KELLY RESTORATION ADVISORY BOARD
October 11th, 2011 6:30 p.m.
Port San Antonio Board Room
907 Billy Mitchell Boulevard
San Antonio, Texas 78226

RAB Community Members:
Beverly Abbott
Jose Arzola
Rodrigo Garcia
Nazirite Perez
Brian Skrobarcek

RAB Government Members:
Kristen Bettis, San Antonio Metropolitan Health Department (SAMHD), Alternate
Paul Carroll, Air Force Real Property Agency (AFRPA), Government Co-Chair
Paco Felici, Port Authority
Greg Lyssy, United States Environmental Protection Agency (EPA), Alternate
Abigail Power, Texas Commission on Environmental Quality (TCEQ)
Jorge Salazar, TCEQ, Alternate

Air Force Staff:
Richard Black, Contractor
Leslie Brown, AFLOA
Rachel Fish, Contractor
Jason Goode, Contractor
Laura Guerrero-Redman, Contractor
Jose Martinez, Contractor/Facilitator
Armando Perez, AFRPA
Jerry Preston, Contractor
Jason Rose, AFRPA

Public Attendees:
Michael Barajas
F. Van Breedam
Robert Espinosa, COSA/CIMS Environmental
Bob Goodson
Nanda Nanjurdappa
Roy Orozco
Stephanie Smith, Representative for Charlie Gonzalez
Praveen Srivastava, Shaw Environmental & Infrastructure Group
Sowmya Suryanarayanan, Shaw Environmental & Infrastructure Group

Public Attendees: (continued)

Susan Watson, Shaw Environmental & Infrastructure Group
Jennifer Wilson, USGS

RAB Members Not Present:
Eloy Garcia
Ivan Jaime

MR. MARTINEZ: Ladies and gentlemen, it's a little past 6:30, time to begin the October 11th meeting of the former Kelly Air Force Base Restoration Advisory Board meeting. My name is Jose Martinez and I will be your facilitator. I'd like to remind members of the audience that the purpose of this meeting is for there to be an open exchange of information between the Air Force Real Property Agency, staff, their consultants and of course the members of the RAB.

If you would look at the agenda you have before you -- and if you don't have an agenda, please raise your hand and we will get one to you -- there is an item listed on the agenda at approximately 8:10 p.m. It's a section that we always have on the agenda for public comments. We respectfully request that members of the audience refrain your comments, questions until that period unless a member of the RAB actually calls upon you. At that time, you will have up to three minutes per individual to communicate your issue, your question, your concern with the members of the RAB.

Okay. I would like to then pass the baton on to Ms. Abbott for some RAB membership discussion.

MS. ABBOTT: Well, first, I'd like to ask each member to identify themselves, who you are and why you're here. I will start with myself. My name is Beverly Abbott. I'm the principal of St. John Berchman's Catholic School down

the road and I live and I work here in the affected area.

MR. SKROBARCEK: My name is Brian Skrobarcek. I represent the industrial community and am a community member and I work in the affected area.

MS. POWER: My name is Abbi Power. I'm with the Texas Commission on Environmental Quality. I am in the corrective action section of the remediation division and I am the project manager looking at the cleanup actions occurring at the former Kelly Air Force Base.

MS. BETTIS: I'm Kristin Bettis with San Antonio Metro Health. Neither Tommy Camden nor Kyle Cunningham could make it today so I'm representing them.

MR. CARROLL: And Kyle -- I'm sorry. Kyle had shoulder surgery?

MS. BETTIS: Yes.

MR. CARROLL: And she's unable to come. She would liked to have, but she can't make it.

MR. LYSSY: Hi. I'm Greg Lyssy of U.S. EPA, Region 6, out of Dallas and I'm the alternate federal RAB member here for Kathy Thomas who couldn't make it today.

MR. GARCIA: My name is Rodrigo Garcia. I live here north of the runway and I'm a community member.

MR. ARZOLA: My name is Jose Arzola. I'm a committee member. I am a retired navy chief. I worked and live in the affected area. I'm past -- I'm past president of

the Edgewood Council of PTAs and I'm representing the John F. Kennedy area.

MR. PEREZ: My name is Nazirite Flores Perez. I'm a native here of San Antonio. Right now I'm -- I'm part of the River Authority, District 1. I represent all this district here, south side. And -- but today I'm speaking in behalf of the people, including the south side, but Palm Heights since I'm within this area, contaminated area. And if you want to check more information about me, you can -- I would just send a e-mail concerning that I came out in the sanantonioexpress.com, check it out and you will see some information there. I was talking via satellite with a city representative, District 8, and she was in China someplace, but we were via satellite. We were communicating and we were holding -- concerning my way of thinking and I'm here to help the area, people in this area of course. And once again, I represent Palm Heights. Thank you.

MR. FELICI: I'm Paco Felici. I'm the public information manager for Port San Antonio.

MR. CARROLL: And I'm Paul Carroll. I'm the Air Force Community Co-chair for the RAB. I'm the BRAC Environmental Coordinator for Kelly.

MR. MARTINEZ: Another item we have in Ms. Abbott's section right now was an introduction of a new member, Mr. Ivan Jaime. I don't think the gentleman is here so we

will postpone that until the next meeting.

The next item on the agenda is simply for me to go over some items that we call administrative items. And I will do that by pointing out that at the last meeting, which was held on May 10th, the RAB members requested certain actions to be taken, one of which was to ensure that the transcript of that meeting be sent to the RAB members and that has been done.

Another request was for a presentation from the PBC Contractor regarding innovative ideas and strategies be done and that item you will see listed at the 7:10 -- approximately 7:10 Performance Based Remediation Contract presentation. Another item requested by the RAB at the May 10th meeting was an update report on the Building 360. You will see that listed as well.

The next item was also a Semiannual Compliance Plan Report addressing Leon Creek was requested by Mr. Garcia. That item is on the agenda. And last was a presentation of -- on the ongoing study of creeks in the county. That item is also on the agenda.

I also would like to point out at the back of the RAB packet is information that has been provided by the presenters for today's -- this evening's presentation. There's an item in color graphics on USGS and then the correspondence between the federal and the state agencies, EPA

and TCEQ, and the Air Force Real Property Agency for your information. And then the typical publication efforts by staff to insure that this meeting is publicized to the media -- to the general public by local media.

And last, but not least, is a whole package of public information that has been reported in the local media as a result by either staff or the -- or the Air Force itself. So that information is typically included in the packet and it is included this evening.

I'd like to simply very quickly run through the rest of the agenda. Immediately after this, Ms. Abbott is going to make a brief presentation about an event that she participated in, a Federal Facilities Cleanup Conference and then Paul is going to make the introduction of the set of consultants I understand. Shaw Group will make the presentation per the RAB's request from the last meeting. Then we will go approximately to the 8:10 period where we will allow the public comments.

Paul will then request members of the RAB to suggest items for the next meeting which will be held on April 10th, 2012, and then we'll make an announcement pertaining to security at Building 171.

With that said, Ms. Abbott.

MS. ABBOTT: Good evening. I had the honor and the pleasure to represent Kelly RAB at this Facility Cleanup

Dialogue in Washington, D.C. And it was very -- very informational and very intimidating at times because there was about 40 people in the room, all representatives from the Department of Defense, Department of Energy, Department of Agriculture, Department of Land Planning, and everybody had -- they talked very fast, because they do in Washington, D.C., and they use lots of alphabet letters, lot of acronyms.

So it was a little intimidating at first, but it was very very interesting and informative. One of the first things that we talked about in this conference is we talked about the long-term protectiveness after remedy implementation. And it was interesting because there were a lot of other RABs that were represented there from all across the country, from Alaska, from Arizona, from California, from Virginia, from New York, from there in Washington, D.C. They were all represented there and we talked about what is the public's role.

Well, one of the public's role in this is to be a part of this RAB, to be -- to continue to be a part of this, to continue to be a voice for the public, to be a voice for the people that live in the community, to insure that the implementations are being taken care of. In other words, to make sure that they're doing what they say they're doing and to ask the questions. That is our role, to continue to question, to make sure that it gets done.

Is it ever -- is it going to take a long time? Probably. Some of the different RABs, they were talking of 30, 40, 50 years down the line to get things cleaned up. But as long as we continue to be a part of that dialogue, and to be a part of the dialogue with the Air Force, that kind of lets the public know that their stake is being taken care of.

The second thing we talked about in this conference was how do we as RAB members, how do we let the public know what's going on. Now they send us all these documents. And I'll be honest with you, sometimes there's a lot of paper in them. And they gave me the five-year review to look at before I went up there to dialogue. 596 pages and I'm going through this like (indicating), you know, my goodness.

Well, all the people in the RABs there were saying the same thing. This one guy from Kentucky was saying his stack for his five-year review was about this big (indicating) so it was a huge paperweight and how do you go through all of this and how do you sift through what you need. So one of the things we talked about was we said as community members and probably even as not only community members, but Air Force members, it would be very nice if we had just an executive summary to tell us what is included in this five-year review so we don't have to try to hunt through all these pages to find the pertinent information.

And this was kind of felt amongst all the RAB

members from all the different agencies that if they give us -- even if it's just in a couple of pages, but just a brief executive summary outlining what it talks about, that would kind of help us out quite a bit so we could feel like we knew what was going on.

Then the other thing we talked about but was how do we get the public involved and how do we notify the public. Well, today is the age of twitter and Facebook. And of course all the young ones in there -- and I say young ones because I'm not getting younger. But they're talking about, you know, setting and doing blogs and doing Twitters and doing Facebooks, which works. It works and that's where we need to go today.

But what about the person who doesn't have access to computers, who has the right to know what's going on at the Air Force base? What about that person? How do we reach them? How do we -- do we go face to face? Do we go door to door? How do we reach these people?

Some of them are still reading the San Antonio Express News. They're not doing it through mysa.com. They're actually picking up the newspaper. So we should continue to pick up the newspaper. We should continue to let them know in the newspaper what's going on, to continue to use The Reporter.

But what are some other things that we could do?

One of the suggestions was to have a virtual field trip on the website. On the website dealing with the Kelly Restoration Advisory Board, have a field trip where they can go and see someone's taken a camera and actually showing all the different measures that have been taken to facilitate the cleanup. It makes a difference when you can physically see something. And some of the other locations do have virtual field trips on their websites so people can see the actual location.

And one of the things that meant a lot to me was when you took us on that tour through Kelly and you showed us the different sites. We saw the slides; we saw the pictures. But it was something else to actually stand in front of the big dig, to actually stand in front of that electrical resistance heating unit and to see what it physically looked like. So maybe putting a virtual field trip on the website is one way to let people know.

Another one was through having live meetings. And that would be recording the meeting and having it live on the web. That doesn't mean that they participate in the meeting, but they can be -- they can see what's going on, what's being talked about, the different items that are in discussion, because people who really want to get involved do a lot of searching on Google. They do a lot of searching on the web and they might be interested if they got to participate in the

meeting.

And then of course, you know, putting -- you know, having people make some comments. Now the only thing is a lot of the thing that we thought about doing, the live meetings, the Facebook, the Twitters, the things like that, you also have to get that approved by the higher ups. You have to get that approved by the Department of Defense. You've got to get that approved by EPA. Because they're not going to let you post something on a website unless they're absolutely sure that this is the gospel going on the website.

But the idea is the more that we can make the public informed, the more it makes it look like you're not trying to hide something, that you're trying to keep them involved. And that sometimes is the impression, is that if the Government doesn't make people aware of what's being -- what's going on, that maybe there's something to hide. And there isn't.

There's a lot -- what gave me a sense of assurance was knowing there are a lot of institutional controls on him (indicating) and on Kelly. And I'm talking up there. There's a lot of institutional controls going over every single document and quest -- coming back and sending it back and questioning them. What does this mean? What are you doing about this?

EPA is highly involved in all their documentation. Well, that made me feel good to know that. DoD -- the lady

sitting next to me at the meeting Maureen Sullivan, she's (indicating). She's from the Pentagon and the Pentagon does have five sides. I saw it from the airplane. But Maureen Sullivan, she's from the Pentagon and I was asking her a couple of acronyms, What does this one mean, and she was just telling me. Nice person.

But she's well aware of what's going and so there's a lot of people across the country and as long as they continue to have this conversation about, What's working for you, What's working for you -- and things that may work for some other RAB may not work for us. One size doesn't fit all.

But one of the things we can do to get involved is if you look around, we got more space at the table. So as community RAB members, we need to go out and say, Hey, we need some more community members on our RAB. We need some more voices. And that's -- that's up to us to go out there and recruit. So I'm going to challenge you all to recruit somebody for our next RAB meeting. Thank you.

MR. ARZOLA: I have a question.

MS. ABBOTT: Yes, sir.

MR. ARZOLA: Ms. Abbott, it's very true, you know, about the things that were discussed out there at that conference. Did you bring back any type of material with you that you can give us or send to us?

MS. ABBOTT: Actually, they put together -- they're

putting together a discussion -- a summary of all the points that everybody talked about. And as we were in the meeting, they had these papers on the walls and they were writing all the points that people were bringing up. And so they're putting together that summary.

My understanding, they're supposed to send it to us. But probably just like it takes them with their reports, that summary is gone through over with a fine-tooth comb and keep going and keep going. So I want to say, what, do you think it might take another month or so before we get that summary, maybe even six months down the line. I'm not sure.

But I would be very happy to share it with you all as soon as they send me that summary.

MR. ARZOLA: Who hosted this conference?

MS. ABBOTT: EPA.

MR. ARZOLA: EPA.

MS. ABBOTT: Uh-huh.

MR. ARZOLA: And it's very true also that, you know, to get the word out to the community, but there's a wide digital divide up in the community that we represent.

MS. ABBOTT: Exactly.

MR. ARZOLA: And yes, some of the kids are very computer savvy and all this, but they get home and they may not have a computer.

MS. ABBOTT: That's right.

MR. ARZOLA: Or the parents do have a computer but they -- you know, so I think -- I think in order to continue to show that the feds are transparent and accountable, it appears to me that -- that not only to recruit more community members, but to host more meetings outside of here.

MS. ABBOTT: Awareness?

MR. ARZOLA: Right.

MS. ABBOTT: One of the things they did --

MR. ARZOLA: St. John Berchman, John F. Kennedy, Winston, Hoelscher, you know.

MS. ABBOTT: One of the things -- you're right. One of the things they did talk about was how to get the community more aware is to do a lot more training of not just us, but of young people. They would host science fairs.

MR. ARZOLA: Exactly.

MS. ABBOTT: On Kelly. Like the Port would host a science fair and show them some of the different things that's going on. You've got a science academy right down the street here at Kennedy High School. You know, host a science fair. Get a team to come over here. And the more you get the kids involved, you train them, they're going to train -- they're our future.

MR. ARZOLA: Absolutely.

MS. ABBOTT: So, you know, we have to reach out to them somehow.

MR. ARZOLA: And DoD is very high on the stem program.

MS. ABBOTT: Right.

MR. ARZOLA: And that's -- that's our future.

MS. ABBOTT: That's right.

MR. ARZOLA: Okay. And if we can bring some of these experts to the science academy and -- and speak to the students, you know, I think that's going to go a long way.

MS. ABBOTT: You're right. You're right.

MR. ARZOLA: But I would like to see, you know, some material from that conference.

MS. ABBOTT: As soon as they send it to me, I'll send it to you, either mail or e-mail.

MR. ARZOLA: Thank you.

MR. PEREZ: Airmail.

MS. ABBOTT: Airmail? Yes, sir.

MR. GARCIA: Did they give you or did you discuss some of the principles that they teach you in the public administration degree? One of those main points in public administration that you learn is community networking.

MS. ABBOTT: Yes, sir.

MR. GARCIA: That is something that is not being done, community networking. Whereas, you know, the science fair is a good idea and everything, but when you're getting into the ultimate of community networking, the principles of

community networking, that's where you try and touch everybody. And San Antonio is unique. And just like everybody else, we have PTAs; we have MALDEF; we have LULAC; we have community groups; we have neighborhood associations, Palm Heights. There's two in Edgewood. There's some all around here. There's neighborhood associations all around here. Valley High. You know, they have to learn the -- the principles of community networking.

When we first started in 1995, I told Patrick McCullough that he needed to put a plan together for community networking, but he was stopped by the Air Force on that because they thought that bringing in too many people was going to be too much of the Air Force running interference because everybody wanted questions and everybody wanted to know what to do, see. And that's when the Air Force stopped them from community networking.

Now it's, what, 17 years later, and we need to start looking at community networking, using the principles of community networking and then see how we're going to get into that. Because there's a vast procedure to getting community network where you touch everybody. You go to the senior center where they have the senior meetings; you go to the PTAs and young parents; you go to science fairs and get the students involved.

It's all part of community networking and that's

something that the Air Force when the -- when I tried to get that started with Patrick McCullough back in 1995 or '94, something like that, they kind of put a stop in doing that. And so he said, Well, I need some community input, so he gave me about 600 pages worth of stuff to do that was being planned. So I returned the favor. I wrote him a 400-page report asking him questions about every little thing of that document he gave me. That's how we first got started.

He said, If you want that type of community networking, you got to find community leaders and give you the same type of comments that I did, but we need to start looking at a custom fit plan for community networking with everybody from MALDEF, LULAC, COPS, the church organizations, within all the churches and then getting to work our way down to student fairs and work our way down the PTA because that's how -- that's how it actually works.

MS. ABBOTT: But it's also finding someone who wants to take the time to get all that organized. Lot of people, even in my school, come up with good ideas and I tell them, Oh, would you like to be in charge of that and help spearhead that?

MR. GARCIA: No.

MS. ABBOTT: No, they don't want to do that. You know, they want to make the ideas. But one thing that could help us though, sir, is they said there is funds available for

training. And if we would like training on community networking, training on something else, my understanding is there is funds available to help the community members, even if it's understanding about the -- the turning of the transfer of the property. Anything that we want training on, they'll provide it and there are funds there.

So maybe they want -- if we want to do a little community networking, maybe we can get someone who can help us get organized; right?

MR. ARZOLA: Those training funds that are available, are they on the EPA website?

MS. ABBOTT: Yes. What's the name -- I can't remember the name of that program. It's -- it begins with a T.

MR. LYSSY: TAG, TAG grants.

MR. CARROLL: TAG grants.

MR. LYSSY: Technical Assistance Grants.

MS. ABBOTT: Yes.

MR. CARROLL: The Air Force has Technical Assistance for Public Participation, hard to spit out, that we have actually funded to our limit of $100,000 here over the years. So we've done that over the years here, too.

MR. ARZOLA: So if we can -- if we can submit a proposal, a grant, does anyone in here belong to an organization that can prepare that grant and submit it to

provide that type of training?

MS. ABBOTT: I don't have any ideas who --

MR. ARZOLA: Are there any grant writers in here?

MS. ABBOTT: I mean I wrote -- I've written them for my school, but there's lot of information you need to put the grants together. You know, it would take a lot of information, I'm sure. Rachel, the generous people she is, could give it to me, but I --

MR. CARROLL: We can ask EPA on this TAG grant --

MS. ABBOTT: That would be the person to ask.

MR. CARROLL: -- thing to see what the process is and who -- who looks into that. But --

MS. ABBOTT: And that might could be an Agenda item.

MR. ARZOLA: Absolutely. Absolutely.

MR. CARROLL: One of the things that the RAB is responsible for, and we're responsible for as the RAB, is to reach out to community members, try to get all the communities involved, all the affected community involved in the cleanup efforts.

So that's one thing we kind of tend to forget here at the RAB is that we're all on this -- this board that we have the responsibility to spread the word through our community. And that's one thing that we're -- we try to do through these membership drives. We do those about one every year or two years to try to get other members from more

diverse -- from the community. So that's -- I think that's been the most effective means of communication that we've had is this membership, this board.

MR. ARZOLA: I'm just thinking of ways where we can put out this information like the -- like the band boosters meet once a month; the athletic boosters meet once a month; the American Legion down here, we meet once a month. You know, to put out the word to those.

MR. CARROLL: We have in the past and we still do. If groups around -- civic groups or religious or schools or whatever ask us to do some briefing for -- on the cleanup at Kelly, we'll be glad to do that. We still do that kind of thing.

MR. ARZOLA: Good.

MR. PEREZ: I think when I refer to that I try to -- I have my own program and I -- normally I educate the City of San Antonio and of course it's televised and I do show literature plus, you know, color photos, whatever, and I connect -- well, since I represent the creeks and so on, San Antonio creeks, and of course the federal government does give us a study behind that, and it gives me an advantage to get into there.

I even get into -- into other -- sorry. I get into other subjects, you know, and -- fluoride for example. Fluoride. And it's going to cause big problems in the future.

Now last time I was speaking there, a week ago, two weeks ago, something like that, I was referring -- a week ago. I was referring that here y'all -- the Air Force done a good job. And we been pushing of course, Mr. Rodriguez has been in it and so on. And I did mention that sometimes we got -- all of us in the Air Force got the sense right that water does flow through the Leon Creek and it comes from further north and it's another jurisdiction that is hard to, you know, get answers, but y'all been blocking, putting information, the no-fishing and so on, educating the people.

And but I -- I get into it and let -- for example, not tomorrow -- a week from tomorrow, we'll be going to -- out of town, the River Authority, to educate people downstream. And I come all the way to this point of explaining this. In fact, I take advantage and take some of these photos. But I speak well of Air Force. You know why? Because they done a good job and there's no doubt about it.

MR. MARTINEZ: Ms. Abbott, does that cover both posts?

MS. ABBOTT: Yes, sir.

MR. MARTINEZ: Okay. Any other comments, questions? Mr. Garcia?

MR. GARCIA: One more thing, Mrs. Abbott. You can start out by asking a council person to send you a list of all the civic and neighborhood associations that -- from the

planning department. You can call the superintendents of the school district, tell them to send you how many PTAs there are and tell you -- send you a list of all their officers in the PTA, that you want to send them information and recruit RAB members like that.

Hopefully when I -- if the Department of Transportation ever lets me retire, I'll be able to help you do some community networking, but I'm going to have at least two years to train my replacements because they hired six people to replace me, that are going to replace me, and I'm going to have at least two more years of working before I can retire. But after I retire, I'll be glad to do a lot of the community networking for you.

But start off with the planning department, all the neighborhood associations. Call the superintendents, get all this. Call COPS and tell them to send you a list of all the chapters they have and all the Catholic schools around the affected area and you can start off like that. You can send them notices on meetings, send them notices on the progress, send them -- like you said, send them executive summaries on the status of the board and send them to all the different organizations. That way they'll stir the interest in them. we can start out by doing that. And it won't be that hard. We just have to send them mail-outs after we find out who everybody is. That's just a suggestion for you.

MS. ABBOTT: That's a good suggestion. And I will tell you what EPA said. Remember to try to go green as much as you can, so to make a lot of this available for them -- for people on websites.

MR. MARTINEZ: Thank you. Thank you very much. If the RAB would allow us, we'll move on to the next item of the agenda, which is Paul Carroll, government co-chair. Discussion and presentation, introduction on the environmental updates.

MR. CARROLL: I know this is a day that we've been looking forward to for a long time to introduce our new environmental performance based contractor, Shaw Environmental. One of the benefits I get out of this is I don't have to stand in front of y'all for an hour or two and y'all don't have to listen to me for an hour or two. So we're going to have Shaw get up and do the presentations on the environmental issues, a brief presentation on the Leon Creek, the USGS study that was done on all the watersheds in San Antonio.

And Jennifer Wilson is here to answer any additional questions that we might have beyond what Shaw is able to -- will be presenting. And then they're going to be talking about the Leon Creek -- the Air Force sampling that we do of Leon Creek and then an overview of their environmental cleanup plans, their strategy to get us to clean up in a matter of a

few years as opposed to 30, 40, 50 years that we had planned for originally. So I'm pretty excited to get to allow Shaw to present that for y'all.

And I want to introduce the project manager. Praveen Srivastav is here and will be presenting part of the -- part of the presentations and Susan Watson is the project engineer for us at Kelly. So...

MS. POWER: Paul, one comment.

MR. CARROLL: Yes.

MS. POWER: I would like the community and the other members here to realize that the TCEQ, as well as the EPA, is still holding the Air Force responsible for the actions and that we will continue to communicate directly with the Air Force and make requests of the Air Force to complete actions. Shaw is facilitating the Air Force in these actions.

MR. CARROLL: Right. We still get the letters. We get the NOVs, if there's NOVs.

MS. POWER: Never!

MR. CARROLL: And Susan Watson --

MR. MARTINEZ: Excuse me. Mr. Garcia.

MR. GARCIA: I just want to ask you permission about something. Can we hold their feet to the fire and ask them intensive questions like we used to do you?

MR. CARROLL: Well, I'll always be here. I'm not leaving so you can ask me, too.

MR. GARCIA: No, I'm just saying can we -- can we hold them and cross examine them as extensively as we used to do you?

MR. CARROLL: I would imagine, yes. I think you can.

MR. GARCIA: Okay. All right.

MS. POWER: Rod, they've been warned.

MR. CARROLL: Susan, go ahead.

MS. WATSON: Okay. I'm going to start first talking about your ABCs, sitting there with the acronym list. So this is the acronym list for our presentation. I'll just start on each side, take one.

So these will be the acronyms that we're using. So if we start speaking in alphabets only, you can refer to your little guide. So let me know back there if someone can't hear me, just kind of signal. I don't have a voice that carries sometimes very well.

So tonight I'm going to talk about some Leon Creek studies. Typically, the Air Force samples Leon Creek so we'll be talking about that. But in addition, I also presented some facts from the USGS Report, also the USGS Fact Sheet. All of you should have a copy of the fact sheet. And then also there was another study done by CH2M Hill and it's the final Leon Creek Environmental Perspective brochure.

So exactly where is Leon Creek? This is just kind

of some general information. Leon Creek is actually 45 miles long. And -- oops, sorry. And it has two segments by the State. So you'll see the 1907, this is the upper Leon Creek; and then down here is 1906, this is the lower Leon Creek.

And the State actually designates uses for all of their segments of water. And the designated uses for Leon Creek are contact recreation, aquatic life and public water supply. And please note that right now Leon Creek is not used for a public water supply, but that is just a designation, all except for about 3 miles of 1906 from the Medina River up.

So Leon Creek has a watershed. That's where it gets its water. And it's -- basically you might say what is an area -- what is a watershed? It's just the area of land that catches the rain and that channels it down to the creek. Sometimes we call this runoff. It's also called a nonpoint source.

So you can see here, these are the different areas in Leon Creek and you can see that more than half of it -- I keep hitting the wrong thing, the pointer -- is residential and agriculture. You can see over here, the little three percent is actually the military. So most of the runoff is from other area -- other areas besides the Air Force. A lot of times when we talk about Leon Creek, we're focusing on just that little strip that runs primarily through the Air Force.

So sometimes there's other sources besides just the regular runoff from rainfall. That includes lawn watering, fire hydrants, groundwater seeps and outfalls. And an outfall is just a point, like a drainpipe, that enters the creek and we call this a point source. So before the general runoff from rain, nonpoint source.

A pipe coming out is a point source. So point source examples, stormwater outfall or a discharge from a treatment plant. And any of these point sources could carry small amounts of pollutants. So along the 45 miles of Leon Creek, there are four municipal outfalls and seven industrial outfalls.

So we have flow in the creek. So what effect does that flow have in the creek? During low flow, the water can get stagnant and the sediment can fall out of the water. It just settles out into the creek bed. During high flow or flooding, you know, as the streams roll on through, that stagnant water also gets carried downstream along with that sediment in the water.

So in Leon Creek, the upper portion, above 90, over here in this little bitty map up in here, it only flows after heavy rains. South of there, the creek tends to flow. It flows at a rate of about 3.6 million gallons per day. And this is based on average flow from data from 1995 through 2006.

The lower portion of Leon Creek down, once you get through the Air Force plant, is the discharge of the groundwater treatment plant and the groundwater treatment plant discharges about 300,000 gallons per day. And this outfall from that plant is permitted by TCEQ and it must comply with effluent criteria.

So the US Geological Survey did a study and this is -- they did it in 2007 to 2009 and it was in cooperation with the San Antonio River Authority and the San Antonio Metropolitan Health District Public Center for Environmental Health. And if you go to page two of your fact sheet, there is a map that shows the entire area that was in the study and there are actually eight streams that are in the study. And the purpose of the study was to assess the concentration of hydrophobic contaminants in the streambed sediment and the suspended sediment samples. And hydrophobic just means it doesn't dissolve in water and it will accumulate in the sediment during low flow.

So for this study they evaluated certain contaminants which include trace elements of things like metals, cadmium, chromium and lead, halogenated organic compounds such as pesticides, polychlorinated biphenyls which y'all also probably know as PCBs and brominated flame retardants. Also there is polycyclic aromatic hydrocarbons. I call that PAHs so you'll hear me call things PAH throughout

this talk.

Specifically for the Leon Creek sampling, the USGS has seven sites and you can see the little dots on the map. You can see the dots down through here. They're just little single numbers and those are the USGS locations. They study the contaminants listed on the previous page and the samples they collected were streambed sediments, which is actually from the bottom of the creek, as well as suspended sediment samples and those are collected from the stream, the running water during the storm. And they took this data in the USGS study and then they compared it to the data that the Air Force had collected. So on this map, you see these little LC locations. Those are the ones that are the Air Force locations.

So you may be saying, Well, why are they taking these sediment samples? And they -- they selected sediment because many naturally occurring elements and man-made organic contaminants bind to those sediments. And so they collect the sediments. And then what do they do with the data?

Well, how they evaluate it -- especially in the USGS report, what they did is they compared it to a Sediment Quality Guideline and this determines the degree of contamination. These are just guidelines. They are not regulatory limits. The Air Force using sediment screening levels published by TCEQ, the state agency, and they're

similar to those levels that were used in the USGS report.

This is just kind of a summary of the results of the USGS report. Basically, they found contaminants in all eight streams and actually in the fact sheet there are some summary tables on page three and four. But generally, what the study concluded was there are naturally occurring trace elements in the streams including cadmium, chromium, lead and mercury. And the mean concentrations of the trace elements were basically similar to what they were finding in Austin and Fort Worth. So basically, similar to other urban areas.

The same for man-made chemicals, which include, you know, the pesticides and PCBs. They were relatively low compared to the screening levels; but, again, they were similar to other Urban area.

Then we have the PAHs. And an interesting thing I found from this study was they identified those as coming from the parking lot coal-tar sealcoat dust. So basically, it's runoff from parking lots.

So now I want to talk about the Air Force monitoring of Leon Creek. In 1994, they began monitoring at 31 locations. They were upstream, you know, along and downstream of Air Force Base property. Now the Air Force base monitors 59 locations.

They monitor twice a year for surface water and sediment at in-stream, seep and outfall locations. And they

monitor for metals, cyanide, PAHs, PCBs, volatile organic compounds, and they also do flow and water level measurements and this tells them if the creek is gaining or losing water.

MR. ARZOLA: Monitor twice per year. Do you know when that happens? Mr. Carroll?

MR. CARROLL: Yes. We have reports coming out in July and January. This -- what we're briefing here tonight is from the July report, but they sample in that period between, you know, July and -- and actually the sampling for the next report's already been done. So during the summer they sample for the report that comes out in the winter. During the winter and spring, they sample for the other report.

MR. ARZOLA: Okay. Thank you. Thank you.

MS. WATSON: So that was done twice per year and then also annually. They actually do toxicity testing for aquatic life. It's called bioassay testing and they also test fish tissue.

So here is a map overall and you see all of these little points along the creek. These are sampling locations and the larger map is over here, but you can look at it later, too. The red dots are in-stream where you see the little red dots and then the green dots are outfall locations, like here is a green dot. And then there are seeps which are little curly Qs. I know there's some down here, I just can't -- and these yellow arrows are where the USGS sample locations were.

So it gives you an idea of kind of where theirs are and where all the Air Force's are. And so all of the stuff on this side is kind of what they call on base and all of these over here are off-base (indicating). So it's areas that are north and south.

So in the USGS Study, the Air Force monitoring results were included. So basically the study compared the Air Force 2006 to 2007 semiannual Leon Creek sample result to the data that the USGS collected.

There were differences in analytical methods, but even with that, the USGS concentrations were typically in the range of the Air Force results for trace elements, select pesticides and the PAHs. The mean concentrations of lead, mercury, dieldrin, DDE -- those are pesticides -- PCBs and PAHs are higher in the Air Force samples than in the USGS samples. They concluded the Air Force's more frequent semiannual compliance sampling captured a wider range of contaminant concentrations.

So this is some of the Air Force sampling. This is the January 2011 surface water elevation flow summary. So surface water elevations were measured at 23 stations. That included three seeps and three outfalls. And basically, they divide the creek up into four segments. And you can see them labeled here, one, two, three and four.

MR. MARTINEZ: Excuse me. Question.

MS. ABBOTT: I had a quick question. The Air Force sampled, so they did the exact same spots that you did the samples to or do they sample at different locations?

MS. WATSON: The USGS sampling?

MS. ABBOTT: Uh-huh. Is it the same place as the Air Force sampling?

MS. WATSON: Not exactly. So -- but you can see this is the USGS and they're similar, but not exactly. So they're close. Like they may be close to a location that the Air Force does, but the Air Force has a lot more locations in between. Does that -- so they're not from exactly at the same spot.

MR. PEREZ: Okay. One more time, just for the record. Whose is higher? Whose is higher the Air Force or --

MS. ABBOTT: The results.

MS. WATSON: The Air Force results are, yes, typically higher than the USGS results. Now they did use different methods, analytical methods sometimes, so there is some difference just in the different methods. So they're not directly comparable, but that's -- from the USGS study, that's what they concluded.

MR. PEREZ: Could time have something to do with this?

MS. WATSON: I -- I really don't know. I can't be --

MR. PEREZ: Timetable?

MS. WATSON: Yeah.

MR. PEREZ: Timetable.

MR. CARROLL: Yeah. I think timing has something to do with this. Jennifer may want to chime in, too. But the exact location would have something to do with it. The time. There's -- there's variations that we see in samples all the time. What you want to do is take the samples again and again and again to try to get your consistency up.

MS. POWER: Paul or Susan, do you know why the USGS uses different methodology?

MR. CARROLL: If Jennifer wants to comment.

MS. WILSON: We use a different lab. USGS uses our national water quality lab in Denver for almost all of our samples.

MS. POWER: But they're not the EPA methodologies.

MS. WILSON: They're not EPA methodologies, no. They're --

MS. POWER: They're their --

MS. WILSON: -- USGS methods.

MS. POWER: -- own little brand of --

MS. WILSON: Uh-huh. Yeah. They're all published, peer reviewed. Published in journal articles. They're USGS methods.

MR. PEREZ: She's the one that went to the River

Authority.

MS. POWER: Oh, okay.

MR. CARROLL: Thank you.

MS. WATSON: Okay. So back to the surface water elevations and flows. So basically in January 2011, three of the segments, 1, 2 and 4, showed that they were gaining water or water was coming into them and one segment, segment 3, is showing a loss.

So January 2011, surface water sampling was conducted. And the surface water samples were collected from 44 stations including 30 in-stream locations, five seeps, six outfalls, and three reference stations. And the results indicated that in the surface water, all the water quality standards were met for all parameters.

These are specific to the seep samples. And there were a couple of locations where there was tetrachloroethene and trichloroethene that exceeded the health criteria of 5 micrograms per liter. This is also the criteria that we are held to in the permit. These same locations have had exceedances before. They were -- both of these locations were slightly higher in January. And they are down -- down in the lower part, right before it comes off the base where the seeps are.

They also did sediment sampling. Sediment samples were collected from 28 stations, 24 Leon Creek in-stream

stations and outfall and three in-stream reference stations. And the results indicated that the Texas Surface Water Quality Standard for sediment screening were exceeded at 14 of the in-stream locations for 18 sediment contaminants. So not all of these contaminants were detected at each location. It did vary, but they included SVOCs or semi volatile organic compounds, pesticides, metals and PCBs.

And for comparison, in July, August 010, that was the last time the sampling was done, there were 12 locations that had exceedances. And there was one reference station at Medio Creek, which is off-base, and it had arsenic that exceeded the benchmark.

Another thing in sediment this time, we did see some PAHs in a couple of locations. And basically overall, there was an increase in the number of stations where contaminants were detected as well as this increase in PAHs.

So what are the findings and conclusions? Basically in the renewed compliance plan the Air Force has, if there is an increase in any of the samples, they need to investigate. And if needed, they need to propose additional actions to figure out what was wrong and try to mitigate it.

So the government -- a lot of stormwater runs into Leon Creek so the runoff from the streets and paved area, there was rainfall in December and early January and this may explain some of those increases in PAHs, just like we saw in

the USGS survey, you know, that a lot of the PAHs and the sediment came from the coal-tar seals in the parking lots. Even though there was not an increase in the surface water concentration, there was a slight increase of VOCs at two seep locations.

The analytes showing an increase will continue to be investigated for potential sources, including the stormwater outfall. We'll continue sampling at Leon Creek as required by the permit. The creek sampling is still ongoing at twice per year and the fish tissue and bioassay sampling are conducted once per year. The Air Force will continue to report these results to the State, to TCEQ, as well as keep briefing the RAB on the results.

The compliance monitoring provides data that is used to evaluate the effectiveness of the remedies that are already in place, including those that are designed to protect Leon Creek from the contaminated groundwater.

As part of our contract with the Air Force, we will be conducting active remedies at several sites along Leon Creek and these will also continue to help protect the creek. So you can see, here is Leon Creek running through and all of these little symbols on here are sites where we're going to be doing some type of remedy.

And at this point, I will turn it over to Praveen who will talk to you about the different remedies.

MR. CARROLL: Thank you, Susan.

MR. SRIVASTAV: I'll start off talking about the Performance Based Remediation, the contract, and then move on to our approaches.

So what is the Performance Based Remediation Contract? You might have heard this term before, PBR, but what does that really mean? So here are some bullet points so you can make yourself familiar. It is a fixed price contract. It's incentive-based so the government specifies the end results. So they tell us, Accomplish this, and then we get to propose how we get there. And once -- until we get there, we don't get paid. So basically, in a nutshell, that's what it is.

So we determine the steps to meet the performance objective, for example, site closure. We do what's necessary to do it and our payments are tied to that. We are liable to meet performance objectives. The government still maintains the oversight so they're going to review our documents and make sure that we do what we said and our documents also get reviewed by regulators. But this kind of approach does allow an open communication -- open communication between the contractor and the regulators with oversight from the government and the Air Force.

Benefits, it does provide a mechanism for the government to fund -- to secure funding for the entire

contract. It is instrumental but they're able to help them out, secure that. It does expedite cleanup because it is an incentive for us to get it done and get it done the right way the first time around. Doesn't help us any to keep trying and spending more and more money.

It can be aligned with exit strategies or to optimize systems and that's what the Air Force is trying to do at this particular site. A lot of these sites have gone through initial remedies. The remedies are in place and the sites have reached a certain level, but now the Air Force wants these sites to be closed out early or they want them to be -- cleanup strategies to be optimized. And that's what we're here for.

It does innovative approaches and cleanup technologies. Contractors are challenged. We compete against each other to come up with new strategies and do it cost-effectively.

Overall, it lowers taxpayer liability. There are studies that show the government is actually saving money through these kinds of contracts. Is that right?

MR. CARROLL: Uh-huh. Yes.

MR. SRIVASTAV: Project description. So what is under Shaw's contract? In the former Kelly Air Force Base, which was a BRAC site transferred to the Port Authority as of 9/30/2010, and Lackland, as you know, is an active base.

There are a total of 39 sites. There are 11 sites at the former Kelly Air Force Base and then there are nine sites within Lackland. Those add up to 20 and then there are 19 sites with land use controls and five-year reviews.

So the eleven plus nine, those are the active sites with the active remediation systems.

This is a map that's color-coded. Over here is a poster of the same map. It's color-coded to show what we proposed as part of our proposal to the Air Force before we got the contract. The green -- the green coded are the ones that we propose to close with unrestricted reuse. So there are ten of those. I'm not going to list them all, but you can see all the green areas here and here.

The yellow is the optimized exit strategy sites and, again, there are ten of those. A lot of those are the ones over here in Zone 1. These are landfills. But then there are two others which is Zone 3 groundwater and Zone 4 groundwater. I'm assuming everybody is familiar with the zone nomenclature. If you're not, let me know.

MS. POWER: Please, explain to us how it was developed. I'm kidding.

MR. SRIVASTAV: You may get up here and explain that. We're still trying to understand.

And the 19 sites I mentioned earlier, these are the sites with land use controls. They've been closed, but there

are five-year reviews that are being conducted and those we propose to continue the five-year review process and land use control maintenance.

General activities under this contract would include groundwater treatment plant operations, so there are three treatment plants in Zone 2, 4 and 5. And these are being operated under Texas Pollution Discharge Elimination System, or TPDES for short. We'll be monitoring groundwater, surface water, sediments and fish tissue sampling will be conducted under the compliance monitoring, the second bullet. Some of it Susan was talking about earlier, the surface water and sediments and study that was done around Leon Creek so that's what this is.

In-situ enhanced bioremediation injections, I'll get into that a little bit later. This is our primary remediation strategy, soil excavation and treatment. Monitoring well installation abandonment, we'll be doing some of that. Utility clearance for remediation systems installation.

Any time you do any kind of intrusive work, either installing a well or you're digging somewhere to remove soil, you have to make sure there are no buried utilities there. There aren't any phone lines or sewer lines, of that nature. Waste disposal and site closeout, decommissioning of system. If a site is closed out with no further action, we'll have to decommission the systems that are in place. It could be

abandonment of wells or there are other instrumentations in place so it's that and then RAB meeting support and that's what we're here for today.

Objectives. The Air Force gave us several choices, actually four, and we decided to pick three of them for difference sites. This was based on our evaluation of what we thought we could achieve in our performance, which is approximately 9.5 years.

So we evaluated the data and this is how we propose -- I mentioned this also earlier. So I'll be using this acronym SC/UR, which stands for site closure with unrestricted use. Ten sites are proposed for that and those are the green colored sites colored in green I showed you over here on the poster board.

We have ten sites with optimized exit strategy and those ten sites we're proposing to optimize the remedies that are already in place. We didn't think we could get those sites to closure within our performance period. And then 19 sites are the land use control and five-year review sites.

Our technical approach in general is to -- we'll be doing some limited investigations or investigations at a limited number of sites. There are four or five sites we think we need more data on the bioremediation/optimization for groundwater, soil remediation, performance monitoring, installing more effective in-situ treatment systems and within

performance year, we'll be discontinuing the operation of two of the groundwater treatment plants, Zone 4 and Zone 5.

After we treat the groundwater, we'll have approximately two to three years of performance monitoring where we monitor the performance of the remediation and followed by three years of groundwater monitoring as required by the compliance plan. So we put the remedies in the ground. We use compliance -- we reach cleanup goals and then after that, the compliance plan requires us to monitor the groundwater for three years to show that the cleanup goals are met and they're being maintained at that level. So that's that.

And after that, site closure for site -- the sites that are scheduled for closure. Site decommissioning, some of that is repeated, I already talked about earlier. Continuing operations at the OES sites. There's one treatment plant that will continue operation in Zone 2 groundwater treatment plant and then of course five-year reviews will continue at the 19 sites.

First I'll talk about the investigations, the sites we are proposing investigations at. One of the sites in Zone 2 is also known as site WP021 or Site E-1 as it's more popularly known. There's one well with some LNAPL contamination and we'll be conducting investigations to see what the extent of the contamination is. Building 98, in Zone

5, again, it has some fuel-related contaminants. We'll be doing groundwater contamination to delineate.

And then Site S-1, or SS03, is a -- we'll be conducting a follow-up investigation. There were other recent remediation efforts by other contractor with electrical resistance heating and they are just finishing up. We just need to find out what's actually left in the ground and then plan our cleanup actions based on that, that site investigation.

Okay. So for groundwater, remediation/optimization strategies. I'll get to the soil a little bit later, but I'm going to address the groundwater strategies first. And here for the first few slides regarding Zones 2 and 3. So there's Site SS36, which is the groundwater in Zone 32, and SS37 is groundwater in Zone 3. Again, there's site E-1 and E-3 and within Zone 2. And the groundwater remedies at these sites are optimizing the existing strategies by treatment.

Site SS36, which is the groundwater -- we didn't see it, but this is Zone 2 over here so the groundwater in this zone is known as SS36. It also encompasses the groundwater under E-1 or WP21, which is over here and E-3, which is over here. So all that groundwater is under one site called SS36. Our objective is site closure and approximate projected date is the second quarter of 2019. The remediation would involve excavation of soil at one site.

The third remedy there is a soil vapor extraction. There are some volatile organics in the soil that the system is extracting and we feel that it's not functioning as well as it could have been or at this point things are stalling. So our proposed remedy is just go ahead and remove the soil. It's a very small spot. And then treat hotspots in the groundwater with in-situ enhanced bioremediation.

Site 37 also is the name that's given to the groundwater in Zone 3. And Zone 3 is this yellow -- little area over here so all of that groundwater that is on that site as known as site SS 37. Our objectives and optimized exit strategy. This is one of the more contaminated areas of the base and our approach here is to -- is to knock out some of the highly contaminated spots and then reduce the overall time of clean up for the Air Force.

MR. ARZOLA: Excuse me. That excavated soil that's you're going to be pulling out at Building 522, is that soil going to be contaminated? Its contaminated; right.

MR. SRIVASTAV: Yes.

MR. ARZOLA: Where are you taking it?

MR. SRIVASTAV: We'll analyze it and then we'll characterize it based on whether it comes out hazardous. It will go to a landfill that take hazardous waste and they usually treat it and then put it in the landfill. If it's nonhazardous, it will go to a nonhazardous waste site.

MR. ARZOLA: Where is that done, Mr. Carroll, here in San Antonio?

MR. SRIVASTAV: You mean the disposal?

MR. ARZOLA: Yes.

MR. SRIVASTAV: Have we identified --

MS. POWER: We don't -- there are no hazardous waste disposal facilities in San Antonio or Bexar County. The closest facility geographically to San Antonio that accepts hazardous waste -- waste has different classifications, as Praveen was saying.

MR. ARZOLA: Right.

MS. POWER: That accepts hazardous waste is in Robstown down in Corpus Christi.

MR. CARROLL: We took -- when we did that -- I'm sorry.

MS. POWER: There are other facilities that are located closer that can take nonhazardous waste that are impacted with certain types of contaminants. For instance, the Waste Management landfill facility, a lot of the gas stations around here that may have had a leak and have impacted soils, those types of soils can go to that type of facility. Does that answer your question?

MR. ARZOLA: Well, I guess what I'd like to know is maybe down the road I'd like to find out how contaminated that soil is and where it went.

MR. SRIVASTAV: We -- certainly during one of these meetings, we will be happy to share that, unless there's --

MS. POWER: I don't know.

MR. ARZOLA: Okay.

MR. SRIVASTAV: Okay. So on Site SS37, which I had mentioned was this Zone 3 over here, we are consolidating the groundwater. There are three sites. Actually, there are four. Well, three sites that are all within SS37 and those are the SS40, SS38 and ST06. We'll consolidate the groundwater within these zones -- within these sites with the groundwater in SS37 and that may require a modification of the Compliance Plan so we'll go ahead and do that. And then we'll treat the hot spots within SS37 with in-situ bioremediation. And in addition to doing that, we'll also be controlling migration of the groundwater.

Oh, there are plume maps on the wall here. And I don't know if you can see, but Zone 2 is over here and this is Zone 3 and looks like these plumes are migrating to the south so it can be -- go back to this map over here. The plume is already migrating in SS37 and it migrates down into Zone 2.

There are some sources within Zone 2, but there's some water that's coming in, contaminated groundwater moving into Zone 3. I'll show you a map and it will include doing that.

Okay. So something about bioremediation. The main

contaminants at Zones 2 and 3 are tetrachloroethene, or PCE, and trichloroethene, or TCE. Our approach is to inject amendments using Direct Push Technology or DPT. It's a small unit that allows us to punch holes into the subsurface relatively quickly and inject the amendments.

So what will the amendments be? Those will be food grade safe vegetable oil, lactate, sodium bicarbonate -- we need that sometime to buffer the pH -- and then SDC-9. That's a bacterial mix in layman's terms. This is a specially developed bacterial solution by Shaw, which is known to degrade these contaminants, PCE and TCE, down to harmless organics. So we mix all that up and inject it using a DPT rig.

And you can inject these -- these amendments in several different ways. You can do a grid injection or linear application. And I'll show you examples of those as we go along.

You can have active or passive distribution. An active distribution is where you inject in one place and then you use extraction wells to pull this material in the subsurface across this area that's contaminated. Passive will be where we just inject the material into the ground and just leave it, let it cook.

The active injections then help us in utilizing the existing extraction wells where possible. So there are sites

where there are existing extraction wells and we can utilize those to distribute the materials. It's also -- it reduces the field time associated with injections and also reduces the potential for follow-up injections. So it all depends on site to site, what do we have available and how we can utilize it.

There are a couple of terms here. One is called biostimulation. What that means is there are microbes that are already in the ground and naturally these microbes are there. They may not have food. They may not have the right ingredients to eat away the contaminant. So in this particular case, we will give them the food which is the substrate, either lactate or vegetable oil, molasses, and then add some other chemicals, electron acceptor additions, oxygen or sulfate. We may have to adjust the pH. PH has to be within a optimum limit before it can be attractive to the microbes that we are impacting. We may also add some nutrients like nitrogen and phosphorus. Now that's assuming that the microbes are already there. And we usually do that analysis before we implement these techniques to the field. We go out and collect samples, groundwater soil samples, and characterize, make sure the conditions are favorable.

Now what happens if we don't actually have microbes in the ground? And that term is actually called bioaugmentation where we either add non-native organisms, and that would be SDC-9. Maybe those microbes are just not there

so we infuse them into the ground or maybe they are not in sufficient concentrations so in which case we'll bring in the same type of microbes and introduce them.

So then at that point what you have is the food, the nutrients and the microbes. And at that point, the microbes are happy and they start eating the contaminants.

There are some examples down here. Anaerobic cultures, SDC-9, BAV1, KB-1, BAC-9, these are all cultures from different vendors. These are commercially available. SDC-9 is Shaw's own developed anaerobic culture. And then aerobic culture for -- that we use is called ENV-477.

Some contaminants require more aerobic environments, like infused components. That's when we need a different type of microbe.

Okay. This particular slide shows you how the contaminants degrade under anaerobic conditions, under reducing conditions. So a compound like tetrachloroethene would be -- what we're doing here is slowly taking away each chlorine atom from the compound. So tetrachloroethene has four chlorines. Once you lose one, it becomes trichloroethene. Lose one more, it becomes dichloroethene. Finally you're left with one chlorine and once that's stripped, you're left with ethene.

This is just a picture showing what the tanks look like when we actually do the work in the field. We might be

doing a -- this slide over here shows when the vegetable oil is shipped to the field. These are big canisters full of vegetable oil. And these tanks are used to actually generate water that already has reducing conditions so it's reduced and mix everything up. We let it sit for a while and then it dissolves in drops. At that point, it's ready to be injected.

That's an example of a field trailer and this is the pipelines from -- going from where we're going a start injecting stuff in the ground.

Okay. Those are some examples of different -- I don't intend on going into too much detail here, but these are just some examples of how we plan to do it at different spots in these -- in these zones.

So on the left is an example. It's called SS36, 300 area. And this pink area, the purple area, the examples are the plumes. So there's a plume over here and then a little detached, another plume over here. This plume still has a couple of areas, Zones 2 and 3, with slightly high concentrations. So this area would be a good injection. Within that area, we go inject ten or 15 points, just let it sit and knock that spot out.

Over here is an example of where we plan on using an extraction system. So we'll have a series of injections along this -- these two lines and then there are extraction wells over here, which we'll keep operating and pull these material

through this area with high concentrations. That's in -- that's in SS36, 600 area.

Couple more examples and this comes from SS37, Zone 3, over here. It has several spots. This overall is how the plume looks like in Zone 3. And what we are planning to do is to build -- I give you an example area here where we have a series of -- like over here, a series of injections into the ground. We also call it a biowall. So just imagine that you have -- you're injecting oil at -- in these holes, we drill 25 feet apart, 20, 25 feet apart. By the time you inject all of this, it's like a wall of oil or lactate in the subsurface.

So we plan on building these -- these are picked to be ideal spots to make the most impact and we've done groundwater modeling to come up with these optimum locations. But these are biowalls, one here and then two over, three over here and then this is what we call the Zone 2 biowall. South of here is all Zone 2.

So if you look at this map, that biowall right there is going to be along this, that lower area that goes just to the south of that. And that's to control the migration of the -- the groundwater flows this way so the migration of this contaminated groundwater includes Zone 2. That's what this biowall would control because we're trying to close out this groundwater over here, clean it up completely. But to make sure that we do clean it up, we need to install things

above -- up above to the north.

These are another example of injection in this series and then extracting over here, pull the material. This is here in Building 301. You're familiar with it again, small hot spot injections. This is another example of active recirculation system.

MR. SKROBARCEK: I've got a quick question. The biowalls, how long will they remain? How long are they active? How long will they be effective in what you're trying to establish?

MR. SRIVASTAV: Depends on the material. These biowalls have vegetable oil and they typically last two to five years. The oil stays in the ground and sticks to the matter and it will stay there -- it will stay there a long time.

Okay. Continuing in Zone 2, Sites E-1 and E-2 are also WP21 and 22. Again, examples of this site over here has, again, chlorinated solvents. And one spot has some more fuel-related compounds so we'll have to do two types of injections here. First one will be with the vegetable oil to create more of a anaerobic environment to knock out the solvents and then the second one will be more of an aerobic treatment to knock out the more fuel-related compounds. That's what -- that's this area over here.

Remediation optimization in Zones 4 and 5. So Zone

4 is this area over here also known as East Kelly. And then 5 is all of this green area, which include a lot of that administrative area, the runways and part of Lackland. And within Zone 5, one thing to remember is that there are two Site 50s. The Site 50, that's part of Kelly. So all of this area on this side of the runway is called SS50 Kelly. And that's what that area is.

And on this side it's called SS50 Lackland. The SS50 Lackland has, let's see, two plumes, plume K, plume H. That's Zone 5 area over here.

Okay. So Zone 4, also known as SS52. So we'll be talking about this area. Objective is optimize exit strategy and our goal is to treat hot spots with in-situ enhanced bioremediation and control migration of the biowalls. I'll show you a couple of slides. And then Zone 4 groundwater treatment plant will be decommissioned in year four or five and then we will require a Compliance Plan modification to administratively change the -- the rules or the regulatory framework. That's the term I was looking for. From the old risk reduction standards to the Texas Risk Reduction Program rules which would then eliminate the need for deed restrictions in off-site areas, all of this residential area over here.

So this slide here shows the plume. The main area of Zone 4 is this slide, which will be over here. And then

this plume has gone quite a ways and it has two prongs, north and south. Seems to have multiple sources. What we are planning on doing is knocking out of some of these sources, or what used to be sources, but they're still holding up at a high concentration. So we'll be having a grid injection type treatment, one over here and then a couple of them over here.

You can see the concentration is about a hundred or over a hundred, and then a high concentration over here. So we knocked out those sources so they don't keep contributing to the down-gradient. And then we build these biowalls further down-gradient. There's one here, one here, another one over here. And then this is to protect any migration -- potential migration into the San Antonio River.

Now again, the idea here is that we knock out this. These are contributing to the down-gradient locations. And then as the contaminated water moves through the biowalls, it will get remediated.

In addition, the amendments here will flow down-gradient and will treat this area here, thus reducing the time frame to clean up those.

SS50 Kelly, that will be this area over here, has several areas that are still at high concentrations so we plan on -- our objective, first of all, for this is site closure, unrestricted reuse. It has several areas that we plan to address, the 34th Street PRB, which is in this area over here.

PRB also stands for permeable reactive barrier.

Plume D, which will be over here, and then there are -- there's Building 1414 and 1533. And 1414 will be over in this area and 1533 over here.

Again, a range of approaches we have are grid injection over here, grid injections, biowall. This is 34th Street PRB. There are some high concentrations still. PRB was effective for a while, but we think we can do a better job, especially if you're trying to expedite the cleanup to do a biowall over here, again, for plume D and other grid injections.

Plume D has gone through several rounds of in-situ remediation before so we're taking a more robust approach for this to knock it out.

Approaches for soil. These are the sites where some kind of soil action is required. SS36, groundwater Zone 2. SS40, plating shop. Let me just mention that we are going to -- the soil needs to be addressed so we need to evaluate the data and, if needed, we will excavate the soil or address it in some other way. So there's this reevaluation field that we are going to go through. But these sites do have some kind of soil issue. SS40, ST06, E-1, E-3, SS37, Building 360, SS38 or S-8, Zone 3.

And the reason that these sites do have some soil issue is because we're trying to close them out to residential

levels. Some of these sites have had soil action before. Maybe soil was removed. Maybe the site was closed by evaluating the data against industrial levels.

Our industrial level closure does not give you unrestricted reuse. It will always be a land use control. So when we are looking to close the site out to residential levels for unrestricted reuse, we look at it again and see, Okay, does this actually meet residential levels. If it doesn't, then we got to do a more active remediation which may involve taking out some soil. So these are contaminated areas.

Soil remediation strategies for SS36, SS40 and ST06. We'll Evaluate the soil data against residential levels and, if needed, excavate the soil. Here is an example of -- this is Building 522 and SS36. This is what I mentioned earlier. There's a soil vapor extraction system that we don't think is being effective to remediate the soil in the short term so soil excavation is proposed.

This is MP site. There are a couple of spots that have elevated levels so we may have to remediate that. And then this is ST06, a couple of spots in the soil that's above residential levels.

For -- same approach for other sites within Zone 2, 21 and 22. Either we'll administratively close the soil to residential levels or we may have to do some remediation.

Same for Building 360. It has a soil vapor extraction system. I have a few more slides to share a little bit later to address that Building 360 question.

SS38 has a active bioventing system. And we'll operate that until the soil meet residential levels, which we think should be effective.

SS03 I mentioned earlier had a electrical resistance heating system that was being operated by another contractor for the last year-and-a-half, two years. It didn't actually get to the point where they were hoping to get so there is still some contamination left and we'll have to conduct a follow-up investigation to figure out what's actually left in the ground. Once we figure that out, we'll be designing a plan to remediate the soil and groundwater. And we hope to decommission the groundwater extraction in about four years. And we are, like I said, still developing the plans because we need to first investigate fully.

Okay. So this brings me to the -- this was one of the questions in earlier meetings, I guess the previous meeting, where the RAB members were wanting to know how effective the system is at Building 360. So I've got a little bit of information here to share with you. This is a schematic that shows -- this is Building 360 here so that is the edge of the building.

There's some instrumentation here. These lines here

represent three horizontal wells. Okay? So they start off up here and they actually go under the building. So three of them. And they are perforated. Suction is applied at this end so it actually pulls out vapors from the subsurface and the vapors are treated in this area.

Closeup of that upper left corner and this one is a little bit more detailed drawing. So here are the wells that are coming in. These are the three wellheads and this is an enlarged view, so three wellheads over here. The vapors, we pull the vapors and then there are some vapor phase water that comes in when the suction is applied.

Suction is applied by a blower over here. So this water/vapor mixture gets pulled into this. This is called a vapor liquid separator, or a knockout tank, where the vapor gets obviously separated from the water. The water goes into this tank and then the vapor then gets pulled through this granulated activated carbon unit. There are two of those. That's where the vapors get absorbed, the contaminant vapors.

And then the clean air is then pulled through here. Again, there's this blower that does all that job. It's highly automated and then gets really released into the air after the contaminants are removed.

This is the picture showing -- so that picture is actually this area over here, standing here looking through this. So imagine you're standing here looking at -- looking

to the left.

Here are the three wellheads coming in. That's the piping that comes into the oil/water separator and goes through it and you can see the carbon tanks that gets -- that absorbs.

Here's some of the data that has been collected. The system was operational in 2008. Again, these are the readings that are taken using a flame ionization detector, or a FID unit, which actually detects total organic vapors so it's not going to distinguish what the vapors are. It gives you the total reading.

So there used to be a total of 3.6 average, went down to .8 in 2009. And if you look at the average here, 1.7. So overall, it seems to have gone down, but also has gone up and down a little bit.

Again, this is the data from the vapors that are being extracted so we know that there's still some contamination that's being extracted. That's what that shows. And then it's being cleaned up. The vapors are being cleaned up before they're released.

The significance of this -- I think there was a question in the last RAB. Again, I wasn't here, but we looked through the transcript and there was a question that there was a water main break in 2011 in May and then did have an impact on the system. What we have found is that there wasn't

actually -- there wasn't any impact on the operational system. The operation is -- the break was not really -- where is the system is, the system kept operating as -- as usual.

The only thing we saw was that the average reading on the 6th of May was 1.6, and right after it went up to 7.3. We don't know why. I mean you can -- you can make a guess that maybe the water that was coming out of this main settled down and maybe it pushed some of the vapors towards where the extraction wells are. But that's just -- just speculation. And as you can see, it fell back down within two weeks.

MS. POWER: Praveen, was the system shut down after the water main break occurred or did it continue to operate the whole time?

MR. SRIVASTAV: I don't believe so. I think it was continuing.

MS. POWER: Okay.

MR. SKROBARCEK: I've got a quick question for you. On the 12 -- 9/12/2011 and prior to that, like 7/15/2011, you see it goes from zero to 2.2. Is -- is there correlations between the significant rain events or things of that nature where you're getting some kind of soil washing or something that's occurring and it's -- it's creating that kind of thing?

MR. SRIVASTAV: That's hard to say. Those are minor variations if you look at it. Those are minor variations.

There are some summary slides, just about how the

system is working. The contaminants at the site are PCE and TCE, again, tetrachloroethene and trichloroethene, in the soil below the building.

The extraction system is screened below the building and it draws air. I showed you the schematic where the wells are -- horizontal wells are drawing the air by applying suction. So that system maintains a negative pressure so it keeps any vapors from entering the building. So they all get sucked out. The system extracts vapors from the soil and treats them by getting them absorbed into the carbon before the clean air is released in the atmosphere.

And this is just a side note that there was some sampling done in May 2009 that the soil -- actual soil samples themselves have reached industrial cleanup rules. So even though we kept extracting more and more vapors, the levels aren't that high. The actual soil has met industrial levels.

The weekly monitoring of the soil vapor continues. These are the vapors that are coming out of -- we have sampling for the wellheads before it gets treated. VOC measurements from April through September, they fluctuated from 7 ppm to zero. Again, these are just fluctuations from where it's coming through. But it seems to be effective in removing contamination and we'll continue to monitor the system.

I mentioned earlier that the water in the extracted

vapor is removed before the treatment. And then the last bullet is that we did not actually see an impact from the water main break.

Okay. So what is Shaw doing right now? We have had this contract for about three months. July, August, September and in the fourth month. I think we made quite a bit of progress.

To give you an idea of what we've accomplished, there's a document called Quality Program Plan. This is a contractual requirement where the -- where we put out for the Air Force to review and also regulatory review how we actually perform the work. So it puts -- it lays out our sampling strategies and sampling methods. It lays out laboratory requirements, what cleanup goals we are going to meet, what methods we will follow when we are sampling soil or groundwater or vapors and all sorts of things. So it's got our -- what we call Standard Operating Procedures or SOPs out in there.

The laboratories that identify the cleanup levels are in there. I'm sorry, not the cleanup levels, but the detection limits, other quality control procedures. It also has specifics on the operation of the groundwater treatment plant and other remediation systems:

We are working -- so that -- in short, we call it QPP. That has been submitted to the Air Force and it's

currently in Air Force's review. And then after they have reviewed, we'll address the comments and it goes to the regulators.

We are working on site specific technical work plans. And I was going through all the details and it may be a blur at this point, but what we're trying to do is put out these site specific work plans for like Zone 2, Zone 3, which we'll present our approach where exactly we're going to inject and what are the performance points, where will we collect samples to show that our system is in fact working.

So we'll put all those details out into the site specific work plans, again, going through the same review cycle, Air Force, regulators. And the operation of treatment plant continues.

We have -- so we've been operating this plant for the month of September. Before that, it was another previous contractor. And as of September, Shaw is managing this plant and other remediation systems.

The first bullet, QPP complete by end of October. That actually is supposed to say -- supposed to get to the regulators by October. So we are working towards that.

Technical work plans should be getting into the regulator review October through November. Investigation/well abandonment activities will be some time in January, February 2012. We plan to be in the field for the first injections,

the bioremediation injection, in February. We expect it to be a five-month -- five or six-month long effort because we have lots of site we need to do the same thing. So starting in February, we're probably going to begin.

And then all the injections done in 2012. Then we start performance monitoring and that goes on for three years through 2015. And then everything goes as planned, we meet cleanup goals in 2015. We monitor the water for another three years as part of our Compliance Plan so that will take us through 2018.

So the sites we are planning to close, we'll be closing them out in 2019 and that will require site closure documentation and it will require Compliance Plan modification so all that has to happen by then.

Treatment plant operations for one plant that will be operational is the Zone 3 groundwater treatment plant and we'll keep operating through the end of our performance period.

MR. BREEDAM: Can I ask a question?

MR. SRIVASTAV: Yes, sir.

MR. BREEDAM: When you inject the bacteria, as long as there's chlorinated contaminants, do they propagate? And when there's chlorinated contaminants are gone, what happens to them?

MR. SRIVASTAV: They basically die out there because

nothing else remains for them to feed off there.

MR. BREEDAM: Is there any negative aspect of that?

MR. SRIVASTAV: No.

MR. BREEDAM: Concentration is low enough that it's not going to be about problem?

MR. SRIVASTAV: Correct. What we are seeing is that the population goes down. What we monitor is total organic carbon. We monitor the by-product or the total product of these compounds. We monitor total organic carbon, which is coming from the amendments we added. We monitor dissolved oxygen. We monitor the population of these microbes.

And what we have seen is that as the concentrations of contaminants have gone down, slowly the total organic carbon starts to go down because the microbes ate it all up. And then they all -- the microbe concentration will eventually level out. There may be a little bit remaining, but they all level out.

MS. ABBOTT: I know you were talk about the Zone 2, 3 and 4, but does your contract extend out to that Commercial -- Commerce -- Commercial Street, that barrier, the PRB.

MR. SRIVASTAV: Yes, it does.

MS. ABBOTT: That goes all the way out to that barrier?

MR. SRIVASTAV: Yes, ma'am. It does.

MS. ABBOTT: Okay.
MR. SRIVASTAV: I was showing some slides earlier --
MS. ABBOTT: Right.
MR. SRIVASTAV: -- on the barrier.
MS. ABBOTT: Right.
MR. SRIVASTAV: And it shows all --
MS. ABBOTT: So it goes all the way out --
COURT REPORTER: Excuse me. One at a time, please.
MR. SRIVASTAV: Does that answer your question?
MS. ABBOTT: Uh-huh.
MR. SKROBARCEK: Quick question regarding Building 360. I understand that in May 2009 you were able to get to the industrial value level, that risk reduction standard level. What's the goal?
MR. SRIVASTAV: The goal is to get to residential.
MR. SKROBARCEK: Get to residential.
MR. SRIVASTAV: If we can.
MR. SKROBARCEK: And we expect to get to that?
MR. SRIVASTAV: Then the Air Force can close out the soil and then we'll just have the groundwater remaining.
MR. SKROBARCEK: And we expect that to occur approximately --
MR. SRIVASTAV: We don't know yet. We're just -- we're evaluating all that. It's too early for us to tell.
MR. MARTINEZ: Okay. Fair enough. Thank.

Mr. Garcia.

Excuse me. We're still -- with all due respect, we're still in the question period between the RAB and the presenter. In a few seconds, we'll open it to the rest of the audience. Mr. Garcia?

MR. GARCIA: Question number one: Are you going have an office on the base?

MR. SRIVASTAV: Yes, sir. We do already.

MR. GARCIA: Yes. Okay. How many workers do you have and how many hours are you going to work a day?

MR. SRIVASTAV: We'll have, let's see, at least four. Well, we have four right now.

MR. GARCIA: Four.

MR. SRIVASTAV: And it's going to go up as we get more busy in the spring. Might have ten, 15 people at one time, maybe more.

MR. GARCIA: On critical issues, are you going to prioritize the work or is all this work going to go on at the same time?

MR. SRIVASTAV: No. We are prioritizing.

MR. GARCIA: Are you going to give us a list of priorities --

MR. SRIVASTAV: Yes.

MR. GARCIA: -- starting human health dangers that are mentioned in here and health dangers from buildings like

what we were discussing, Brian, 301 and 360, to people that are already working here that we have to also consider their health and their safety while they work on base?

You know, those are two of my priorities, but we need to set up priorities of how we're going to protect the people that live around the area, the people that work in the area and these high concentrations that we're talking about because you're going to have to deal with all of that first.

That's just my idea. Because we need to deal with all of that because we have a massive amount of work to do.

And also, Mrs. Abbott, I want to mention to you that since we've undertaken this big project and we have a lot of things to consider or a lot of things to review, every six months is not going to be good enough because we're going to have to come three or four times a year and get update reports to see how everything is going on because this is a massive undertaking and we need to spend some more time monitoring it and make sure that everything goes right and see what we can do to help. I have --

MR. SRIVASTAV: May I address --

MR. GARCIA: Go ahead.

MR. MARTINEZ: Mr. Arzola?

MR. ARZOLA: And I concur with him on the issue of public safety. And also another one of my concerns is as you gear up the hiring process, how many veterans are you going to

hire? How many community folks are you going to hire?

I work for the Texas Veterans Commission and there's a lot of our veterans who are unemployed that live around here. So are you going to have some kind of performance measures, some kind of goal that X number of your workforce, a certain percentage is going to be veterans and for the community at large? Here, around here.

MR. SRIVASTAV: As you saw, a lot of this work is highly specialized.

MR. ARZOLA: Right.

MR. SRIVASTAV: So it all depends on what -- if you can find locally people who are qualified to do that kind of work, we'll certainly go for it. What we are looking for -- and we do have our -- our own that the government -- our own small business goals that the certain amount of work --

MR. ARZOLA: Right.

MR. SRIVASTAV: Of the -- what we are getting, a certain percentage we have to award to small businesses or small disadvantaged or veteran-owned.

MR. ARZOLA: Right.

MR. SRIVASTAV: We have specific goals. So that that's what we plan on meeting --

MR. ARZOLA: Okay.

MR. SRIVASTAV: -- by hiring businesses that are qualified under those categories. So that's how we plan on

meeting those and helping out those -- those categories of small businesses and so on and so forth.

MR. ARZOLA: I can -- I can assure you that I can find veterans that are highly specialized.

MR. SRIVASTAV: Oh, I'm sure. I'm sure there are.

MR. ARZOLA: Okay? So I encourage when you do start to hire, you can contact me and I can -- I can put the whole word out within the San Antonio area. So -- and you answered the other question. You're the primary contractor which means that you got to subcontract some of the work out; is that correct?

MR. SRIVASTAV: Yes. Things that we don't do in-house will be subcontracted.

MR. ARZOLA: Okay. Thank you.

MR. SRIVASTAV: So the injections, for example, as I was telling you about that's a huge subcontract.

MR. ARZOLA: Right.

MR. SRIVASTAV: We don't do injections ourselves. We hire people to bring the instrumentation. Yes.

MR. ARZOLA: Thank you.

MR. SRIVASTAV: To answer your question, sir, you're talking about protecting the public. At this point, with the measures that are in place, the remedies that are in place, the land use controls that are in place, I don't believe anybody is being exposed to these contaminants. Is that fair

to say, Paul?

MR. CARROLL: That's fair.

MR. SRIVASTAV: Groundwater is not being used. The vapors I mentioned, I mean they're very low levels but they're being treated, extracted and treated. So in terms of the a how we are going to prioritize, our priority is based on the site that we are going to close. Okay?

So there are ten sites we are going to close so those are the one we need to hit first. We need to have enough time for this stuff to be in the ground to be -- to be remediating. But this is happening within a few months so it's not like the other sites will come two years later. All this is happening within the next year, stuff that's going through the ground. So it's not a huge amount of time that we'll necessarily require a priority, a concern.

MR. GARCIA: Because I lived here in this area 55 of my 59 years and we have been exposed to --to this danger to humans, danger to the workers, and there's lot of people, like my father who died of cancer from using all these chemicals, I mean aircraft and stuff, and we're finally going to put a stop to this. First to the public danger, second to the danger to the community and third to the danger of people like Brian that work here. We need to set up a priority so we can cut the danger first and then get into around it and get into everything else. Because we need to protect human life first.

That's our priority.

And we -- that's the first issue we want to get across, protecting human life is our number one priority. Or mine is. Because that is something that has to be done first. I've been through too much not to respect humanity --

MR. SRIVASTAV: I understand. And that's --

MR. GARCIA: -- while serving in the Marine Corps and I -- I take human life very special, especially to the children that have schools around here, that live around here, and we need to make sure none of these chemicals provide any danger to these children, all of them. Elderly people that are sick, dying from liver cancer and this and that because they've been exposed to all kind of contamination, especially these Kelly workers.

And also I want to bring up the issue of any air contamination. What happened to the AACOG study? Have we gotten an update on the AACOG study on the air contamination around Kelly? I want to see something if -- if that study is still going on. If not, let's get it started again and see if the air operation they have now and the Lackland annex over there from the Air Force is causing anymore air contamination than when it was as bad as when Kelly was here because we have a lot more issues, more health issues to cover, air pollution issues to cover, human health issues to cover as well as contamination issues to cover.

MR. CARROLL: Rodrigo, is that -- that ACOO study?

MS. POWER: AACOG.

MR. GARCIA: AACOG.

MS. POWER: Alamo Area --

MR. GARCIA: Alamo Area Council of Government. That was before you came.

MR. CARROLL: Okay.

MS. POWER: We can talk.

MR. GARCIA: She can -- she can brief you on it.

MR. CARROLL: I was going to ask --

MR. MARTINEZ: Are there anymore questions from members of the RAB of either the presenter or Mr. Paul Carroll?

If not, you had a question, sir.

MR. OROZCO: Yes. The tetrachloroethene and trichloroethene that was found in the groundwater, what was the source? Where did that come from?

MR. SRIVASTAV: It had -- these compounds are typically being used as solvents, degreasers. They are quite common in a lot of the Department of Defense sites. So just think that if any time they removed grease, they used either trichloroethene and tetrachloroethene. And without knowing which specific site you were asking about, that's probably what the source of that would be.

But that's where they typically come from. They're

solvents.

MR. OROZCO: In the operation of groundwater treatment plants, how many water sources does Kelly have?

MR. SRIVASTAV: Water sources.

MR. OROZCO: The water source here at Kelly. Do we only have one source or do we have two sources? You mentioned two.

MS. POWER: I think you need to clarify that this is not drinking water.

MR. OROZCO: What?

MS. POWER: This is not drinking water that we're talking about.

MR. OROZCO: Okay.

MS. POWER: There is a drinking water source which is water wells that are in the Edwards Aquifer, but the -- the groundwater that Praveen is discussing is actually very shallow and it is not being used for any sort of drinking or agricultural purposes.

MR. OROZCO: Okay.

MR. MARTINEZ: Could we have your name for the record.

MR. OROZCO: Roy Orozco.

MR. MARTINEZ: Roy Orozco?

MR. OROZCO: Yes.

MR. MARTINEZ: Any other questions from any member

of the audience? All right. We then go to the next -- thank you, sir.

MR. CARROLL: Thank you, Praveen.

MR. MARTINEZ: The next item on the agenda is Paul. Suggested agenda items for the next meeting of the RAB.

MR. CARROLL: First of all, I'd like to thank all the RAB members and member of the public for attending tonight. We appreciate having a good crowd tonight.

Also I want to thank Paco and the Port for graciously letting us have this meeting place. This is a very nice place. We appreciate that. Thank y'all.

MS. POWER: I appreciate it.

MR. CARROLL: And also Rachel Fish, Armando Perez and Laura Guerrero-Redman who helped set up a lot of the things. They set up these meetings. They're our PAPIs. They do an excellent job of making sure that we have everything that we need for these meetings and these meetings go smoothly. So thank y'all.

And Shaw, thank y'all for your presentation. Appreciate everybody's attention. I know we ran a little bit late tonight. Sorry about that, but I think it was very productive and y'all asked some good questions.

Okay. Now, on to my topic. The next RAB meeting is scheduled for -- when is it?

MR. MARTINEZ: April 10th.

MR. CARROLL: April 10th. 10th of April, 2012. And I'm taking agenda items for the next meeting.

MR. PEREZ: No special events during that time?

MS. ABBOTT: Too bad.

MS. POWER: It's pre Fiesta.

MR. CARROLL: It's pre Fiesta.

MS. POWER: It's pre Fiesta.

MR. PEREZ: What I mean is be careful on, you know, the conflicts.

MS. ABBOTT: One night. One night.

MR. PEREZ: One night. Okay.

MS. ABBOTT: One night. We can do it one night.

MR. CARROLL: We can all go to pre Fiesta after the RAB.

MR. SKROBARCEK: You're looking for agenda items?

MR. CARROLL: Yes.

MR. SKROBARCEK: So it seems as though the technical approach, a lot of it had to do with those biowalls, if we can get more information regarding that as far as what they look like underground, that kind of stuff and a little more information on that. I think that will be helpful.

MR. CARROLL: Okay.

MR. SRIVASTAV: We can do that.

MS. POWER: They're not only using biowalls, they're using some of the concentrates. Do you want to see details on

each of the three techniques that they're using to treat groundwater?

MR. SKROBARCEK: Correct. And if there's any considerations that have to occur. You know, will a biowall foul out a PRB, those types of things. That was one of the questions asked in one of the previous RABs.

MR. SRIVASTAV: We can have one of our experts give you information on that.

MR. SKROBARCEK: I think that will be helpful.

MR. CARROLL: Rodrigo?

MR. GARCIA: I want a RAB discussion on having more meetings so we can further monitor the work that Shaw is going to do.

Second, I want to put that we need a -- one -- they got six months to work on it, to put a plan, prioritized plan or a rating system on what is most important, what is least important and what we need to tackle on first and, you know, so on. A rating system or a priority system to see what we're going to tackle on first with Shaw.

And also I'm still very concerned about we have cleanup contamination, cleanup of Leon Creek and all of this, but I'm still concerned about the high levels and I want to find out if somebody can tell us if there are other sources that are causing this and whether -- who could give us a study on that.

Because I'm still concerned about some of the -- you know, some of these -- you know, we have all these remediation things going on on Leon Creek, but still there's some places where they do not -- have not gone down. And -- and where is all that new kind of stuff coming from? Why are there still signs over there at Highway 90 saying that the fish is contaminated? Why is there still a lot of contamination on base?

You know, we expect it to go down after they start working on it, but there are other sources that are going to continue that's going to set them to wonder, How come I've got all this effective cleanup going on on Leon Creek, but the levels won't go down? We need to know more about what's causing some of these levels to stay up so high and what is a health impact of Leon Creek also.

You know, there's still a lot of -- in my mind there's still a lot of unanswered questions on Leon Creek and I'm very concerned about the danger to the public and the high levels and why they won't go down and a lot of other things, you know, as well as other health issues.

And the air contamination issue, I would like to see something reported on the air contamination issue and the status report on the health issue. What's going on with the health issues? Do we got anymore health studies going on? Who is going to fund them? And will Metro Health take up

anymore health issue studies and how we're going to fund them and what the status of the community's health on all of this.

You know, there's so many unanswered questions that we still need to deal with. That's how come I recommended to Mrs. Abbott that we set up more than two times a year, maybe three or four. Because, you know, besides Shaw we still have a lot of unexplained issues that I feel we need to deal with.

MR. CARROLL: We'll be briefing -- you had a lot to say there. We'll be briefing Shaw's progress between now and the next RAB. They'll be out in the field doing some work so they'll have some progress to report there.

We will brief, you know, what we can of what you recommended that's in the purview of this RAB. As you know, we said before and we'll continue to say, there are several things that aren't in the purview of this RAB. What we're interested in getting the word out is what we're doing to clean up former Kelly Air Force Base.

MR. GARCIA: You know, if some of the issues I brought up are not in the realm of the -- the actions of the RAB, then I would like to know what they are so I can take them off -- take this up with the Justice Department or somebody else that these issues aren't covered by the RAB.

I want an independent investigation without Air Force influence to find out what in the world the Air Force is doing about this. If they're not, they're doing anything

about the issues that are not in the -- in this realm of the RAB because somebody has to get on the Air Force, whether it be the Justice Department or public law firm or somebody like Erin Brokovich or somebody is going to have to do something about all of this.

MR. CARROLL: Well, I'm not saying the Air Force is not going --

MR. GARCIA: Because, you know, I'm just very --

MR. CARROLL: -- to brief what we're doing --

MR. GARCIA: -- disgusted after 20 years --

COURT REPORTER: Excuse me.

MR. CARROLL: Sorry.

I'm not saying the Air Force is not going to brief what we're doing in the cleanup program. We are going to do that.

MR. GARCIA: Yes, I understand. But I just want you to make the Air Force aware of what I said and maybe they might want to get -- elaborate further on a lot of the issues that I have brought up besides just the cleanup.

MR. MARTINEZ: Mr. Perez.

MR. PEREZ: I'm not here to break his momentum because I believe in what he's speaking of. But since I'm in the cover -- we're covering creeks now, as you probably know that -- even the federal government is helping and so on -- for the good of all.

But in time, I would want them to check up north, the city up north, and to see where that so-called contamination is coming from. I remember when we -- you had to have these discussions and so on, but Air Force couldn't continue checking further north for the simple reason that they did not have jurisdiction to the areas. But -- but he's got a very good point, too. You know, but -- but still --

MR. CARROLL: Yes. It's --

MR. PEREZ: -- we need to get it done.

MR. CARROLL: It's y'all's community. You know, you live here. You have concerns over the whole area.

MR. PEREZ: Yeah. We need to -- we need to start from -- hopefully we can get to the source because -- you know, but he's got a good point, too, that he wants to see that everything is clear, you know, in the long run.

MR. MARTINEZ: Any other suggestions from any other member of the RAB for items for the next RAB meeting?

MS. ABBOTT: The Semiannual Compliance Report, is that going to be ready for the April meeting?

MR. CARROLL: Yes. The next round of that will be out. It will be the -- there will be a shorter report next time and it will be on the three RCRA sites and then some on Leon Creek also. So we'll have time to report Shaw's progress, what we're doing, things y'all asked for and then the Leon Creek -- I mean the Compliance Plan Report. Okay.

MR. MARTINEZ: Okay. Thank you.

The last item on the agenda, I've been asked to make a brief report pertaining to access to the Air Force Real Property Agency staff in Building 171.

What this basically means is that that facility now has the same level of security as an active base so the members of the RAB, community members and everybody else, general public, of course are invited to come to the Air Force Real Property Agency office. You are simply requested to make it known that you would like to visit 24 hours in advance so that a procedure is initiated and you are provided with a visitor's pass.

So it's basically that simple. Just give them 24 hours advanced notice and you will be able to gain access to the staff as you have before.

Armando, anything that you would like to add to that.

MR. ARMANDO PEREZ: No. You pretty hit on all that. And our slides, you'll see our contact information. If you would e-mail us and call us within 24 hours, we'll be able to inform the security guards at the gate that you are allowed access to our building; however, we're located at entrance two. You'll see the signs on the building. There's entrance three, four, five. We're right in front of entrance two. If you find a parking area, if you can in that area, we'll be

able to accommodate you, meet you out there and you'll be able to meet with us.

So this is just a security for the people in the building, as opposed to the security in an active base. So if you would just give us, you know, that amount of notice, we'll be able to accommodate and let the security guards know that you're on your way. Okay.

MR. MARTINEZ: Thank you. Ladies and gentlemen, members of the RAB, we have covered the agenda thoroughly. Unless you have any other questions, we are done for the evening. Thank you very much.

STATE OF TEXAS)

COUNTY OF BEXAR)

I, Gina K. May, Certified Shorthand Reporter in and for the State of Texas, hereby certify that this transcript is a true and correct a record as possible, transcribed by me through computer-aided transcription.

I further certify that I am neither counsel for, related to, nor employed by any of the parties in the action in which this proceeding was taken, and further that I am not financially or otherwise interested in the outcome of the action.

WITNESS MY OFFICIAL HAND, this the 5th day of December, 2011.

/s/ Gina K. May
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