5. I've seen them, but they've never given copies to me.

MR. WEEGAR: Okay. Well, you said complete documentation. To me, that means all the reports. I mean, that's tens of thousands of pages of documentation that I don't think anybody wants to wade through, especially considering that, you know, the cleanup decision or the final remedy has been proposed for zone 4 and 5, and it's already to the next phase. Zone 2 and 3 has been in the corrective measure study phase, as has been commented on. Zone 1 hasn't even been proposed yet, and as a -- as an alternative, the suggestion I would make is zone 4, zone 5, zone 2 and 3 have been reviewed and commented on by the RAB's TAPP contractors, and those comments have been incorporated into TCEQ's review of those documents. Would you accept -- I mean, I don't see any reason why AFRPA couldn't make copies of the TAPP contractor's comments, and things like that.

MR. GARCIA: All I see we have a lot of new members, and a lot of new member, when they listen to something like this, they don't know what's going on. That's my only concern. We need to figure out -- to reach a common ground, so that these new RAB members, as well as the memories of some of the older RAB members, they're refreshed, they know what's going to happen and what's going on with BCT and what's going on with this cleanup. You know, you give us a report we don't know nothing about. Something is wrong and something has got to be corrected.

MR. WEEGAR: I understand --

MR. GARCIA: We've got to correct it one way or the other.

MR. WEEGAR: I understand what you're saying; but I think everybody has to keep in mind that this environmental restoration started back in the early to mid '90s, and we are within a year of being done with all the cleanups at Kelly Air Force Base, as far as the remedies being installed.

MR. SILVAS: That's a little short-sighted.

MR. QUINTANILLA: If that is correct --

MR. WEEGAR: Could I finish, please?

MR. QUINTANILLA: Go ahead.

MR. WEEGAR: We are looking at within probably about a year's end of having the final corrective action programs submitted for TCEQ approval. I don't know that it serves -- obviously, we have a changeover in RAB members every year as we go along in the process; but we're getting towards the very end of the remedy selection process here, and going back and trying to brief each new RAB member on what's happened at the beginning all the way up on decisions that have already been made and approved, seems to me to be somewhat counter-productive as far as focusing on those major cleanup plans, like the off site groundwater and the on site soil and groundwater.

I would just offer as an option that the Air Force provide all the RAB members copies of the TAPP review, because those are, you know, consultants that were hired basically for the RAB to review these technical documents and provide comments. That was accepted by the RAB as the RAB's comments to the TCEQ, EPA and AFRPA. So that lays out what the various remedies are, what was selected, what the TAPP contractor found were some of the problems with it; but gives an overall evaluation of that program.

MR. QUINTANILLA: But that's not in every case, Mr. Weegar. It's not going to be next year that

we're going to quit. It's going to be several years of monitoring that's going to continue, maybe ten, maybe 15 more years. So what he's saying does have some validity.

MR. WEEGAR: My point --

MR. QUINTANILLA: Yeah, all the cleanup --

MR. WEEGAR: September -- the end of September, the final cleanup plan for zone 4 and zone 5, all the off site groundwater comes to TCEQ for review and approval. Following on behind that shortly is going to be zone 2 and zone 3, within probably the next six to nine months. So we're within a year, or slightly longer, of actually having those major cleanup decisions having been finalized.

DR. SMITH: Ms. Galvan, please? I was trying to get back to you.

MS. GALVAN: If that's true, what you're saying it's going to be about a year, then it would seem to me that it would be most important to have those June and July minutes given to us.

MS. LANDEZ: I'll be glad to.

MS. GALVAN: That I don't understand. So Norma, I want to know what is your position, and where do you work, because I need to --

MS. LANDEZ: I work for the Air Force Real Property Agency.

MS. GALVAN: AFRPA?

MS. LANDEZ: AFRPA.

MS. GALVAN: Uh-huh.

MS. LANDEZ: And I'm the BRAC Environmental Coordinator for Kelly Air Force Base.

MR. SILVAS: What is your degrees?

MS. LANDEZ: What's my degree?

MR. SILVAS: Yes, your background?

MR. GARCIA: Your educational background in this area?

MS. LANDEZ: I'm a scientist.

MR. SILVAS: What?

MS. LANDEZ: I'm a scientist.

(Several people talking at once.)

THE REPORTER: Can we have one at a time, please?

DR. SMITH: Come on, guys. Let's not beat up on people.

MR. SILVAS: No, we have --

DR. SMITH: Please.

MR. SILVAS: We have every perfect right to ask that question.

DR. SMITH: That question has been asked

and answered more than once in this group.

MR. SILVAS: Not from her. We can ask again.

DR. SMITH: What I'm not going to let you do is beat up on her.

MR. SILVAS: We're not beating up on no one. We're asking a perfectly legitimate question; okay? We're not up there slugging at her.

MS. LANDEZ: I answered. I'm through.

MS. HANNAPEL: Dr. Smith --

DR. SMITH: Would you like to add anything?

MS. LANDEZ: Just to let you know, I've worked at Kelly Air Force Base since 1983.

MS. HANNAPEL: I have never heard the answer to that question, whether she has a Bachelors or Masters or PhD, and in what particular area. I've never heard that. May she answer?

DR. SMITH: She may, if she chooses.

MS. HANNAPEL: That's fine.

MS. GALVAN: Do you choose to tell us, or not?

MS. LANDEZ: I'm the BRAC Environmental Coordinator for Kelly Air Force Base.

MS. HANNAPEL: So she's not --

MS. GALVAN: That doesn't --

THE REPORTER: Hold it. One at a time, please.

MS. HANNAPEL: Okay. Thank you.

MS. LANDEZ: I gave you my answer.

MS. GALVAN: I hadn't finished my question. What's the number to contact you? Where will we be able to contact you?

MS. LANDEZ: 925-0946. No, 925-0956.

DR. SMITH: 925-0956. Did you get it? Yes, ma'am.

MS. CUNNINGHAM: I'm just going to say most of the documents I believe that they're asking to be copied are here in the Environmental Health and Wellness Center, and they're certainly welcome to come over and review those documents.

MS. LANDEZ: They're here and at the --

MS. CUNNINGHAM: And at the library downtown. So to save a few trees, that might be a way, because there's a whole room full of documents in there. I can't imagine having someplace at home to store them.

MR. QUINTANILLA: Does that include the administrative record, the decision records that have been made?

MS. CODERRE: Mr. Quintanilla --

MR. QUINTANILLA: Are they here?

MS. CODERRE: The administrative record is housed at the Information Repository.

MR. QUINTANILLA: They're not here?

MS. CODERRE: The entire administrative record is not located on site here.

MR. QUINTANILLA: We've got to go downtown?

MS. CODERRE: To the Information Repository.

MR. QUINTANILLA: We can't go to this office here? You don't have it in your office?

MS. CODERRE: The administrative record is part of the Information Repository at the library. That's where it's been set up. But it's in the Government's document section that's on the second floor of the library.

MS. HANNAPEL: I have a question on that. I have been there to the library, and for me it was impossible to find what I needed. It's not indexed properly, it's not in any particular order. That's what I found. That was my experience.

DR. SMITH: Okay. You have a motion and a second on the floor. Further discussion on the motion?

MR. SILVAS: I'd like to find out the supervisor for Mr. Landez.

MS. LANDEZ: My supervisor is William Ryan.

DR. SMITH: Discussion pertaining to the motion?

MR. QUINTANILLA: No. I'm in favor of the motion.

DR. SMITH: Okay. Haven't gotten quite there yet. Are you ready for a vote on it?

MR. SILVAS: What's the motion again? I lost track of it.

MS. HANNAPEL: I'm sorry, I don't know what the motion is.

DR. SMITH: I'm not sure I can capture it, because it was rather prolonged; but I think the essential message of the motion was that Mr. Garcia felt that RAB members needed additional information on zones 1 through 5 and that Mr. Quintanilla --

MR. QUINTANILLA: Also that the BCT minutes in writing be printed to us. I can understand the August, you know, you just had the meeting; but not June and July, and you're supposed to present that to Mr. Adam Antwine. Tell them you want expedited action on that.

DR. SMITH: So it's really an action for Robert to present?

MR. QUINTANILLA: Yeah. That's his job.

DR. SMITH: We do have a motion and a second. Are we close enough to understanding what that is to get a grip on it? All in favor of the motion? Seven. Any opposed? Okay.

MS. LANDEZ: Anything else?

DR. SMITH: That's all. The next item on the agenda is the documents to the TRS and RAB. That's Ms. Coderre.

MS. CODERRE: Actually, I need to correct that one. Mr. Silvas, that's the copy of the documents that I handed you. So I just need your signature that that has been put into the library. If I may read them off to the group while we're on that point? There we go. Okay. So the documents that will be going into the Environmental Health and Wellness Center Library, including the Semi-annual Compliance Plan Report for July, which is January through July of 2005, with parts 1, 2 and 3. Also would be the Ecological Risk Assessment Addendum Tier 2, Tier 3 with the CD, and an AFRPA letter to neighbors/residents on the removal of groundwater recovery well from S-4. So if you'll sign.

MR. SILVAS: Yeah. There's something I'm

going to add to that, so --

MS. CODERRE: Those are the documents that have gone to the TRS. David, if you don't mind I'll keep moving.

DR. SMITH: That's fine. You do have a question coming up.

MS. CODERRE: Oh, I'm sorry. Mr. Garcia?

MR. GARCIA: What did you say, Semi-annual Compliance Report for July?

MS. CODERRE: Yes. I only brought one copy to get Mr. Silvas' signature. And Ecological Risk Assessment Addendum. You'll receive a copy of this. Mr. Silvas requested that we hold this back until you can get a copy of the one that has his signature on it, which I won't get until tonight. So you'll get a copy of this document in the next packet that we mail out, as well as a letter about the removal of the well.

MR. GARCIA: How about an Executive Summary -- 50, 60 page Executive Summary of all the major items and the action items in the Semi-annual Compliance Report; are we going to get that?

MS. LANDEZ: I'm sorry? A summary?

MR. GARCIA: Executive Summary of all the actions and all the remediation items that are going on in the Semi-annual Compliance Report, are we going to

get that?

MS. LANDEZ: There's an Executive Summary in the report itself.

MR. GARCIA: Executive Summary of the entire report?

MS. LANDEZ: To discuss - yes - what's in that specific report.

MR. GARCIA: Will it define the items in that report and actions being taken and everything?

MS. LANDEZ: Yes.

MR. GARCIA: How long is that report, and when are we going to get it?

MS. LANDEZ: The report is in the box that we --

MS. CODERRE: The report is -- that's what I'm asking Mr. Silvas to sign for receipt of that. That will be as part of this library here that the community members have access to.

MR. GARCIA: When are the RAB members going to get copies of the Executive Summary?

MS. CODERRE: We're not planning on making copies of that. We were putting it in the library for your review.

MR. GARCIA: Okay. I had discussed that with Mr. Adam Antwine about presentations being made to

the RAB members and documents for review getting to the RAB members. Apparently, you're not going to do that again, so I want to put it on record that I'll file a complaint against Adam. Action needs to be taken against AFRPA over that, because that has been discussed in the past two years, and it's still not being done, Mr. Silvas, and I want some kind of reprimand action be taken against AFRPA staff by the RAB or by Federal officials. I want that put on the record.

MR. QUINTANILLA: Sonja, this has come up before, about a year or so ago that we brought this up that all of these reports must have an Executive Summary in front of them.

MS. CODERRE: And the report does have an Executive Summary. In fact --

MR. QUINTANILLA: And that we would receive copies of the Executive Summaries.

MS. CODERRE: And the copy of the Semi-annual Compliance Plan Report is put in the Community Co-chair's Library here, as well as the Information Repository that's downtown.

MR. QUINTANILLA: Where are the Executive Summaries at? We're not getting them.

MS. CODERRE: They've been put into the librarys for your review.

MR. QUINTANILLA: That's not what we asked for and what was promised two years ago, Sandra.

MS. CODERRE: My name is Sonja Coderre.

MR. QUINTANILLA: Sonja, I'm sorry.

MS. CODERRE: Thank you, Mr. Quintanilla. I don't know that that was promised two years ago; but I will look into that.

Okay. So if we'll continue on, the action items -- we referred to that earlier in this meeting, that is the first letter that you have in your packets behind the agenda. So those were the action items that were raised earlier at the May Technical Review Subcommittee; and the first item was to designate a TRS membership, and you'll see what transpired as far as the membership. It was left open. You'll see that item number two was to designate a TRS chair, which we discussed earlier being Mr. Silvas volunteered for that. It was also requested that we provide a zones 4/5 briefing, which is the briefing that you'll be receiving tonight in response to that request.

Also was requested information about the site E-1 rebate amount, and that information was presented during that June 2005 special RAB meeting that we had, but we've summarized that as well and put that into this document that you have in front of you here

this evening.

As far as an Outreach Report, the Air Force Real Property Agency is working with EPA and Southwest Workers' Union and some of the neighborhood association groups on a project that used to be known as Project Regeneration. That project has been renamed, and it's now called the Kelly Area Collaboration. We held a meeting on the 27th of July; and during those meetings, there's discussion about forming community round tables and forums where the community can participate in dialogues with different organizations about issues such as --

MR QUINTANILLA: Are you reading from this?

MS. CODERRE: No, I'm just talking extemporaneous.

MR. QUINTANILLA: This is not part of this --

MS. CODERRE: No, sir. I moved on to the Outreach Report, Mr. Quintanilla.

MR. QUINTANILLA: Okay. I didn't see it on the agenda.

MS. CODERRE: The Outreach Report is under item E under administrative on the agenda, Mr. Quintanilla.

MR. QUINTANILLA: Outreach report. Okay.

MS. CODERRE: So the Kelly Area Collaboration, the focus for community members on that group is economic redevelopment, health issues and environmental restoration. So those are the issues that its discussing, and hopefully we'll have more information to bring to you as that plan and process moves forward.

Also we'd just like to bring your attention to what we passed out in the meeting that we had last month, was a notification of a class 2 modification. We provided in last month's packet the notification and the letter; and in there is information about a public meeting that's going to be held on the 23rd of this month. So I just want to draw your attention back to what was handed out last month, and just remind you that we are going to have that public meeting on August 23rd, and that will be at 285 Quentin Roosevelt where we held the special RAB.

MR. QUINTANILLA: Tell us a little bit about that. What site is that that's being closed, or what do you intend to do?

MS. CODERRE: You know, we're already starting to get a little bit off time here tonight. That public meeting is really what's intended to go

through the complete discussion of that.

MR. QUINTANILLA: I just want an overview.

MS. CODERRE: I'm not the one that can really speak to everything about that.

MS. LANDEZ: I can.

MS. CODERRE: Oh, okay.

MS. LANDEZ: Basically, we're making a minor adjustment to the site full recovery system, because the railroad decided to put in a high-speed line over a ground water recovery trench. We evaluated it, and it hadn't been generating any water for us, so we said we'd remove it since it is their property.

MR. QUINTANILLA: Those are the wells that are up there on the railroad in front of 271?

MS. LANDEZ: Yeah. There is a groundwater recovery trench and a recovery well that we needed to remove; but yeah.

MR. WEEGAR: That's it down there.

MR. QUINTANILLA: That's in front of building 171, in that area?

MS. LANDEZ: No, it's further down by the airfield right here; and then also the 1100 area, which is now part of --

MR. QUINTANILLA: Lackland.

MS. LANDEZ: -- Lackland over here that's now -- it's a site on the Compliance Plan. We had groundwater contamination. We reviewed the data. The data meets production standard 2, so we've closed the sight and we're removing it and the monitoring system.

MR. QUINTANILLA: There's no contamination there in that area?

MS. LANDEZ: It's now below drinking water standards, so we're removing it from the Compliance Plan.

MR. QUINTANILLA: Thank you.

MS. LANDEZ: That's it, and a few other minor changes.

MS. CODERRE: I need to make a correction. I said 285 Quentin Roosevelt, and it's 485. And just as a reminder that's the same location where we held the special RAB meeting, in that same conference room, and we'll have it, of course, signed very well so that you can find that location. Mr. Garcia?

MR. GARCIA: One last comment. If you go back through the records and you look to see, and you'll find that for the past -- it's been over three years that the RAB has made motions, and it's been under discussion that we hire somebody who's going to work with the community and give us community information and

give us updates and give us Executive Summaries on the Semi-annual Compliance Report; but you keep dodging the bullet, and the bullet or the buck stops now.

You go back and look at all the records. This has been an issue that has been brought up over and over and over again. You'll find it in the record, and you keep telling us this and that and that, and we've asked for a professional consultant who can work for the community and give us updates and explain all the scientific jumbo in that Semi-annual Compliance Report and give us Executive Summaries on this Semi-annual Compliance Report, but you keep dodging the bullet. You can't -- we're not Burger King; you can't have it your way. We want it done, and we want our information, and if you're not going to do it, then I want it in writing so I can take it to the proper Federal authorities and have them change your mind for you. Because this thing about the Semi-annual Compliance Report was dealt with several times. Every six months we deal with it, and nothing has ever been done. You give us the same old procedure all the time. That's what -- I'll stop now.

MS. CODERRE: Those are mine.

DR. SMITH: Okay. That completes the administrative component of the agenda and moves us on to the zones 4 and 5 update. You'll notice that there

are two updates that follow one another; zone 4 and 5 comes first, followed by a question and answer session; then the groundwater treatment plant presentation, followed by a question and answer session.

You have the slides in your packets. They were primarily provided to you also in the mailouts. I'll ask you, if you could, as long as you still kind of understand what's going on, if you could kind of hold your questions until Mr. Buelter gets to the end of one of these, zones 4 and 5, we'll talk about zones 4 and 5 then, and then we'll back off for a minute and then go to the groundwater treatment plants and talk about that, if that's an acceptable process.

Mr. Buelter, I'll turn it over to you.

MR. BUELTER: I guess it was back in the April TRS meeting or March, we went through zones 2 and 3, so this is the zone 4 and 5 update. Just to kind of show you where we're at in the process, under our Compliance Plan that we have with TCEQ, there are various phases that we have to go through for our sites, RCRA facility investigation, RFI; corrective measure studies, CMS, the CMI workplan is basically a design document and compliance plan mod that we submit. Implementation is the construction of those remedies; and lastly, it's the operation of those long-term

remedies.

For zones 4 and 5, RFI for all the sites and the CMS for all those sites have been approved by the State. We -- by the end of September - I think that 5 October date is the 180 day, but we're trying to shoot for the end of September - we need to submit our CMI workplan to the state. Again, this is a Compliance Plan mod. It will formalize our final actions that we're taking for zones 4 and 5. You'll see most of these, we put in initially as interim measures, you know, just kind of to get going while this process is taking place.

In zones 4 and 5, the only soil site that we have left is kind of long-term action site S-1. All the other soil actions have been addressed to meet either risk standard 1 or risk standard 2 criteria.

Next slide.

MR. SILVAS: Before you go on, why was that a long-term soil site?

MR. BUELTER: Site S-1?

MR. SILVAS: Yeah. You just mentioned it was a long-term soil site.

MR. BUELTER: I will discuss it here in just a second.

MR. SILVAS: All right.

MR. BUELTER: These are the treatment

systems as proposed in the corrective measure study for zone 4, which is east Kelly. The first is a project that installed horizontal wells along the boundary of east Kelly. We've done some enhanced bioremediation up near the former engine repair shops in the northeast corner of east Kelly. Another area where we did some bioremediation is kind of down in this area of east Kelly.

MR. SILVAS: Excuse me, but those were storage sites, too; they weren't just maintenance facilities.

MR. BUELTER: The maintenance facility is the source of contamination in that area. We completed - this is a little different now - the PRBs for Commercial Street; and actually, there's one on Collingsworth that's over here and that has been completed. And as mentioned earlier, we have -- are in the process of installing injection PRB here along UPRR property. The injection wells have been installed, and we're just waiting for the injection equipment to come back on site to complete.

MR. QUINTANILLA: Injection equipment, injecting what?

MR. BUELTER: Iron. Iron filings. Okay. Next. Zone 5 is this yellow area, and the CMS and

Compliance Plan covers both sites that are on Lackland property now, former Kelly that was transferred to Lackland and then also BRAC property.

Selected alternatives, there are two for -- plume A is a groundwater plume that there's a repair shop in this area, and the plume moved this way kind of to the south and primarily east. We installed a permeable reactive barrier here at building 1533 and then at this area up here, we did enhanced bioremediation.

One aspect with enhanced bioremediation - I'll talk a little more about the technology a little later - it's not just a one time shot. When we initially did the enhanced bioremediation in this area, there was an old hanger, building 1414 that didn't allow us to go -- we kind of had a limit on how far north we could go with the installation of the new door hangar, which was constructed west of the old 1414. Now we have access and now we're going to go back in and spot treat this area really fully and do that area.

Plume B is really potentially more likely an off base source that commingles with some of the Kelly contamination. This is the 34th street PRB, which has been installed.

Plume C is actually site S-1. It's in

this area right here. It was kind of a waste storage facility. We've done soil excavation in that area. Presently there's a soil vapor extraction system and pump and treat that is operating currently at that spot.

Plume D is down in this area, and we've done enhanced bioremediation there. The other plumes here are modern natural attenuation. Plume F is kind of a small area here. Real low concentrations of TCE. Plume H is out in the flight line; low concentrations of TCE. Plume J is the 1100 area that Norma mentioned we've achieved closure. Plume K is another little small plume over here in the 149th area, primarily chlorobenzine and it's just above the MTL for that area.

Okay. Next. Enhanced bioremediation, I was looking up -- and I knew that the ITRC has done some work on here. They actually have a guidance document out that was published in December of 1998. So it's a process that people have been looking at for some time. Really, there's different ways to do this. For the areas that I talked about in zone 4 and 5, we're adding a carbon source, primarily -- well, it's like vegetable oil. The material we used is a proprietary substance from a company called Regenesis, and it's basically vegetable oil.

MR. WEEGAR: Expensive vegetable oil.

MR. BUELTER: Yes, it's a little more expensive. Oxygen, for the chlorinated solvents, isn't something you would want to do. It's basically for some of the zones 2 and 3 sites is something that we're doing through soil vapor extraction. And actually site S-1, that's one of the reasons we're doing SVE there is to get oxygen into the subsurface.

MR. QUINTANILLA: How do you do that?

MR. BUELTER: What's that?

MR. QUINTANILLA: Get the oxygen into the ground?

MR. BUELTER: Basically, you just use blowers and blow air into the ground.

MR. QUINTANILLA: Blow it into the ground?

MR. BUELTER: Yeah.

MR. QUINTANILLA: Okay. Pump it into the soil and into the water?

MR. BUELTER: Yeah.

MR. QUINTANILLA: Just like the iron filings?

MR. BUELTER: It's a little different. It's a little easier to put the air in than it is the iron. The iron needs a special --

MS. HANNAPEL: You said you were not

doing enhanced bioremediation?

MR. BUELTER: We are at -- it's site E-3, S-8 and S-1 chlorobenzine contamination, and oxygen is what's needed in the subsurface to degrade that chemical. Some places actually try to inject hydrogen. That's not used that often. Trace nutrients aren't really a problem here. It's really -- in the late '90s, we had a study done to look at natural attenuation, and really the one thing that was missing in a lot of our areas was this source of carbon for the degradation.

So the process from PCE to ethene is something that's called reductive dehalogenation. Basically, it's removing the chlorine atom and replacing it with a hydrogen as you move from PCE, TCE, DCE, vinyl chloride and ethene. I'll show some graphs here in a second of some of the sites.

The rates, how long it takes for PCE to degrade to TCE, TCE to DCE, they're different and it will depend on the site where you're at and what kind of bacteria are available. Generally speaking, the researchers say the step from DCE to vinyl chloride and from vinyl chloride to ethene are slower than PCE to TCE and TCE to DCE. Okay. Next.

MS. HANNAPEL: How much slower?

MR. BUELTER: It varies.

MS. HANNAPEL: Years, months, minutes?

MR. BUELTER: I can't answer right off. In the lab, it's different. It could be months; it could be years.

MS. HANNAPEL: How are you testing that, because obviously the TCE and the DCE are added. They weren't there before, and now they're there because of this process. How do you test for that?

MR. BUELTER: It's one -- you can look at what the concentrations are relative to what you started with. I'll explain it better on the graphs - it's easier to show - in just a second.

Basically, what you're doing, the breakdown of organic material. I don't want to get into it too much, because it's like electron donors, electron acceptors, and these are items that are pretty - well, solvents obviously aren't natural, they're added because of spills - are things that -- you have to have something here to accept electrons before an organic material will actually break down. So what we're adding here is the -- I'll use vegetable oil. Basically what we're trying to do is produce hydrogen, and hydrogen provides the electrons to eventually break down the solvents.

The other major aspect of this is right

here, is energy. Natural system, the thing that produces the most energy is what's going to happen first. So to get to the point to where you break down solvents, you need to get rid of the oxygen, nitrates, sulfates, iron, carbon dioxide. So you need to get rid of that before you actually -- these electrons will go to the solvents to break those down.

MS. HANNAPEL: What do you mean by something to breathe?

MR. BUELTER: It's -- the analogy -- the person who put this equation together, his analogy was just looking at trying to relate it to, you know, a higher system where you have food and you breathe air. Basically, it's transfer of electrons. It's just --

MR. MURRAH: The energy is carbon, isn't it?

MR. BUELTER: Pardon?

MR. MURRAH: The carbon source is causing the energy?

MR. BUELTER: Yeah, it's the whole reaction is what eventually comes up with the energy.

MR. MURRAH: If you don't have carbon somewhere, it's not going to happen.

MR. BUELTER: Right. You won't even get rid of the oxygen, if there's not carbon for bacteria to

send electrons to.

MR. QUINTANILLA: How much carbon have you poured into it?

MR. BUELTER: I would have to look at the sites. I don't know that off the top of my head.

MR. GARCIA: How long does this process take?

MR. BUELTER: Some sites are quicker than others. I'll show one area where we usually see some results fairly quick. The difference --

MR. GARCIA: Years, days, hours?

MR. BUELTER: It will be years, but it's shorter than if you don't add anything. If you don't add this carbon source, you're probably looking at tens of years, rather than a few years.

MR. SILVAS: What chemical is this cleaning?

MR. BUELTER: What we're targeting here are PCE, TCE.

MR. SILVAS: The solvents.

MR. BUELTER: The solvents, yeah.

MS. HANNAPEL: What is the carbon source for?

MR. BUELTER: The carbon source is the bioelectron.

MS. HANNAPEL: And what is -- getting back to the breathing thing, what is breathing?

MR. BUELTER: It's just acceptance of electrons. It's an analogy to the human body needs air, you breathe. You have two things that happen.

MS. HANNAPEL: What's breathing though?

MR. BUELTER: It's the type of -- it's taking --

MS. HANNAPEL: What's breathing though.

MR. BUELTER: Well, it's -- ignore that.

MS. POWER: Isn't it an analogy to respiration in plants possibly, or some other life form, as opposed to a microbe? Is that possibly an analogy of some type?

MS. HANNAPEL: I'd like to know --

MR. LYSSY: That analogy is we already have the solvents out there. We already have the bacteria out there. We have oxygen. You cannot get this reductive dehalogenation with oxygen. It has to happen without the oxygen. So we have to get the oxygen out. The way we do that is we go ahead and put in some type of food source for the bacteria to eat, which in this case is veg oil. You can use molasses, you can use wood chips, you can use all kinds of different things to get the bacteria colonies to start growing. As they do,

they'll use up all the food that you put in, all the molasses. They're looking for something else to eat.

The next thing they're going to find to eat is they're going to start eating the solvents. By eating the solvents, they're just stripping off the actual chlorine molecules, atoms to break it down from PCE to TCE to DCE to VC and finally to ethene.

MR. SILVAS: The waste is that thing?

MR. LYSSY: The waste?

MR. SILVAS: From the microbes?

MR. BUELTER: That's really these things.

MR. LYSSY: Yeah. It's the natural byproducts that are already there.

MS. HANNAPEL: I guess what I'm getting to is what do you mean by breathe? The final electron acceptor -- I know what it means, I'm just trying to figure out what you all are saying.

MR. LYSSY: I don't know. It's not my slide.

MS. HANNAPEL: That's a good answer. Do you know?

MR. BUELTER: It's basically -- like I said, this person was using an example. It's really the last electrons are going there. He's just making that analogy that's similar to breathing.

MS. HANNAPEL: See, I really -- that's an important thing to know, when you're saying this. I'm not trying to criticize you. That's an important thing to know. I know what it means, because I teach that; but I don't know if you know, and that's kind of scary, you know.

MR. BUELTER: I know what electron donors and electron acceptors are.

MS. HANNAPEL: Okay. What does that mean?

MS. GALVAN: Why did you use it as an analogy? Why?

DR. SMITH: Excuse me. Let's not challenge the techniques of the presentation. Deal with the issues that you're trying to deal with.

MS. HANNAPEL: That is an issue, Dr. Smith. That is a very big issue, as far as I'm concerned. I will wait until the end --

DR. SMITH: Please.

MS. HANNAPEL: -- but it is an issue.

MR. BUELTER: Basically, the way -- it's very simple to work, either through -- most of our injections were done just through soil boring sonic rigs. You can also use existing monitoring wells. Basically, you just get the vegetable oil -- actually

the HRC comes in five gal containers --

MR. QUINTANILLA: How many gallons did you all put into that?

MR. BUELTER: I'll have to find that out. I'll have to look in the report. I can get that information for you.

MR. QUINTANILLA: How much?

MR. BEULTER: I'll have to get that information for you for each of the sites.

MR. SILVAS: Can we put that as an action item to find out?

MR. QUINTANILLA: I think it's about $400,000 worth; is that a good --

MR. BUELTER: Well, yeah. In the zone 5, basically the three areas that we covered was $600,000.

MS. HANNAPEL: I would like to say that I resent tremendously being told let's deal with that later when I ask a question that can't be answered, and that's all I'll say. I'll wait until the question period; okay? Thank you.

MR. QUINTANILLA: It's not productive.

MR. BUELTER: This is the base treatment. We really tried to hit the source areas with this, just to the higher contaminant areas, so that's what we did.

Next. Looking at some of what we've done

in three different areas, this first graph is a monitoring well, the highest concentration well here upon east Kelly. Primary initial concentrations of TCE and DCE were, you know, near 1,000 micrograms per liter. I'm sorry. I got the unit wrong. Vinyl chloride has jumped occasionally up to probably about 20 micrograms per liter.

We did our injection and towards the latter part of 2002, we saw a drop off of the TCE and DCE. Both of these are now well below the MCL for those sites. We did have production of vinyl chloride to a level that's around 170 micrograms per liter. It started to come down. This is where the rate is a little bit slower for the vinyl chloride, but it is degrading. This isn't its highest concentration. If there was no degradation going on, you do the calculation of the chemistry.

Next. This is, again, the highest concentration well in this area here. Here the primary initial constituent was PCE. The TCE has kind of fluctuated on and off through time, and really no vinyl chloride to speak off in past samples. This one we injected again in the latter part of 2002. Saw decreases in PCE concentration; TCE stayed about the same. We started to develop vinyl chloride. This last

sample, both TCE and PCE, and I guess DCE, are below the MCL. The vinyl chloride is about 20 micrograms per liter, but it is also starting to decrease.

One more. On plume A, this is actually a well that's a little bit further down from the source, but it is an area where we put in some treatment. Here again, the primary constituent was TCE and DCE. At this site, we haven't seen any increase in vinyl chloride. We did see a drop in TCE and DCE, but I mean, they're slowly dropping, but not to the extent of the others. One of the things -- that's why we want to go back in and do some injection. The source material is a little bit north of where we injected, and we want to go back in and hit that area again. We expect to see further degradation down gradient.

MR. QUINTANILLA: How much is it; five parts per billion at that area, or what?

MR. BUELTER: Right now --

MR. QUINTANILLA: From March '05, the last one there.

MR. BUELTER: Okay. Yeah. The TCE was around 15 micrograms per liter, so it's still above the MCL. We're not there yet, but we're considerably down from the 1,400 we started with.

MR. QUINTANILLA: And that has taken you

three years, from June --

MR. BUELTER: We injected again, it would have been around this September/December '02.

MR. QUINTANILLA: Every time you inject it, it cost you 300 to $400,000?

MR. BUELTER: It was -- that time we did it one time and it was over a large area. When we go back and do these small areas, we're really going to target in on areas. It will be part of our regular going in.

MR. SILVAS: Plume A falls in what zone?

MR. BUELTER: Zone 5 up here.

MS. HANNAPEL: What happens to the water when it has not come down to a drinking water level, when it's gone through this process; what other step is taken to clean it up?

MR. BUELTER: Well, we're getting into the other presentation. We constantly look at the data. This is one of the reasons we're going back into this area and doing a little bit more injection. It's an active process. Some of the other areas appear to be working better. We're not going to go back in there, unless we need to. Down gradient -- further down gradient here, we're still seeing decrease in concentration of DCE.

MS. HANNAPEL: But it's still above?

MR. BUELTER: This area here is kind of above. It's a little bit above here.

MS. HANNAPEL: So what I'm asking is when it's above, what do you do to clean this again, after it's gone through one procedure and that procedure has not worked? What happens to that water?

MR. BUELTER: Down gradient from here, we do have the permeable reactive barrier, which is down gradient.

MS. HANNAPEL: Permeable reactive barrier?

MR. BUELTER: Right here.

MS. HANNAPEL: So when it goes through that, do you test it after that?

MR. BUELTER: Yeah.

MS. HANNAPEL: How do you test it?

MR. BUELTER: We take groundwater compliance samples.

MS. HANNAPEL: How often?

MR. BUELTER: We've been sampling the PRBs about every six months.

MS. HANNAPEL: We still don't have that information yet; is that correct?

MR. BUELTER: Yes, you have it. Go to

the next chart. For zones 4 and 5, these are the PRB systems. We talked about this one that's still in construction of this one along UPRR. In your packets you have all the data that's been collected, all these five rounds, these two rounds, and the first round of Commercial/Collingsworth as well as (inaudible).

Commercial/Collingsworth, first round we collected in May of 2005 -- well, back up. I mean, in any of the sampling rounds we've had here, we have vinyl chloride. The DCE is pretty indicative of what was in the area prior to the PRBs being put in. Commercial/Collingsworth, that was a wall that was used with the injection of iron, so we don't have any wells within the wall, because the wall is only four inches thick. I think this round, there's not much you can make conclusion-wise on that; but it's a good baseline for future bids. Hopefully those down gradient wells will continue to decrease.

MR. MURRAH: While ago, somebody said when we get this water to drinking water standards, that's really kind of a misnomer, isn't it?

MR. BUELTER: Right. We have -- we're required to clean to the standards set by the state, which are the --

MR. MURRAH: For a chemical?

MR. BUELTER: For a chemical, right. The --

MR. MURRAH: That doesn't mean the water is drinkable.

MR. BUELTER: Right.

MR. MURRAH: I don't like that terminology.

MR. QUINTANILLA: I thought it was drinkable, supposed to restore it back to the way it was.

MR. BUELTER: It's classified as potential drinking water, but that doesn't mean if you pump it out, that you don't need to do some sort of treatment to make it drinkable.

MR. QUINTANILLA: How much more treatment does it need?

MR. BUELTER: You would have to look at how much solids are in there. I mean, there's sanitary sewer lines, there's all kinds of --

MR. MURRAH: There might be 50 other items in there that would be a problem.

MR. QUINTANILLA: Will Bexar Met's filtering system work?

MR. MURRAH: The water they use is from a different source. They can't use this water.

MR. QUINTANILLA: How come?

MR. MURRAH: It's not drinkable. Not because of this.

MR. QUINTANILLA: Jesus.

MR. MURRAH: Not because of this base, but because of other things.

MR. QUINTANILLA: Like what?

MR. BUELTER: Sanitary sewer lines.

MR. MURRAH: A lot of things. Back where you live, it might have been a problem.

MR. QUINTANILLA: You're taking water from pole-cat creek, and pole-cat creek has got sewage dumping into it.

MR. BUELTER: Well, yeah. You need to do some sort of treatment to it.

MR. QUINTANILLA: They're doing it at Bexar Met.

MR. BUELTER: Yeah, but way down at the Medina River.

MR. QUINTANILLA: I thought this could go through the same filtration, and --

MS. POWER: I'm sure they could apply -- there are filtration systems available to - I'm sorry, Abbi Power - to make it drinking water quality; but as it exists naturally in this shallow aquifer, it

has constituents, not only as Don mentioned sanitary sewage, there's probably salts, there's probably high iron content that the agency considers aesthetics. In other words, it's not going to taste good.

MR. MURRAH: Those old oil wells that they drilled around here at 400 feet deep is enough to cause most of the problem.

MR. QUINTANILLA: There's (inaudible) I know there. It's further south of there.

DR. SMITH: Mr. Silvas is trying to get in.

MR. SILVAS: Yeah. I have a few questions here. One, to begin with, are any of these technologies, these PRBs, pump and treats, are they able to deal with propellent, rocket propellent?

MR. BUELTER: We don't have propellent here. PRBs, as with iron PRB, I doubt -- I'm not quite sure on the chemistry on how they're treating for chlorates.

MR. SILVAS: Well, Kelly handled rocket fuel. It handled rockets. So you're not testing for chlorates; is that correct?

MR. QUINTANILLA: That's right. We've got a fuel system here, a fuel agency here that bought all the rocket fuels for all the missiles throughout the

world.

MR. BUELTER: It's solid rocket fuel.

MR. QUINTANILLA: I beg your pardon, sir?

MR. BUELTER: It's solid rocket fuel is what perchlorate is used for.

MR. QUINTANILLA: This was solid rocket fuel.

MS. LANDEZ: But the fuels people that were at Kelly were the managers --

MR. QUINTANILLA: Yes.

MS. LANDEZ: -- of the fuels. We never had the fuels on the base.

MR. QUINTANILLA: Never did?

MS. LANDEZ: Hu-huh.

MR. QUINTANILLA: For the record, we never had anything on the base?

MS. LANDEZ: Not to my knowledge, no.

MR. SILVAS: Okay. Secondly, going back to east Kelly and the maintenance facility that you mentioned earlier, what maintenance facility was that you were talking about?

MR. BUELTER: It's an engine repair shop, prior to them moving that over to building 360.

MR. QUINTANILLA: Now, that was the old R4360 line.

MR. BUELTER: Okay. Thank you, Mr. Quintanilla.

MR. QUINTANILLA: 28 cylinders per engine. A lot of solvent was used to clean them up.

MR. BUELTER: I imagine. Mr. Garcia?

MR. GARCIA: One last question: As you go round by round by round by like some that have had five rounds, what's your opinion; is it getting better with each round and more pollutants being removed in each round, as you do the sample here?

MR. BUELTER: That's a good lead question. I was just going to get to that. We probably don't have, just because of the concentrations that were there prior to this wall being installed, we see good things within the wall on 34th street. We see basically non-detects for all the chemicals concerned. A few more samples, if you'll look on your thing, there's one area -- one of those walls down gradient that has some fairly high concentrations, 40, 50 micrograms per liter of TCE. Future analysis shows they start to decrease.

This wall here, actually if look, it's something we need to look at. The northern end of this wall is doing what it's supposed to do. Down here at the southern most area, we're not seeing the degradation here that we should be seeing. Now, the concentrations

are relatively low, but even within the wall, we're not seeing degradation. So that's something we need to look at. The good thing is that the wells that we have off base continue to be below our cleanup level and really are near the background -- or near detection limits; but we do need to -- there is a problem down here, and we need to take at look at that. The data that we collect is important in determining those.

MR. GARCIA: These PRBs are going to keep working for another 20 or 30 years?

MR. BUELTER: Yeah. They've had pretty good success in longevity in other areas. They're lasting a lot longer than even some of the people that initially installed them thought they would.

MR. GARCIA: So we're talking about 20 more years of service of these things?

MR. BUELTER: Yeah, for some of these, maybe. This one you probably won't need that much longer. These two are a little different.

MR. GARCIA: How many years?

MR. BUELTER: For off base east Kelly, probably another in that area, ten years, plus or minus a few years, based on our last modeling effort. These -- 34th Street, there's what we think is an off base source area. Unless it's addressed separately,

this one may have to be there a while. There may be a similar case here for this one.

MS. GALVAN: Is this your question and answer comment? Have you finished? I would like to ask some questions.

MR. BUELTER: Yeah. Go ahead.

MS. GALVAN: On that first page, or the second page of your presentation, it said public comment opportunity on your Corrective Measures Implementation WP. What does the WP acronym stand for.

MR. BUELTER: Okay. It's work plan.

MR. WEEGAR: Do you want me to answer that?

MR. BUELTER: Yeah. Go ahead.

MR. WEEGAR: Mark Weegar, TCEQ. When Kelly proposes a final cleanup plan for any of these areas, they're required to present the Corrective Measures Implementation Work Plan along with an application to modify their Compliance Plan, and that's a major modification that requires public comment -- a public comment period; there's an opportunity for an affected person to request a contested case hearing. It's all part of our permit process.

MS. GALVAN: So If I'm the public - and I lived there over 40 years - if I kept asking for what

your past air studies, soil vapor studies, you know, emissions, because AHGSR recommends evaluating the reported leukemia cases, then how do we get that done or find out, you know, at the human risk assessment?

MR. WEEGAR: That would not be --

MS. GALVAN: That would not come under here?

MR. WEEGAR: No. The only thing that the public -- the CMI Work Plan comes in as part of the permit mod. It will identify what Don has just gone through, what are the proposed groundwater corrective action processes. That is the only thing that is open for public comment. Any comments that come in from the public that are not related to what is specifically contained in that mod, we would just respond. It's not the subject of this compliance plan modification.

MS. GALVAN: Okay. And it said 10 million was the cost of Commercial Street -- the PRB at Commercial Street and Malone. And I notice the difference between the one -- the others that were in zone 5, the PRBs at 34th Street and Building 1530. So does this indicate that the contaminated plume is worse in that area?

MR. BUELTER: No. These are -- the length of the wall is longer than the others.

MS. GALVAN: Why the longer length?

MR. BUELTER: It's -- it's not so much the concentration of the solvents, as the area that the solvents -- the area that the solvents cover.

MS. GALVAN: Why weren't they the same length as the one on Malone?

MR. BUELTER: The closer you get to the source --

MS. GALVAN: Which means the source is concentrated more --

MR. BUELTER: Right, they're more concentrated --

MS. GALVAN: -- in that area of zone 4?

MR. LYSSY: Primarily, because the plume is so far from the source area and it's tending to get wider and spread out more. So you have a larger area -- or a larger volume that there's contaminated groundwater.

MS. GALVAN: Down gradient?

MR. LYSSY: Down gradient, yes. So in order to capture all of that, you're going to have to have longer PRB. So if you look at what a couple of the source areas are, you have a fairly small PRB, because the actual plume is concentrated. As you get further out, the plume is spread out, it's diffused and it's

getting less concentrated, more diluted. To capture all of that, to bring things down to the MCL level, you have to have a longer PRB.

MS. GALVAN: The only reason I'm asking is that because as I walk block to block, door to door, I notice more rashes and illnesses and cancers throughout that area where I used to live, Commercial and Division. So it's understandable now why I see all this illness going on in the neighborhoods. Okay. Thank you.

MR. QUINTANILLA: I need to ask this question: These barriers are so long, but the plume is bigger than that. It's just like placing a dam in the middle of a lake.

MR. BUELTER: Actually, before we determined the size of these, we went in and put in a number of groundwater monitoring wells just so we could collect groundwater samples. So we put the wall in an area that exceeded that cleanup level, and there's gaps. It's not a continuous --

MR. SILVAS: You don't have 100 percent containment?

MR. BUELTER: No, we do of the area. What we determined is at that location where the solvent was flowing versus where it wasn't.

MR. QUINTANILLA: One last question. Malone Street, the PRB there, what is the estimated cost of that?

MR. BUELTER: I think the Commercial -- this is both of these together, because it was one project.

MR. QUINTANILLA: That's both of them together?

MR. BUELTER: Yeah. This was about roughly six and a half million. This is probably about four and a half.

MR. QUINTANILLA: Okay.

MS. HANNAPEL: What are the results of the enhanced bioremediation at the Commercial Street permeable reactive barrier and Malone? What are the results we're seeing right now?

MR. BUELTER: Okay. Malone, the wall isn't in yet, so we're not seeing anything there.

MS. HANNAPEL: Okay.

MR. BUELTER: The Commercial Street, we took a sample in May, the wall really hadn't been installed that long prior to that sample. I don't want to make too much of up gradient wells in that data package having higher concentration than down gradient, because I don't think there's enough time there. I

think November, we might start getting a little better information; but next May, it will probably be even better.

MS. HANNAPEL: Okay. So what is done with that water that's come through Malone?

MR. BUELTER: It's part of things that are beyond the treatment system in the CMS is natural attenuation.

MS. HANNAPEL: So you're just letting it go?

MR. BUELTER: Yeah.

MR. QUINTANILLA: Let mother nature take care of it.

MR. BUELTER: Right. It's not going to do nothing. We're monitoring it to make sure it remains --

MS. HANNAPEL: Will it have enhanced bioremediation on 51?

MR. BUELTER: The source area here, the TCE and DCE is below the cleanup level; the vinyl chloride is now above.

MS. HANNAPEL: Now above?

MR. BUELTER: Yeah.

MS. HANNAPEL: So what are you doing about that vinyl ch1oride?

MR. BUELTER: We're monitoring it. It's not migrating beyond the source area.

MS. HANNAPEL: How do you know that?

MR. BUELTER: With the groundwater samples that we collect.

MS. HANNAPEL: Okay. Where is that data?

MR. BUELTER: It's in the -- it will be in the January Semi-annual Compliance Plan.

MS. HANNAPEL: How long have PRBs actually been around? It's my understanding that they've only been around for ten, maybe 15 years. So we really don't know long-term; is that correct?

MS. GALVAN: You said there was a history?

MR. BUELTER: First ones were early '90s time frame. That's about right.

MS. HANNAPEL: So we really don't know what they're going to do long-term?

MR. BUELTER: The sites that have had them in since the early'90s, the down gradient portion of it has done very well. Originally, when they were constructing these, a lot of the people thought you would need to go in and either add new iron or regenerate the iron in seven to ten year periods, but they're lasting a lot longer.

MS. GALVAN: Are there other bases using this --

MR. BUELTER: Oh, yeah.

MS. GALVAN: At what state?

MR. BUELTER: Oklahoma, Texas, in our region that I know of.

MS. GALVAN: The service ones?

MR. BUELTER: Yeah.

MR. LYSSY: Actually, we have PRBs in almost every state, but like in 1992/93 is when the studies first started coming out about using PRBs to treat groundwater. Like Don said originally, we were talking about maybe having to go and recharge the iron every seven to ten years, because we didn't know; but it looks like the iron is lasting longer than what we thought it was going to last. Some of these walls have been in since '92/'93 since the original case studies. The first ones that went in, there were numerous studies that were done where they had just monitoring well after monitoring well, after monitoring well all along the walls, just to see how they were going to act. They've been very effective so far.

MS. HANNAPEL: Is there a source that we can check all of these other areas?

MR. LYSSY: Go to EPA's website, and in

our search engine, type in PRB and you should have a bunch of sites pop up.

MR. WEEGAR: ITRC has a PRB website.

MR. QUINTANILLA: You can also go to the GAO and get their report for all the treatment of the D and Es. PRBs are mentioned in there, and the pump and treat is mentioned in there.

MS. GALVAN: Are you still using the same engineers that first came?

MS. CODERRE: One at a time, please.

MS. GALVAN: Are you all still using the same original contractor for the PRB?

MR. LYSSY: For EPA, we don't have a set contractor. Most of the PRB work was done by the people that caused the contamination, wherever they're looking at the results, seeing the results and then doing the studies to see how effective they are. So it's been a series of different contractors, depending on the site was that the PRB is installed.

MR. SILVAS: Where the contamination is concerned of the shallow groundwater, what fines were assessed, what penalties were assessed?

MR. BUELTER: Basically, the salt that Kelly spilled was -- the enforcement was to stay with the compliance plan.

MR. SILVAS: So the state never fined or assessed any penalties for the underground water?

MR. WEEGAR: Mark Weegar, TCEQ. I think if you look at the briefings that the Air Force has made here over the however many years time, the cost and remediation, the penalty they're paying, which is cleaning up the environment, is much more significant than what TCEQ would ever --

MR. SILVAS: The community is paying the penalty, Mr. Weegar.

MR. WEEGAR: The community would have paid the penalty as well.

MR. SILVAS: Taxpayer money.

MR. WEEGAR: Right. The point is there's plenty more to do with the cleanup than they would have been assessed an administrative penalties.

MR. SILVAS: Any way you look at it, they weren't assessed any penalty. That's the point.

MR. WEEGAR: You know. You can make that point.

MR. SILVAS: That's the point. So let's drop the discussion.

DR. SMITH: Excuse me. Excuse me. Mr. Weegar has the floor.

MR. WEEGAR: I understand your position.

I would make the argument though that the concern that we have is cleaning up the environment, and the quicker they get the environment cleaned up back to drinking water standards, that's what we're charged with doing. So we can argue whether penalties should have been assessed or not. My focus on this is ensuring that Kelly cleans up the soil and groundwater to the levels that make the environment protective of the health and the environment.

DR. SMITH: Excuse me. Now, Mr. Silvas.

MR. SILVAS: Yeah. Your record speaks for itself, Mr. Weegar. The State hasn't fined any of Kelly's pollution, except for the fish kill, perhaps; and that was only due to the community outcry of that fish kill. Penalties should have been assessed, and I think that's something that should be considered in the future. Besides the state dropped the ball on a number of occasions on these cleanups, on base realignment and closures. This is just one example.

DR. SMITH: Excuse me. This is a question answer period on this particular presentation, not a community comment period. Kind of stay with this. We're 30 minutes past our agenda point already. I've got a couple of questions, then I'm going to have to give Don a break, so he can take a break before he goes

on to do 4 and 5.

MS. HANNAPEL: Back to this enhanced bioremediation and the breathing, you say this source from the Remediation Course at Princeton, is that something that we can look at? What was the year on it?

MR. BUELTER: Actually, this is from course material I took last year, 2004.

MS. HANNAPEL: Last what?

MR. BUELTER: Last year. It's the Princeton Groundwater. It's actually water --

MS. HANNAPEL: Could we see that?

MR. BUELTER: Yeah. But if you go with the -- basically, what is happening in this reaction is you add vegetable oil and you generate hydrogen. So have two hydrogen atoms bonded together. The electrons -- those two electrons, the hydrogen will go into and basically give this chlorine atom the eight electrons it wants. It comes off the chloride ion. That hydrogen connects, and you have a chloride ion and a hydrogen proton ion as part of this reaction, if you carry it out. That's why you get chloride as a source. The PH will adjust, but a lot of PH is coming up. So you're basically taking electrons from that hydrogen, and you're putting them on this to give it its nice full outer shell of electrons.

MS. HANNAPEL: And the breathing?

MR. BUELTER: Basically is that process; it's that movement of electrons to that chloride.

MS. HANNAPEL: I would like to see a source for that.

MR. BUELTER: Okay.

MS. HANNAPEL: When could you provide that?

MR. BUELTER: I'll get it. Yeah, Mr. Silvas?

MR. SILVAS: Where's your degree from?

MR. BUELTER: I have a Bachelors degree --

MR. SILVAS: Just tell me what school.

MR. BUELTER: Colorado School of Mines and Southern Illinois University.

MR. SILVAS: Thank you very much.

MS. HANNAPEL: And what is your degree in?

MR. BUELTER: Pardon me?

MS. HANNAPEL: What is your degree in?

MR. BUELTER: Geology.

MS. HANNAPEL: Masters or --

MR. BUELTER: Both.

MS. HANNAPEL: You have a Masters in

geology?

MR. BUELTER: Yes.

MS. HANNAPEL: Any chemistry?

MR. BUELTER: I have some post Masters work in geochemistry.

MS. HANNAPEL: Okay.

MS. CUNNINGHAM: I have just a real quick question. Kyle Cunningham, San Antonio Metropolitan Health District. You mentioned on 34th Street, there were two methods that were used there. It was mainly trenching, and there was a little bit of injection. Are you seeing any differences?

MR. BUELTER: We really don't have monitoring, I don't believe, set up for that injection portion. It's a very small linear footage.

MS. CUNNINGHAM: You just mentioned a couple of the wells that were not --

MR. BUELTER: Yeah. I'm not quite sure where they are. I think it's more -- it's spotty along 34th. There's just one of those transectors initially. Within the wall it's looking really good. It's down gradient. I think the next couple of rounds will give us an indication.

MS. CUNNINGHAM: Thank you.

DR. SMITH: Are we at a spot where we can

take five quick minutes, let the court reporter take a break?

MR. PEREZ: Can I add something?

DR. SMITH: Sure.

MR. PEREZ: When you all do your research, I spoke about this at one time or another, and I did a lot of studying. Is that the stuff that's the negative charge, the electon? I believe we spoke about it. And there's a bonding electron. Now, when the free electron takes off and you pull to -- you pull the bond electron, it's supposed to be bonded. You pull it out, it creates friction. That's when things burn, and so -- but by moving that bonded electron, you make changes and I know this has something to do with this kind of science. Of course, I would have to get more into it, but it's because you get with the free electron and the bond electron, they've got a negative charge both of them. They're related, of course.

MR. BUELTER: That's why you need -- you can't have the electrons running wild. That's why you have to have an electron acceptor.

DR. SMITH: Okay. How about five minutes? We really have to keep it short, guys.

(Five-minute Recess.)

DR. SMITH: If you all will settle in,

we'll go ahead and get started. Mr. Buelter is ready to move on to the groundwater treatment plants, zones 2 through 5. He's had a minute to get a drink of water and shift gears, so we'll begin the process.

MR. BUELTER: This was -- a couple of things, not a whole lot to talk about the treatment plants, but a lot of the slides, it's really why we have the operations maintenance project that we program every year, and a lot of this is backup material for exactly what that project covers. But before we get there, we have four groundwater treatment plants, and I'll start on east Kelly, it's the simplest. It's located down here in this corner. The water that's treated at that plant is from these -- basically from the zone 4 horizontal wells and a couple of vertical recovery wells here. So it's treating water that's collected from this containment system on east Kelly.

And the process that's used there is very simple. Water is taken from the wells, there's a holding tank to kind of equalize flows and concentrations located at the plant. The water is treated with -- it's a combination. We inject a little bit of hydrogen peroxide in the water, we use UV lights and it breaks down the contaminants that are in the water. At that point, the water is discharged to a

storm ditch that eventually works it's way to the San Antonio River.

That plant operates at -- right now its typical flows are 200 gallons a minute, and we are actually looking -- I'll have some backup slides a little later on that hydrogen peroxide ultra violent light treatment, and one of the things we collect a lot of data for each of these plants, that treatment process is very expensive in chemical use, just physical items and electricity. So we're currently looking at converting our plants wholly to carbon absorption. The concentrations are such that we think that will work.

Zone 4 is the most simple plant. The oldest plant is down in zone 2, and it takes water from site E-1, site H-3, and also the older recovery systems on what's now Lackland Air Force Base. They were installed in 1993/1994, were connected to the plant. The cost of treatment of this water is supplied by Lackland Air Force Base to us through our contractor who operates the plant. So we treat that water as well down here, as well as from collection trenches and recovery wells at site S-4, a couple of recovery wells at site S-8 and a couple of recovery wells at site MP. So all that water goes down to the zone 2 treatment plant.

The process is pretty similar at east

Kelly. We started using some of the old infrastructure of the waste water treatment plant that used to sit at that site. So we use their large equalization basins. The first process there is running the water through a sand filter. This removes iron and manganese from the water through absorption.

MR. MURRAH: Now, that water isn't treated. It goes through that treatment plant, but that water is not put in your drinking water system.

MR. BUELTER: No.

MR. MURRAH: That's what I want to clarify.

MR. BUELTER: Right.

MR. QUINTANILLA: It is dumped into the creeks?

MR. BUELTER: Yes. And from the sand filter, water runs through, again, the UV oxidation process with the ultraviolet light and the hydrogen peroxide. At one point, those concentrations were a little higher there. It ran through carbon absorption and that water was discharged to Leon Creek. For a while, while the golf course was still operating over here, it was used for irrigation. Again, we're looking at here of just going straight to the carbon filters, rather than UV oxidation at that plant. Currently, we

treat about 250 gallons a minute of water through this plant.

The last plant is up here at site S-1. The only groundwater that's treated at this plant is from site S-1, about ten gallons a minute. There's not much water produced up there. It's a little more complicated process. There's an oil/water separator. There's occasionally some free phase oil that floats on the water there that gets picked up in the groundwater recovery wells. It needs to be separated out before it goes into treatment, goes into a holding tank. There's a smaller sand filter there initial treatment. With the high concentration of iron and manganese in the groundwater in this area up here, we run the water through a -- it's a material called green sand, and it's basically a potassium manganite injection to oxidize the manganese in that area, and it will basically come out in a solution within that sand filter. From there it goes to a UV/ox treatment and then carbon.

We were looking at these plants as far as removing the carbon. We didn't even think about removing the UV/ox from these two plants, we didn't even think about the zone 5. Then we started looking at some of the data that we were collecting, and by adding this potassium manganite, we're actually --

that oxidizes the chlorobenzine that's in the groundwater. So we're getting treatment of that that we weren't expecting. So we really don't need that UV oxidation to treat the chlorobenzine, and the carbon will probably take care of that. We'll probably reduce all of those. I'll show you some numbers a little later on why that's a good thing.

Again, this is a series of charts that -- and I think Adam briefed at the last RAB meeting, there's a project on that list that shows up every year that's Operations and Maintenance, and it's roughly, you know, five, $6 million a year, depending on the year, and I just quickly wanted to go through some things that make up that scope. There's scheduled O&M, and this is things that we know are going to happen. It's your basic site works. We're going to take samples, any sort of work plans is tied in here, and that's pretty much a fixed price year to year.

Unscheduled O&M, if we had planned for a system upgrade, maybe we want to convert east Kelly from UV oxidation to carbon filters, that's where this would come into play. Upgrades of control systems, everything is run by computers, any sort of unscheduled maintenance. A few years ago we had one of our power poles got hit by lightning and blew out one of our

control panels. This is how that would be repaired is through that unscheduled cost.

There's a little bit of building and grounds maintenance. These buildings are AFRPA property, they're not GKDA; and Lackland Air Force Base supplies services for costs, just for typical building maintenance, air conditioning, that kind of thing, if something needs repaired.

The last item here is optimization and this is basically looking at the different types of systems that we have in place and can we make them better. Can we clean up quicker; can we do the same thing but do it cheaper, that kind of thing. That's also built in there.

MR. QUINTANILLA: Have you tied money to those items, how much it cost to do each one of those items?

MR. BUELTER: We have that kind of there, but we tend to use different contractors for some of this. This is a contract that hasn't been let, so we can't really get that information. We can get the general cost of the total project, but the individual pieces, we can't do that.

MR. QUINTANILLA: Let's say for 2003 or 2004, would you have that broken down?

MR. BUELTER: Yeah.

MR. QUINTANILLA: I'd like to have a copy of that.

MR. BUELTER: Yeah. The last few years it should follow these same items. This is the cheapest part, I can tell you that much.

Okay. Next. Again, I kind of talked on this. This is just the scheduled kind of things that we do. It's routine work that you're going to do, you know what the scope is from year to year.

Next. These are kind of some of the things that the operators at the plant look for, you know, inspections for leaks, are the pumps working the way they're supposed to, is the piping leaking, flow meters working. The leaks are obviously important. That would be more of a daily inspection. The flow meters may be a monthly or semi-annual, depending on how critical we think that is.

Next. Per just various aspects, this first bid required sampling that we do this In-Situ respiration test. These aren't groundwater, this is actually a soil test. We go in the project and it's for two of the regulated units, and this requirement is part of the closure plan for the site. So it's a regulatory requirement.

We have discharge permits for -- gosh, let me get my plants correct. I know this is the zone 2 plant, I believe this is the zone 4 plant, and this is the zone 5. Numbers don't -- and then they're different from when the base was active, and we have a whole bunch of other things. But we do monthly sampling for solvents, and I believe we gave that list at one of the R5s earlier this year as to what we sampled for.

The soil sampling is required if we take the treated groundwater and apply it at the golf course. Like when we were doing that, we would have to go out and take a couple of soil samples. It's part of the state rules for reuse of industrial waste waters. And it's pretty minor, but it's something that we have to do per the --

MR. QUINTANILLA: Approximately how much were you using for irrigation of the treated water, how many gallons out of that million gallons per day you were treating?

MR. BUELTER: Well, I don't think we ever got quite that high with the groundwater; but I think they could do about half a million gallons a day.

MR. QUINTANILLA: Every day you would use a half a million?

MR. BUELTER: Oh, yeah. Golf course

irrigation, if you really want it to be lush, would probably take about 2 million gallons per day. That's why golf courses are such big water users.

MR. WEEGAR: Your irrigation permit should identify -- there would be a limit of the water that you put down. I don't think it's anywhere close to that much water. It's typically somewhere around two inches per month.

MR. BUELTER: I think our max was four or 500,000 gallons a day for the gulf course. They would supplement it with average water, if they needed it.

MR. QUINTANILLA: That sounds more reasonable.

MR. BUELTER: Yeah. Again, things that are important as far as when we want to optimize systems are samples that are taken internally of the process, sampling recovery wells. There is some wells on east Kelly that basically were pumping water that had no detection of solvents. There's no point in continuing to send that water to the plant. So those are important things to look at. Internal sampling from process to process is really important to make sure that your treatment systems are doing what you expect them to do. Yes, sir?

MR. QUINTANILLA: On the last slide, you

mentioned 48 samples; on this one you mentioned 800 samples taken each year. The last slide was 48. What is your average cost per sample?

MR. BUELTER: I'll have to look that up. This is the requirement -- there's a little bit higher regulatory requirement on that previous chart than these. These are --

MR. MURRAH: When you talk about sample, what the cost is, now is he talking about just taking it or analyzing it in the lab; or are you talking about the complete cost?

MR. QUINTANILLA: The complete cost.

MR. BUELTER: Yeah. I mean, the taking of the sample is pretty much built in as labor. It doesn't cost us any more.

MR. QUINTANILLA: It's the lab work and the other stuff that goes with it?

MR. MURRAH: What do they expect it to cost; about $50 a sample?

MR. BUELTER: Yeah. It doesn't cost that much. They're on site, our workers taking samples. So it's just part of their -- the lab cost, depending on the analysis, they aren't that extensive, but we have that cost, Mr. Quintanilla.

Next. This is just what the operators

do, the routine things, just out there making sure that things are working right.

Next. There are two numbers given on this chart. This number on the left is kind of where we are right now, our typical groundwater flow. This number here is the maximum that that treatment system can do. So the maximum amount of water we could do at the zone 2 treatment plant is 1,000 gallons a minute. We get above that, the plant won't operate -- actually, we can't pump enough water to get that high. So this is the max; this is about where we're operating. So right now you add these up, we're doing about 460 gallons a minute base wide, which is this 242 million gallons of water each year.

MR. QUINTANILLA: You're going to continue this for ten more years, approximately?

MR. BUELTER: It depends on the site.

MR. QUINTANILLA: See, I have a report from your office that says that you've already extracted 3 billion gallons. If you're going to do ten more years at 242 million gallons a year, that's going to be 2,420,000 gallons more or seven billion. That's a lot of water that's being wasted.

MR. BUELTER: Well, a number of these systems' water fills Leon Creek with water. I mean, the

natural discharge point is to Leon Creek.

MR. QUINTANILLA: Why can't you put it back into the ground?

MR. BUELTER: We tried that back in the early '90s.

MR. QUINTANILLA: You can put iron back into the ground, you can put vegetable oil back into the ground; but you can't put water back into the ground?

MR. BUELTER: Not at the rates here.

MR. QUINTANILLA: That doesn't sound logical to me. I think you've got a lot of waste there.

MR. BUELTER: Water in a riverway is not wasted water.

MR. QUINTANILLA: It is wasted dollars.

MR. MURRAH: What about the water that's needed down at the gulf?

MR. QUINTANILLA: It is wasted dollars to clean it up to a point and then throw it away. That's waste of our tax dollars, and the people should not tolerate that. The Air Force should not be doing this. Of course, you're not the Air Force.

MR. BUELTER: Next slide. One of the reasons to kind of look at an alternative treatment to the UV ultraviolet with the hydrogen peroxide, and this is a pretty good use. We use about 51 bulbs a year.

They're not cheap. That's $127,000 a year just for bulbs. The hydrogen peroxide, that's just over $50,000 a year, plus the electrical that goes with that. So we're really wanting to get to the granulated carbon as quick as we can to eliminate this cost. The balance is we may have to change the carbon a little more frequently than we do now; but that costs a lot less than this operation.

MR. SILVAS: On those there, is there something that you may lose or gain by trading it off for one another?

MR. BUELTER: No, not really. We'll get to the same discharge points that we get to now.

MR. WEEGAR: Instead of just carbon, have you looked at all at doing air stripping?

MR. BUELTER: We did, but some of our past experience at Kelly with air strippers has been pretty intensive labor. It's a little cheaper on just operation, but our operators found it to be a real pain in the rear. They tend to foul up pretty easily, then you have to clean it.

Next. We do a number of internal reports, again, just to make sure that things are working within the plant, recommendations for optimization are in these. This document assessment, if

at any time we have a system, whether it be a soil vapor extraction, PRB or groundwater extraction system, we make sure the people who operate our plant takes a look at those and make sure they're compatible, especially with the electronics with our treatment plant, and they have a lot of experience to pick things up in the design that just isn't going to work. So they're really good at reviewing these and catching some things before we go out for bid and build something incorrect.

Next. Unscheduled, some of these are -- I mean, they're unplanned in a sense; some of them are planned. Clearly though major system upgrade will increase that figure a little bit, when we plan for it. Part of the reason we separate this is we may want to have a second contractor come in and install something, rather than the person who's doing the plant. Control upgrades, again, everything is done by computers, so you need to keep up with computers. When lightning fries out one of your panels, you need to get somebody out there.

Unscheduled maintenance, that's kind of where that would fit; but that would be if we need to repair a pipeline, a pipe breaks, there's a spill response that we do.

The digging permit is pretty minor, so

that our pipes don't get cut into. When somebody on Kelly USA has a project, they run that through and make sure that they're not going to be digging where one of our systems are in place.

Next. Some of the upgrades, I think the pressure test is something we do pretty routinely, but we'll look and see if the lines need to be clean. There's a lot of iron, as Abbi mentioned, in this groundwater, and it starts to plug your pipes. So to get maximum efficiency, we need to come in and clean those every once in a while, making sure that the recovery wells are working to capacity. Sometimes we have to go clean those.

MR. MURRAH: Something I noticed in that, what are you talking about a well capacity loss?

MR. BUELTER: Oh, here?

MR. MURRAH: Yeah.

MR. BUELTER: If we had a well put in and say we could pump 20 gallons per minute, and all of a sudden we're only getting 12 gallons a minute out of that, we'll investigate to see if it's the pump, or if it's something to do with the well screen. It's just not pumping as much water.

MR. MURRAH: You all don't keep a log on --

MR. BUELTER: Yeah, they do. They do. And that's --

MR. MURRAH: -- static level of the well, that kind of stuff?

MR. BUELTER: Not so much on static level, because a lot of our areas are not continual pump. They're drain off when there's high/low levels, and they'll switch on and off. So the static is a little more difficult; but you get an average over time and you can tell when something is not producing as, you know --

Next. Again, this is just more control upgrade. Next. The spill response, this is for AFRPA, it's not for greater Kelly or Kelly USA. We have the process in place pretty much that our project manager, who kind of oversees the plant, is the Air Force person that will call the TCEQ Regional Office if we have a line break or some other equipment that spills. They do all the documentation, containment. If we need to do some sampling, they'll do that also.

MR. QUINTANILLA: How did that work when you had that water spill in October that killed the fish?

MR. BUELTER: Since that was a construction contractor --

MR. QUINTANILLA: So you all didn't participate?

MR. BUELTER: We did in a sense. Our person -- these people that run the plant didn't participate so much as our project person who handles the spill response was with that contractor to find the source and made the notification to the state and did the follow ups with the state. But that contractor was responsible for any cleanup, and that was their cost.

MR. QUINTANILLA: I understand he's been fined, or the Air Force?

MR. BUELTER: The Air Force has been fined $4,500.

MR. QUINTANILLA: And the status of that?

MR. BUELTER: We received it or --

MS. LANDEZ: Our legal folks are reviewing it.

MR. QUINTANILLA: The legal what?

MR. BUELTER: The legal people are looking at it.

MR. QUINTANILLA: The legal people are looking at it?

MR. BUELTER: But we will likely pay that. We have to run everything through the lawyers. So this is -- fortunately we don't have -- this isn't a

real large cost year to year. We did pretty good. Part of that digging permit cost helps here, because otherwise somebody gets a backhoe and the next thing you know, you have a water spill.

Next. This just shows some of the buildings. We have a number of facilities that we own. They're not greater Kelly's, so the maintenance here, again, comes from Lackland for the routine maintenance.

MR. WEEGAR: You're talking about painting and mowing and whatever needs to be --

MR. BUELTER: It's like if you were renting space in a building and you needed an air conditioner fixed; we would call Lackland, and they would come over and repair that or we pay them to do that.

MR. QUINTANILLA: But those are your buildings?

MR. BUELTER: Yeah.

MR. QUINTANILLA: ÀFRPA buildings, and you're responsible for those?

MR. BUELTER: Yeah. This is the zone 5, zone 4. Most of these 600 are all located -- they're pretty much one facility, but they have different building numbers.

MR. QUINTANILLA: You have three ground

water treatment plants; is that correct?

MR. BUELTER: Yeah. Well, these 600 are pretty much zone 2 ground water treatment plant, and then the zone 4 and zone 5.

MR. QUINTANILLA: What does it cost for each treatment plant per year for treating water?

MR. BUELTER: I think we can come up with that.

MR. QUINTANILLA: All right. Please.

MR. MURRAH: Is that the total number of acres that are still under you all's control.

MR. BUELTER: Yeah. The property's leased, but we -- I can't think of the legal word we use for that.

MR. QUINTANILLA: Lease back.

MR. BUELTER: It's not lease back either. We have 100 percent access rights, or something like that.

MR. MURRAH: In other words, the two or 3,000 acres of the base that the city has aren't included in that acreage?

MR. WEEGAR: That's not acres there.

MR. BUELTER: This up here is.

MR. QUINTANILLA: 26 acres.

MR. BUELTER: Like I said, it's part of

the BRAC action. We just -- it's leased to the city right now, but we maintain control of that 26.5 acres.

MR. GARCIA: So these treatment facilities, all different functions are all inside those buildings?

MR. BUELTER: Yeah. And some of these we took from the former base. Building 621 used to be the office area for the industrial waste water treatment plant.

MR. QUINTANILLA: I've been on a couple of tours, but I have never been to the groundwater treatment plant in building 3837 or in building 1584. I've never seen the operation there.

MR. GARCIA: Where are they?

MR. BUELTER: Yeah. You can schedule a time, and we'll be glad to take you around. They're not as exciting as this, but they're clean.

MR. QUINTANILLA: It's good to know where the contaminated site is, and where a treatment plant is. It gives you --

MR. BUELTER: Yeah.

MR. QUINTANILLA: -- the ability to discuss things with you.

MR. BUELTER: Yeah. And Zone 4 is coming down in this area, in this corner. I can't locate where

the old gate is, but somewhere --

MR. QUINTANILLA: 3800 area.

MR. BUELTER: Yeah. Down in here. And zone 5 is up here adjacent to where the fuel yard was up here.

MR. QUINTANILLA: I've been in the fuel yard, but it's no longer a fuel yard.

MR. BUELTER: Right. This plant here is relative -- time flies, but it's been probably 2002/2003. It's the newest of the three.

MR. MURRAH: I'm still a little confused. That 26 acres, is it all in one place?

MR. BUELTER: No, it's scattered across. Most of it is down here. Each of these, like the groundwater treatment plants in zone 4 and zone 5 --

MR. MURRAH: In other words, it's just the area around these buildings?

MR. BUELTER: It's a little bit of both, because part of what's included in here is like the site E-3 soil vapor extraction, site S-8 and site S-1, the fenced areas. We had those fenced in, and we determined it's probably better for us to do the ground maintenance and mowing, because we know where the wells are. It's just easier that way.

MR. QUINTANILLA: You're talking about a

project staff. How big is your staff there for AFRPA?

MR. BUELTER: AFRPA? We have -- I believe currently there are -- I don't know. I think there are 12 Air Force environmental folks. We have no real estate right now. It's relatively -- I mean, 15, 20 people.

MR. QUINTANILLA: Total civilians?

MR. BUELTER: Yeah.

MR. QUINTANILLA: Including the one that you have there in the --

MR. BUELTER: Yeah. We have one person who manages this project. That's his main responsibility.

MR. QUINTANILLA: So you've got about 20 or 30 people total?

MR. BUELTER: We have some contract support, but he's not doing this himself. I don't know right offhand how many FFTAs we pay for down there. It's probably four or five.

DR. SMITH: Are we there?

MR. BUELTER: One more. This is just kind of going -- don't worry about the type A, type B. Type A is kind of a year to year -- is what can we do kind of quick things, and really it's to anything that we can do to either speed a process, even if it's the

same result, but we can do it cheaper, that's what we want to do.

This FYO3, there was a team that came in to kind of look at our systems, made a bunch of recommendations, and that's when we started looking at the UV/ox conversion to carbon is one of those, plus some other things that we pretty well implemented what we could, and that's the last one.

MR. QUINTANILLA: Good presentation.

MR. GARCIA: How long are they going to operate?

MR. BUELTER: As long as we need to.

MR. GARCIA: It's an open deal, you don't have an estimate? I'm just curious.

MR. BUELTER: Yeah. One of the problems -- one of the things is the east Kelly plant probably within ten years, we won't need it anymore. Zone 5, probably about the same. The zone 2, we have two things happening there; one is with Lackland. As Norma mentioned, they're doing some new things with collection trenches. We may turn that over to them eventually, because, you know, we may have a couple of little sites in zone 2 and 3 that don't need this big plant anymore. So we may start looking for something a little smaller that we can sit on the side.

MR. MURRAH: Wouldn't that be based on the cleanliness of that particular site?

MR. BUELTER: Yeah. You have to look at each system will have a little different time frame.

MR. MURRAH: Each year you check it, and when it gets to whatever point --

MR. BUELTER: Yeah. There's criteria within the Compliance Manual of the state. Zone 2, 3 is probably closer to 15 to 20 years. The others are probably closer to ten.

MR. QUINTANILLA: That's part of the monitoring system, including that 20 to 30 years?

MR. BUELTER: Yeah.

MR. QUINTANILLA: 20 to 30 more years.

MR. SILVAS: That's an understatement.

DR. SMITH: Mr. Garcia, did you --

MR. GARCIA: Are any of these three plants catching anything from Leon Creek?

MR. BUELTER: No.

MR. WEEGAR: Well, the remediation systems are actually preventing contaminated groundwater from going into Leon Creek. That's what some of the zone 2 -- they're designed to prevent the groundwater from getting to Leon Creek, so it's being pumped out and sent to those --

MR. GARCIA: None of the polluted stuff in Leon Creek is going into these plants?

MR. BUELTER: No. No.

MR. QUINTANILLA: It's the other way around. Oh, I'm sorry. Go ahead.

DR. SMITH: Excuse me. Ms. Hannapel has been trying to get in back there.

MS. HANNAPEL: You talked a lot about all these plants and all the millions of dollars that are being spent. Is there a document which legally mandates the Air Force to deal with the health and economic well-being of the people that have been affected?

MR. BUELTER: We -- our environmental work is based on what's in the compliance plan permit that we have with the state. It's a remediation of shallow groundwater.

MS. HANNAPEL: But specifically for the health and --

MR. BUELTER: There's no legal document.

MS. HANNAPEL: There's no legal document for that?

MR. BUELTER: No.

MR. QUINTANILLA: None whatsoever.

DR. SMITH: Back to you, sir.

MR. QUINTANILLA: Yes. You mentioned

Leon Creek. There's sediment in Leon Creek that's got PCB, because that's where the fish are getting the PCBs from. What is being done to clean that up? Do you know anything about that, the sediment?

MS. POWER: I don't know anything about it.

MR. QUINTANILLA: How about the other lady, Ms. Landez? The sediment that's in Leon Creek where the fish are getting the PCBs from, what is being done to clean up that sediment?

MR. WEEGAR: Mark Weegar, TCEQ. Leon Creek is being evaluated, and all contaminants, including PCBs are being evaluated in the Ecological Risk Assessment, and they are evaluating the chemicals. If there are chemicals in the sediment, what have you, that represent an unacceptable risk to ecological organisms, fish or whatever, that will be something that will have to be addressed in the remediation of the site. It doesn't appear, based on the evaluation of the Ecological Risk Assessment that there's going to have to be anything done with those sediments at this point. The Tier 2/3 final report has just come in and is going to be reviewed over the next few months by our ecological risk assessors.

MR. QUINTANILLA: You're on top of this?

MR. WEEGAR: Absolutely.

MR. QUINTANILLA: Good.

MR. WEEGAR: Would you doubt that?

MR. QUINTANILLA: You're on top of it. I'm not worried.

MS. HANNAPEL: What about the Texas Department of Health document that came out last year talking about Leon Creek and saying that there was evidence of PCBs and chlorinated solvents at an elevated level?

MR. BUELTER: They --

MS. HANNAPEL: You know, above --

MR. BUELTER: They suggested a fish advisory be on portions of Leon Creek.

MS. HANNAPEL: That doesn't take care of the source.

MR. BUELTER: Through our investigation, we don't know if there is groundwater soil contaminating from Kelly and former Kelly. There's not likely to be PCBs in soil or groundwater.

MS. POWER: Don, may I also point out that that report does not identify a source for the PCBs that were determined to be affecting the fish.

MS. HANNAPEL: No, it does not; however -- and I don't have that with me, but on page 8

there is a paragraph that says it is very interesting that these chemicals are at the level of the Kelly golf course, where the groundwater from Kelly is dumped.

MR. BUELTER: I think they may have been referring to the solvent. The PCBs, if you look at the sediment, there's --

MS. HANNAPEL: No, they mentioned both.

MR. BUELTER: Yeah, I know they looked at both; but as far as groundwater, there is not PCBs detected in shallow groundwater.

MR. QUINTANILLA: There was a site at one time, D-10 I believe it was on the golf course, that had PCBs.

MR. GARCIA: It's in the HDR report. I still have that, as well as the radioactive materials that were mentioned in that report that were never dug up.

MR. BUELTER: Yeah, they were.

MR. GARCIA: They were?

MR. BUELTER: Yeah.

MR. GARCIA: Carcasses and all that stuff?

MR. BUELTER: Yeah. All the carcasses, no; but the concrete encasements were removed and all the contents within them.

MS. LANDEZ: The radioactive waste in RD-1 was removed and disposed of.

MR. GARCIA: Encapsulated or removed?

MR. BUELTER: Removed. They dug it up and hauled it wherever.

MR. GARCIA: One more question. In lieu of what she said about Leon Creek, is there going to be a further investigation for some of these chemicals that she mentioned, and who's going to do it?

MR. BUELTER: Well, that's -- we submitted our Ecological Risk Assessment to the state. It's under their review right now.

MR. GARCIA: Did you mention that there's some possible danger from TCE, or something? Did you find that at Leon Creek?

MR. BUELTER: We looked at all past sediment surface water and groundwater as part of that evaluation in that report, and we're working through to see if there are potential hazards to ecological systems, and we found that there isn't a change to background concentrations.

MR. GARCIA: Is there a plan already that he has to clean it up? Because if you go like under 90, you look to see there's signs in there about the contaminated fish, and there's signs further down and

all of that. Is anybody working to clean all of that up?

DR. SMITH: Mr. Weegar?

MR. WEEGAR: Again, the Ecological Risk Assessment was just submitted to TCEQ, EPA and the National Resource Trustee Agencies, which are General land Office, Parks and Wildlife; and they will evaluate that final report and its recommendations, and they'll make a determination as to whether or not there are chemicals in Leon Creek surface water sediments, what have you, that require some level of remediation or not. So that -- we're not to the point where there's been a determination made whether or not anything needs to be done with Leon Creek at this point. That will be sometime -- our comments will be sometime probably early to mid November is the time line I've been given by the ecological risk assessors.

MR. MURRAH: When you talk about Leon Creek, what are you all talking about; from Boerne this way, or --

MR. BUELTER: No.

MR. WEEGAR: No. Only the part of Leon Creek that Kelly Air Force Base possibly could have impacted. Kelly is not responsible for what other entities may have discharged to that creek upstream.

MR. MURRAH: I mean, stuff that's coming in there now, that came from --

MR. GARCIA: Camp Bullis.

MR. MURRAH: Camp Bullis or somewhere.

MR. BUELTER: There's a background reference --

MR. MURRAH: When is that determination going to be made?

MR. WEEGAR: They take measurements at the Highway 90 bridge, Highway 90 and Leon Creek. So anything that is at that location, whatever those chemicals are, whatever the concentrations are, everything that is measured downstream from there, on the portion that runs between Kelly and Lackland is compared back against those concentration at Highway 90; and only if those concentrations would be higher than what they are at Highway 90, would that indicate that there was some impact to the creek from Kelly or Lackland Air Force Base. That is, the Highway 90 location is kind of -- that's the performance standard that the rest of the creek through the Lackland/Kelly reach is evaluated against.

MR. MURRAH: But you never go above there to see if something else might be causing something?

MS. POWER: The State has a regular

monitoring plan of all the surface water bodies in the state, and there are a variety of locations. I can't tell you exactly where those locations are on Leon Creek, but there are several.

MR. BUELTER: The San Antonio River Authority, they're looking at kind of a San Antonio River Basin study primarily because of the PCBs, and look to see if it's in other water bodies or other locations in Leon Creek as well.

MR. WEEGAR: The point is the Compliance Plan and the permit has required Kelly for years to sample the surface water, the sediments, the groundwater, all those kind of potential discharging units for the areas of Leon Creek, to evaluate what Kelly has done, or potentially done to the creek. So whether or not there's something upstream that's impacting Kelly, there are programs to evaluate that throughout the state, as Abbi said; but as far as what Kelly is responsible for, it's only to assess what potential contributions their activities have done to the creek, and that's only the level that they would be required to clean up if, in fact, it's required at all.

MR. SILVAS: I've got a question regarding one of the TCEQ letters that came out that changed the status of Kelly to a waste generator.

MS. POWER: It's always been a waste generator. That's not a status change.

MR. SILVAS: There was a letter just recently put out that changed that; said it changed its status.

MR. WEEGAR: Have you got a copy of the letter? I don't know what you're talking about.

MR. SILVAS: Yeah, I'll get a copy.

MS. HANNAPEL: Okay. In the evaluation that you're going to be doing, will you take into consideration the TDH report on Leon Creek?

MR. WEEGAR: I believe there was some discussion of what was found in the fish tissue sampling that was done; but again, what is being evaluated in the Ecological Risk Assessment is what are the possible impacts of Leon Creek from downstream of Highway 90 through the Lackland/Kelly area, that Kelly would have possibly contributed. Now, granted, TDH did put out their fish advisories saying there were elevated levels of PCBs in the fish; but if the sampling that's done on Leon Creek and on Kelly and Lackland don't identify a source of PCBs that would have caused that elevated PCBs in the fish, there's not an action for Kelly to do. It's very possible though that there may be a source of PCBs either downstream of Kelly, or upstream of Kelly

that's impacted these fish, because the fish are moving up and down the stream. So we don't really know. The eco assessors are aware of that study and that information is in there; but they're going to be looking at the Leon Creek data to determine whether there is data there that represents a risk to eco receptors.

MS. HANNAPEL: Okay. So am I to understand that if PCBs and the chlorinated solvents were found in the area of Kelly, but there's nothing to show that Kelly caused that, then that is the end of Kelly's responsibility; they don't have to look?

MR. WEEGAR: What I'm saying is the fish study that TDH did identified PCBs in fish in Leon Creek. If we don't find a source of PCBs in Leon Creek, or we find PCBs that are not above a level that would impact ecological receptors, there is nothing for Kelly to do. We don't know necessarily where those fish may have ingested sediment, or whatever they were feeding on that caused the uptake of PCBs. It could be a source that is downstream of Kelly, and they've migrated up the stream. It could be something that's up gradient. They're going to be looking at Leon Creek for a determination of what Kelly may have to do.

MS. HANNAPEL: Is there a legal requirement to look at Kelly in that area?

MR. WEEGAR: No. There's not a legal requirement for Kelly to evaluate the reach of the base that they have not had any impact to.

MS. HANNAPEL: How do you know that unless you evaluate it?

MR. WEEGAR: If we know -- if water flows downstream - we all agree that it does that, right? And we're monitoring and measuring sediments and water quality and have been for years and years at Highway 290 -- Highway 90. That's your upstream locations. All those levels that you measure downstream through the Kelly/Lackland reach of Leon Creek, and none of those are higher than what you have at Highway 90, that indicates that there's nothing from Kelly that is exceeding what is already coming on to this facility.

Now, granted, I understand -- it's my understanding that the San Antonio River Authority and some other folks are doing studies on the San Antonio River Basin, which takes in Leon Creek and a number of other streams, and they have found PCBs in a number of locations throughout the San Antonio River Basin. They, I believe, are going to be, along with some other agencies, are doing some further evaluation of the river basin, and what have you; but our focus is on what has Kelly done as far as their operations to impact Leon

Creek.

MS. HANNAPEL: Yes, but I guess maybe I misunderstood the report. I thought the report said that they were highest in that area by the golf course.

MR. WEEGAR: I think what the report said was that the fish that were caught, were highest in that part; but again the fish move up and down the stream. That's not indicative. We're looking at actually the sediments from the stream itself. That's what we'll be making our decisions on are the actual stream sediments and the surface water concentrations, not where a particular fish was caught in the stream, because again, because of their migration, you don't know that the place where you caught that fish is where it ingested the PCBs.

MS. HANNAPEL: I understand that, but you don't know that that's not the case either. So why wouldn't you investigate that?

MR. WEEGAR: I don't know what else I can do to explain this. Kelly has been for years sampling surface water and sediment of Leon Creek. They have locations in the area where the golf course is across from Kelly, they're sampling locations up and down that stream. If we don't see elevated levels of PCBs in those sediments or in the surface water, that indicates

to us that there is not an impact to environmental habitants -- or ecological inhabitants of Leon Creek associated with Kelly activities. That doesn't say that the fish haven't been impacted somewhere; but just because a fish was caught in a certain part of the creek, does not necessarily mean that's where it was exposed. If we have sampling data that shows there's nothing there, then Kelly has met their obligations.

DR. SMITH: Mr. Quintanilla?

MR. QUINTANILLA: I just have one question. Are you convinced that there are no PCBs buried in the golf course anymore, and all of that has been cleaned up?

MR. WEEGAR: I believe that Lackland right now is doing their evaluation of past remedial investigations that were done on the Lackland Golf Courses and are going to be doing some additional sampling. Quite honestly, I haven't seen that data. When it comes in, we'll evaluate it. If there are PCBs in those landfills, then Lackland will be required to address it.

MR. QUINTANILLA: There was one part of that site in the golf course, I think it was either D-1 or D-10, that had PCBs at one time.

MR. WEEGAR: Lackland is in the

evaluation stage of -- what they're basically doing is going back and looking at all the old data that's been collected over the years, looking at where there are holes in that data, and are going to go back and do additional sampling.

MR. QUINTANILLA: My question is you've got an extraction well on that side of the creek that's supposed to pick up all of that stuff. Would there be a chance of that thing passing by the extraction wells and getting into the creek?

MR. WEEGAR: No. I wouldn't think -- the recovery wells will pick up whatever -- I mean, they're recovering the groundwater. Whatever is in the groundwater will be recovered by the wells.

MR. QUINTANILLA: Is 100 percent of the groundwater being extracted by the extraction well?

MR. WEEGAR: I doubt 100 percent is.

MR. QUINTANILLA: Some of it --

MR. WEEGAR: There's a less chance that the PCBs that are in the landfill would actually get into the groundwater, because PCBs tend to adhere to the clay material, and they don't migrate through unsaturated soils very readily; but again, that's something that Lackland is actually evaluating right now are those landfills.

DR. SMITH: Guys, I'm sorry, we're past that nine o'clock mark that we promised that we would finish up with.

MS. POWER: Can I make one clarification to Robert's previously comment? I think your question regarding status change of Kelly Air Force Base being a generator, Robert, you may be referring to the comment letter that TCEQ wrote to Kelly Air Force Base on the zone 2 and 3 CMS. In that comment letter, we pointed out that the report identified Kelly Air Force Base as a hazardous waste and industrial waste management facility, which would mean it was like it was a treatment, storage and disposal facility. Kelly is not a treatment, storage and disposal facility. They are indeed a generator of hazardous waste, and the number that they referenced in the report was their solid waste registration number which was a generator identification number, and it is not a hazardous waste and industrial waste management facility ID number. And that was the clarification.

DR. SMITH: Okay. Mr. Garcia, anything?

MR. GARCIA: I want to make a closing statement. I want to say that we discussed a lot of things, and we have time limits. There's a lot more for us to learn, and I think we ought to have more TRS

meetings, as well as more RAB meetings. Also there's a lot of questions that the AFRPA staff has failed to deal with. Most of that have been made and approved in the past, we haven't dealt with clean air -- the clean air plan, the ACOG and all these issues that we brought up, they haven't been addressed and how Kelly -- AFRPA is going to participate in all these air studies and a lot of other medical questions, you know. There's a lot of tension between the community RAB members and the AFRPA staff because of the struggle for us to get answers -- for us to get action from these people, and it's getting to a breaking point. Either we're going to work together, or we're going to have to change personnel. There's no two ways about it. There's a lot of government involved in all of this, but we're still not -- we're never going to get properly trained. There's still a lot of issues and answers, a lot of decision making behind closed doors that we don't know nothing about, and we still have a long way to go. We need to have some way to deal with it, with new staff or change of attitude - I don't know - but changes are going to come.

MR. WEEGAR: In response to that, Rodrigo, I would suggest that the RAB needs to look at your mission statement, read the RAB rule, the purpose

of the Restoration Advisory Board is to provide advice to TCEQ, EPA and the Air Force on environmental restoration activities at Kelly. We are not, as part of the environmental restoration activities, we're not dealing with regional air permitting issues; we're not dealing with Kelly or the City of San Antonio's participation in ACOG; we're not dealing with, you know, regional health issues. Those are things that are outside the charge of the Restoration Advisory Board. Actually, if you look at the proposed RAB rule, it states that while communities may want to look at these issues, they need to find another avenue to do it, because people who want to pursue those avenues make this no longer a Restoration Advisory Board.

MR. QUINTANILLA: It says that the Air Force will help.

MR. WEEGAR: I understand.

MR. GARCIA: The polluter contributed to all of these problems. That's the main problem. The polluter, the Air Force contributed to the pollution; the Air Force contributed to all the soil problems and the Air Force is washing their hands and drying off with us and it's not going to happen.

DR. SMITH: Mr. Silvas, last one.

MR. SILVAS: Yeah. It is 9:10, and I

notice we've got eight o'clock adjournment. Usually these adjournments go a little longer. In closing, I just want to state that the conversation with the AFRPA people regarding the audio cassette, this is the letter I have stating that these audio cassettes will be kept in the library. This goes back signed by Theresa Dawkins. I provided the reporter with four extra tapes, so those will be in the repository. So I hope that -- I'll provide a copy with this letter to you.

Secondly, these adjournments, you know, going on eight o'clock, sometimes we have to go on longer. Again, let's not lose focus that there's a lot to discuss and address. We can't just stop on time every time. Usually we get out nine, 9:30. I for one, I understand staying late if I have to, and I'm willing to.

I think there was one other thing I needed to bring up, and this is regarding the GKDA. They had a June 4th, 2005 Neighborhood Resource Center, and I don't remember them ever bringing that up to the attention of the members of the Advisory Board. I'd just like to know what happened on that.

Secondly, the investigation into the illegal sale of government property, I'd like an update from the Kelly Development Board, a statement from them

whether they can state or not on that investigation. That's it.

DR. SMITH: Okay. Let me remind you one time what my job is. My job is to find a way to help you respectfully disagree with one another. My task is to help you find ways to treat one another with the respect that each of you would like to have, and to guarantee that we can continue to talk. If that respect is not in place, if I don't monitor that, if I don't slow down some of the exchanges, then that talking will not continue in a productive kind of way. So please understand I'm trying to do my job. If I have to step in in the midst of it, I shall. What do you say we go home?

MR. WEEGAR: Have a good night.

(Proceedings concluded.)

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I, Randall E. Simpson, Certified Shorthand Reporter, do hereby certify that I reported the proceedings indicated in the caption hereof, and the foregoing 119 typewritten pages contain a full, true, and correct transcription of my shorthand notes taken upon the occasion set forth in the caption hereof, by means of computer-aided transcription.

Witness my hand, this 27th day of August, 2005.

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