CHANUTE AFB
ILLINOIS

ADMINISTRATIVE RECORD
COVER SHEET

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STATE OF ILLINOIS)
) SS
COUNTY OF CHAMPAIGN)

BEFORE THE

RESTORATION ADVISORY BOARD

IN RE: CHANUTE AIR FORCE BASE)

PUBLIC MEETING HELD

May 7, 1998

Aviation and Development Office
One Aviation Drive
Rantoul, Illinois
7:00 p.m.

Affirmative Reporting Company
1478 Glenn Drive Decatur, IL 62526
(217) 875-1414 (800) 886-DEPO FAX (217) 875-1472

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TRANSCRIPT OF PROCEEDINGS

MR. VIRLON SUITS: You should have a copy of this in front of you. I hope we didn't run out. We probably came fairly close to having not enough copies, but hope you do have a copy in front of you.

I do welcome you. Just in the matter of introductions here, I always get myself in trouble doing this, so I guess actually, Dean, we'll start with you. Just introduce yourself. Go right down the line. We'll take enough time to do this.

MR. DEAN WILLIAMS: My name is Dean Williams. I'm from Jacobs Engineering. I'm just here to observe.

MR. MIKE WILLIAMS: My name is Mike Williams. I'm with Jacobs Engineering also. I'm specifically working on the FTA-02 and -932 projects at Chanute Air Force Base, and a few others.

MR. RAY BOUDREAUX: There is no Chanute Air Force Base.

MR. MIKE WILLIAMS: The former Chanute Air Force Base.

MR. BRYAN RUNDELL: I'm Bryan Rundell. I also work for Jacobs and am Department Manager for the (inaudible).

MR. JIM SKRIDOLLS: Jim Skridolls. I'm the Program Manager for Jacobs' work here at the former Chanute Air Force Base.

MR. RAY BOUDREAUX: Good, Jim.

MS. ANNE WALKER: Anne Walker, Quality Institute (inaudible).

MR. DAN BRADY: My name is Dan Brady. I'm the AFCEE Field Engineer here at Chanute, the former Chanute Air Force Base.

MS. CHRISTINE OLGUIN: I'm Chris Olguin. I'm the contracting officer with AFCEE for the former Chanute Air Force Base.

MS. MARY UREY: I'm Mary Urey. I'm here to observe.

MS. SYLVIA CROWEN: Sylvia Crowen, AFCEE Team from San Antonio.

MR. RON PORTER: Ron Porter from the Human Systems Center in San Antonio.

MR. DREW RAK: Drew Rak. I'm a toxicologist with AFCEE, and I work for Sylvia.

MR. JEFF VILMAN: I'm Jeff Vilman with

The Environmental Company. I'm the Project Manager for what's called the "Seven Sites Remedial Investigation."

MR. CRAIG THOMAS: I'm Craig Thomas. I'm a geologist with USEPA.

MR. CARY WARE: Cary Ware with the Illinois Department of Public Health, Champaign (inaudible).

MS. LORRAINE WIRGES: Lorraine Wirges, Rantoul Garden Club.

MR. VIRGIL KRONE: Virgil Krone, Environmental Engineer, Chanute.

MR. GARY SCHAFER: Gary Schafer, USEPA Project Manager.

MR. RAY BOUDREAUX: Ray Boudreaux with the City of Rantoul.

MR. FRED RAUCH: Fred and Barb Rauch, residents.

MS. JACQUELINE FOTHERGILL: Jacqueline Fothergill, resident also.

MR. STEVE NUSSBAUM: Steve Nussbaum, Illinois EPA.

MR. VIRLON SUITS: Thank you very much. The last time, we had intended to say something to

this group here about risk assessment and how those procedures were done. We didn't have a person here at that time. So I guess actually between the time we put out the mail or sent out the mail and we printed the agenda, we took that off. We do, in fact, tonight have someone who is able to address that.

And I guess at this point I would again call on Sylvia Crowen as Team Chief to go ahead and introduce the person that will be doing that for us. Sylvia...

MS. SYLVIA CROWEN: Yes. We brought with us from San Antonio both Drew and Roy... or Ron, I'm sorry, Ron, to present to you risk assessment. And you know basically what it is, what it means. So feel free to ask them any questions. They do have handouts that they will be giving to each of you.

MR. RON PORTER: My name is Ron Porter again. I work for the Air Force and Air Force Base and I work for the Surgeon General. Drew and Sylvia work with Civil Engineering. And Drew and I have similar jobs, only Drew's reporting chain goes up the side of the house where risk assessment is

used to develop cleanup goals as to evaluate a site and see if there's a risk at that site from exposure. And then the information that's generated in that risk assessment is used by the cleanup team to choose remediation technology and then implement that technology with the funds that are available. My side of the house works more with some of the other agencies like Departments of Health in states and Agency for Toxic Substances and Disease Registry. And these folks are more into the public health assessment activities. And not only do they look at baseline risk assessments and the information that comes in as part of a remediation project, but they also collect information from local health agencies, those people who interview residents who live nearby. They interview activists and other stakeholders in the process. And they try to take a more global look.

MR. DREW RAK: Just briefly, what's getting passed around is a glossary of risk assessment terms. So if there's some group of words that... We tend to be very colloquial a lot of times. The other is a full set of slides. We

will not be using all the slides that are in that set. But all the ones we do use are in there.

And then lastly is a handout that we borrowed from EPA. It's from Superfund Today publication, and it's entitled "Focus on Risk Assessment." And I think it provides an excellent overview of Superfund risk assessments. So those three items are going around.

Thank you, Ron.

MR. RON PORTER: Sure. And my presentation is designed to be an interactive presentation. It's one that has sort of developed over the last 5 years as we've been invited as representatives of the Surgeon General to go out to bases, and brag bases as well as active bases, and to talk to groups like this, Restoration Advisory Boards that are not quite sure in some instances what their job is. They understand that they're there to represent the community. And most of them have some concerns of their own about where they live, and maybe they have a history, some knowledge about some of the activities that occurred on the base. And they want to know about how the risk from those activities is evaluated.

So we have developed this to go out to the community and say "Here's the way the risk assessment process works." We try to do it in terms that lay people can understand, because in the Federal Government we use lots of acronyms and big terms and then on the scientific side we also use a lot of big terms. And we try not to talk down, but to use language that is easily understood.

And then lastly, to give you some information from our experience, some information about where you fit into the process, what is it that the Restoration Advisory Board is allowed to do and is maybe directed to do by the establishment of that group.

To get some just basic terminology out of the way, what is "Risk"? It's the probability of an adverse outcome. And "adverse" is the key word there. Risk inherently includes some adverse outcome. For environmental risk, generally we're talking about that adverse outcome is an adverse health effect. And that could be applied both to the human side and it also can be applied to the ecological side. Or there are inputs to the bugs

and bunnies that will be exposed to the contaminants at a particular site.

The National Academy of Science was charged to develop a method to do risk assessments. And back in the '80s they came up with a book, it's called "the Red Book," a little small guy, and its title includes the words process for doing risk assessments in the Federal Government. And that was a long time before EPA got involved with these cleanup sites. EPA took that Red Book and EPA developed their methodology for doing risk assessments. And that's basically the same methodology that you'll see in the products that come out of the cleanup program here at the former Chanute Air Force Base.

Here are the things that we know we have to look at. The nature and the amount of hazard. What is the "Hazard"? Is it a chemical? Is it a physical hazard? Could it be radiation, some of those other things? Could it be a safety hazard? And then, what is the amount of that hazard? Is it a very high concentration in certain areas or is it a very low concentration spread out over a large area?

Also from EPA we get most of our information about what the expected health effects are. If I find lead at a site, I can go to a document published by EPA and I can look up "Lead," and I will see a number that EPA has determined as a cutoff number, a screening number. And if the lead concentration is lower than that number, then EPA, in general, will say "Well, that's probably not a hazard." We need to spend our time and our resources on other chemicals that might exceed some screening values.

We also look at characteristics of exposed population. Kids, pregnant women, healthy adult males that are in a work place environment, in an industrial environment. Why do we do a risk assessment? These are the reasons that sites are identified for risk assessments. Because we have some historical information about something that took place at that site, either accidentally or on purpose. On that site there was a spill. That was an accident. Or on that site we had some sort of process. The Air Force cleaned equipment there. And from that cleaning of equipment it generated metals or organic contaminants or something like

that. And so we know that from history that there was something that happened there and we need to check and see when we stopped that activity and cleared that property, if there is some risk that's left over.

The baseline risk assessment looks at the site, and that's what occurs in the remedial investigation in the RI. The baseline risk assessment does the evaluation, and it tells you what the risk is if we don't do anything. We can go out to this yard out here and we can do a baseline risk assessment. There's some prescribed methods that we follow about sampling. There are some prescribed methods that we follow about the analysis of those samples, where we take the samples, how many we take. And then we calculate the risk. We use numbers from EPA. We make some assumptions about exposures, and we calculate the risk. That's the baseline risk.

Now we hand that information over to the CE guys on the other side, the Risk Managers, and they determine what to do about it. How do we mitigate this risk? Or is this a risk that needs to be mitigated. If it's 10 feet under this grass,

there may be a risk if you crawl 10 feet under the grass. But as long as it's buried and has grass growing on top of it and it's the type of chemical that doesn't move around, then there's very little risk. You could dig it up, you could spend a lot of money digging it up and move it out of the way. But if you're doing that, you're taking money away from maybe another site on your property that might need a quicker response.

This is just our general remediation flowchart for the circle process for the cleanup process. You probably maybe even know what those acronyms up there are for. The remedial investigation, feasibility study, and some work that Drew and I have been doing. These are the places where we've identified, that we have identified that are opportunities for risk assessment. This baseline risk assessment that we do in the RI, in the feasibility study we're looking at this level of contaminant here, and the engineer now has to make a decision about is there a method out there first that I can use to clean it up? And if so, do I have the money to do it? If there is a high risk and I don't have the money to

do it, then as a Risk Manager I've got to go out there and get that money and clean it up.

Questions so far? Interrupt me if I'm going too fast. I've got more than I should try to cover in the length of time that I have. But stop me as we go.

Here are the steps in the risk assessment process. And it goes all the way back to the early (inaudible) when the National Academy of Science said "This is the way the best scientists in the United States and Canada thinks we should do risk assessment."

Data collection and evaluation. And I'll briefly describe each one of those. Exposure assessment and the toxicity assessment. And notice that these two guys, they can occur at the same time. It's not that linear process. We can do exposure assessment and the toxicity evaluation at the same time. At the end of that process I probably have a number. Engineers love numbers: "Give me a number. If it's above it, I'll do this. If it's below that, I'll do that." But I have a number now that I need to put into some context. How comfortable am I with that number? I

have to tell the engineer that "Yes, I've got this number. But, you know, I really don't know how much time people spend on this property." I made some assumptions about that, and I may have made assumptions based on some statistical package I saw or some research project that evaluated people's time on the flights.

So I tell the Risk Manager, the engineer that's responsible for the cleanup, "I have this number. I'm very comfortable with it because the data I have is solid. The toxicity data is solid. The exposure data is solid. The concentrations, I pretty much know where the contamination is. And that's a good number." So that's good for the engineer.

What's bad for the engineer is I'll give him a number and it's really soft. "Here's the number that you wanted, but I'm not too crazy about the numbers that I got for the toxicity." I'm not sure that we're actually looking at the right chemical for toxicity. I know that it's a solvent. But I couldn't find any good data on this solvent, so I substituted something else. Something that's kind of like it that may act like

it. But I don't have good data. And that's the information that the Project Manager needs to know to strengthen his decision-making process.

To data collection, these are made-up numbers. Please don't assume that those are the former Chanute Air Force Base numbers. I think they were numbers somewhere like in California. And this is the historical record of sampling from a sampling well for truckload ethylene. So you can see back in '89, August/September, we had some pretty high hits. Now we sampled monthly, down here in December, and we've got pretty low numbers. Well, a couple, there can be a couple of reasons for that.

Back in July, July through September the methodology that I used to measure TC and groundwater might not have been that great. Because these methods are developing every day, the technology is getting better. So I may have, I may be able to see it more clearly. And that's maybe a hard analogy. I'm more confident in the analysis. It could go the other way, too. The numbers can be higher. The technology can get better and say what we were measuring earlier is actually lower than

what we saw.

So we look at what did Chanute do? Was Chanute ever a sack base? Did it do training stuff? We can sort of look back through the history and say Chanute did this for the first 10 years and then for the next 30 it did this, and it gives us an idea of the activities that occurred at Chanute. And then we can sample for the things that we know are related to those activities. We look at old aerial photographs. The corporate memory is very important. If I go to a new site, I try to find the oldest guy that works at CE, that's been there 45 years, because that guy can tell you "I remember back in the 40's, we did this over here. I remember that we used to have a landfill over here."

And we found a lot of stuff that way. We found old wells. We found lots of stuff talking to that guy who has been around a long time. The blue suiters may not be your best source of information. They've got the books; they look through the book. But they don't have that on-site history that a lot of folks will have, the sampling records, the emergency spills. The public source,

also you go to the newspaper. It says we had a plane crash at this site in 1949. Well, that may have escaped, you know, our collection of information. And we need to go out to that site, do some sampling and say "There's nothing here" or "Maybe there is something here that we need to look at."

And so at the (inaudible) of our data collection step, that very first step, I now have identified sites. I've gone over the base with a fine tooth comb. I've talked to everybody I can. And now I have a list of maybe a hundred sites that are potentially impacted. I also have a list of chemicals based on the activities. Whether the spill? Was it a crash? What occurred there? I know which media or what are contaminated. By "media," I mean is it surface water? Is it groundwater? Or is it soil? Because I know that based on what it was the physical and chemical characteristics of the compound. If it's TCE, I know that it goes through soil pretty readily. It goes into groundwater and hangs around for a long time. If it's some other metals, it may not move as much. It's going to be right there in the

soil. And maybe my best bet is to come here with a backhoe, scrape up a couple yards of soil, and I'm done with that site.

That's all right. I know how high my concentrations are. And very important, I also know what I don't know, or maybe I don't know all of what I don't know, if that makes any sense, but I recognize it was data gaps. I don't have any information on this groundwater out here where I think there was some activity. So I need to get mobilized and get a contract on mine (inaudible) and get somebody out there to sample.

Exposure assessment is next. We can go ahead with that. And this is a real busy graph, I know. It tries to capture in one picture. It has the different media that we look at and the different pathways. So I've got this industrial activity out here. I see some air contamination coming out of that stack. It looks like it's fallen on. It has the ground there. And I've got kids playing in a sandbox. So I've got some sort of... Something raining down out of the air. Here's's something that looks like I've got some off-gassing there, and I've also got some

groundwater contamination in the stream. And here's Old John out here. He's been fishing in this stream for, it was the last 30 years. He's out there catching that fish.

Depending on what that chemical is, not all chemicals will move into fish. Depending on what that chemical is, it could be something that might be in fish tissue and that might be something else we look at. So not only do we look at air and water and soil, but we also look at the other potential pathways. Can I be exposed through gardening? Can I be exposed through catching fish or killing deer? And then after I've looked at the potential ways that a person is exposed, I also look at the types of, the duration of the exposure and the frequency of the exposure.

If I'm an industrial worker and I work at a tire plant, there are going to be some industrial solvents there. Benzene is the one we used to use a lot in the tire business. And I'm going to be exposed generally speaking for 8 hours a day for 250 days a year. I get 2 weeks off for vacation. So that takes care of those other guys. It's 5 days a week. I have a pretty good idea about

that exposure. I also have a pretty good idea about the concentration of the exposure because probably that plant has some data about how much we used and what the temperature was and all those things that would affect.

Do I drink 2 liters of water a day? That's another. We've got some assumptions we make about how much people eat, how much they drink, how much they breathe. How long do they live in a house? That's an important one. You know, if it's a residential scenario, does a person in Illinois live in a house 30 years? Is that sort of the average? Or is it like some bigger cities where the average is like 3 years or 5 years? In the military it's like 7 years or 9 years. We did some assessments where we went back and went through military housing records because there were pesticides in the soils. Well, how long is a person exposed in this house? The military records showed us with pretty good clarity that the maximum time was 9 years and the average time was a lot less than that. Another busy slide. But these are the things we look at.

For a brag base, this is important. Am I

going to use this section of grass out here? Am I ever going to build a house on it? I don't know. I can't answer that question. Or is it going to be like this place, is it going to be a commercial endeavor, or is it going to be agricultural? Is it going to be turned into a park? And for each of these future land use activities there's a set of values that you plug into the calculation of the risk.

If it's residential, we assume that people are there for 300 and how many, 350 days a year. They also get 2 weeks' vacation. So if I live in this house, the number that EPA puts into that calculation of risk is 350, assuming you get 2 weeks off for vacation and you're not going to stay at home and mow the grass, you're going to go somewhere else.

Intake rates, you know, all of us drink 2 liters of water a day. Our kids ingest 200 milligrams of soil a day. Us adults ingest 100 milligrams of soil a day incidentally. You know, we work in the garden, we have hand to mouth contact, or putting our pens in our mouth and things like that. Those are the defaults that EPA

has out there for us to use. If those defaults... If we don't feel like those are really representative, if you're in a warmer climate. Drew and I come from San Antonio. And 2 liters of day is probably not appropriate. That includes coffee, tea, soft drinks, all that. We drink a lot more down there. It was 95 and like 90 percent humidity when we left.

So we've identified our sites, and now we're doing the exposure assessment. And here are the things that we... Here's the things that we have in hand when we finish the exposure assessment. We know something about the populations that live nearby. We have an idea about the physical setting, how much rainfall it gets and temperature and some of those other things. And we also know something about how much an individual is exposed to based on his time on-site and the concentration of the chemical.

I'll just spend the shortest time ever on toxicity because this is the one that we don't fool with too much because that's a number that's generated by EPA. And for somebody from the Air Force to say we don't agree with that number, EPA

would say "Well, let's put in a fund of $100 million and let's do the research and change the number if you don't think it's that good." So we don't do a lot with the toxicity stuff. What I will tell you about the toxicity is that the data is divided among those, between those chemicals that are either cancer-causing or noncancer-causing. And the assumptions that are plugged into the risk assessment are a little bit different for each of those.

To give you an idea... And most of our information on this toxicity stuff is from animals, right? It only makes sense. We've got some human data on some things where we have known exposures to a discrete compound, not a mixture. We've got some information on that. But for the most part, for most of the chemicals in the data base for toxicity, the information is rats and mice. And so they take an experiment, here's the health effect in the rat. And that health effect may be something only like watery eyes. That may be the effect they measure. And as the dose went up, as we increased the dose of this gas to this rat, his eyes watered more and more, or he was anxious, more

and more anxious they could tell. So they measured the levels. At what point did that effect start in the rat? And then they watch to see how that effect went up.

Now how do you relate that to the human? That's as hard as can be. You have to build in safety factors, times the safety factors. Depending on which animal you use and which exposure you use, it may be a thousand. So I take 1 as the number that caused the effect in this rat. It was just 1 milligram of this stuff. Well, then, in order to make it safe for a human, I have to divide it by 1,000. That's the way EPA has chosen to arrive at a number from animal data that they presume to be protective of human. That's important for you to understand, I think. Most of the data is in animal data. And all of that business that I talked about earlier about how certain amount (inaudible), that information is available for us, too. This is a real strong number. We feel like the number for Benzene is a good one or this number is a little softer.

Yes, sir.

UNIDENTIFIED SPEAKER: I just want to

add, you said 1,000. Most numbers are between 10,000 and 30,000. So you take a safe dose for a rat, you divide a minimum 10,000, a maximum of 30,000.

MR. RON PORTER: Because it's a factor of each, I'm going from a rat to a human, and that's 10. I expose the rat orally. I expose the rat orally, but I'm looking at some other input that's another factor. They just keep building in these, dividing by these factors of 10 until they arrive at a dose that they think is safe for humans. And then finally, which at that point, as I mentioned earlier, I've come up with all I can do or the person that's doing that risk assessment now has a number for this site for this chemical, for this exposure root, for this future use of this land, and I hand it to the engineer. But I need to add those qualifiers in there that let him know how comfortable I am with the risk assessment. So I give him something.

Yes, sir.

UNIDENTIFIED SPEAKER: On toxicity, I think it's very important to indicate for a hazard and history for nontoxicity.

MR. RON PORTER: That's right.

UNIDENTIFIED SPEAKER: I really hate to leave these people with an idea that there's a threshold effect.

MR. RON PORTER: I think there is.

UNIDENTIFIED SPEAKER: You may think there is, but we're not allowed to do that.

MR. RON PORTER: I understand. And I will... Let me put that graph up there. And I didn't mean to slight that in any way. There it is. What's the obvious difference there in that? It goes to zero. The thinking up until this year, the philosophy, or maybe the political stance up until this year has been that a molecule of a cancer-causing substance can cause cancer. That's the EPA philosophy. So no matter where this curve started in this experiment as I showed in the other, they draw that line through zero. So they're saying that if you go out into the sun and you're susceptible to skin cancer and you get one UV radiation, whatever that packet of energy is, it can knock off a molecule and affect your DNA and you can get cancer from that.

We now know though based on some research

that for some chemicals there's a threshold. Probably for TCE there's a threshold because, because it doesn't affect the DNA. It controls something. In fact, it affects something else that controls the DNA, the repair mechanism or something. If I was misleading, I didn't mean to be on that.

UNIDENTIFIED SPEAKER: Well, it's just important to educate the people on the two ways we do this. One is a non-cancer health effect and one is (inaudible).

MR. RON PORTER: And the bottom line of this... He's exactly right. The bottom line of this is these are not things that we really debate. We take what the State of Illinois says is their cancer slope factor or noncancer comparison value or what EPA says. That's just what we do. And that's what we're allowed to do by our risk assessment philosophy.

Now the Risk Manager is the guy that's got the tough job. I will not... The Risk Assessor, our jobs are easy. The Risk Assessor's job is easy compared to the Risk Manager. Because now he has to take this number or series of numbers

and has to make a decision about "Where do I allocate my money? How do I rank these sites? How do I address maybe some contamination that we don't have the technology to really clean it up effective? I can pump groundwater and treat it, but I don't get a lot for my dollar in a lot of places. Once I get down to low levels of contamination there, I don't get much in my opinion."

Go ahead, Drew. I won't say a lot about this except that for the cancer, and this gentleman brought up this cancer stuff, this is one of these things that we have trouble reconciling. And these are background levels of cancer. And I've been to communities all over that say "I know four people on my street that had cancer. My mother died of cancer." And those things are all true. Those are not falsehoods. The fact is that 1 in 4 deaths results from a cancer, all causes. I heard a statistic on cancer from environmental exposure. It was... Do you remember, Drew, what it was?

MR. DREW RAK: (Nodding negatively.)

MR. RON PORTER: No? It was low. It was low. No exposure, no risk. That's what I think

the end of that one was supposed to be.

Okay. Here is my summary. Risk assessment is an evaluation of potential human health and environmental impact from chemical exposure. Or other things. It could be radiation. It could be from chemicals that are in medicine. It helps determine which of the risks on sites need to be reduced or eliminated. And then it forms the foundation for the Risk Manager to make some decisions about which sites to do first, what types of remediation strategies to use for each one.

Is that the last one?

MR. DREW RAK: Yes, it was.

MR. RON PORTER: That was the last one. Oh, no, it's not. What did I do?

MR. DREW RAK: Oh, I'm sorry.

MR. RON PORTER: Those are the things that RAB members... These are not an exclusive list. These are the things RAB members have participated at other raps. They give us historical perspective. They remember things new people on-site don't remember. They also have that memory about potential exposures or know something

about landfills or some other sites that could provide an exposure. They help evaluate, especially on brag sites, what the future land uses can be. What are each of these parcels and buildings going to be used for? And that will directly affect maybe the money allocated, the risk assessment that's done on that site. Which sites are most important for you to get cleaned up first? Is it sort of that cost benefit thing? I can spend some money here and get some good value out of this site or I can work on this site for a long time and not have it available for use. Maybe that's your goal though. Maybe that site bothers you so much that you would feel better living near it if it was cleaned up.

And finally, the other thing is to share knowledge with the community. As RAB members you represent a larger constituency out there that knows what goes on in these meetings and what is going to happen in the future out here at the former Chanute. I wasn't going to do that one, Drew, but you forced me.

MR. DREW RAK: I'm sorry. It looks like you took it out.

MR. RON PORTER: Risk assessment is not a lot of things. As I used to be a hard scientist and now I'm a soft scientist, which means I used to do stuff that was pretty cut and dry. When I did my experiment, I got some numbers. I got something I could really put my hands around. And in the risk assessment business sometimes you can't really get a firm grasp on things and you have to build the end on these uncertainties that in your professional judgment will be protective of human health and environment.

That's all I'm going to say about that one. Thank you for your time.

MR. VIRLON SUITS: Any quick questions?

MR. RON PORTER: Sorry I took so long.

MR. VIRLON SUITS: No. It was informative. One of our goals of our advisory meeting is to go into more of an educational type of process, to educate the RAB membership as far as what we're up against and what we're doing. We'll try to get one of these at probably each and every meeting. And next time we'll have another one here. So...

MR. DREW RAK: If there's a specific part

of that 4-part risk process that maybe you would want us to come back in some more detail, we can do that as well. This is kind of the overview. Ron presented 4 boxes. And if there's one that kind of grabs people's attention, we can come back.

MR. RON PORTER: Drew and I are consultants to the Air Force, and our telephone numbers are on that sign-up sheet. If there's questions you're not comfortable in asking in a public forum, or if there's someone you might know who might not ask a question in this forum, we'll be glad to respond to those questions. If you're not comfortable with an Air Force person answering them, we can certainly connect you with our colleagues that work at EPA or in the states that would give you information I think that would help you understand the process.

UNIDENTIFIED SPEAKER: (Inaudible question.)

MR. RON PORTER: That discussion is in the handout, and I pulled it out. But you're right. The important thing... And I had that as a bullet at the bottom, and I sort of went over that quickly. It says "No exposure, no risk." In order

for there to be any risk from that chemical, it has to be available in the body at the tissue at which it affects. That sounds kind of complex. But the chemical, you have to be exposed to that chemical and that chemical has to be in the form in your body that causes the effect that for which it's famous, whatever that is.

So if you're not exposed to groundwater and there's something in the groundwater, there will be no effect. Or if you're not exposed to this soil out here and there's something in the soil, or you think there's something in the soil, there won't be an effect. That has to be complete. That pathway has to be complete. And I'm not sure where you wanted me to go with that.

UNIDENTIFIED SPEAKER: It's kind of like a fire triangle where you've got dots and fuel. The same thing applies to risk assessment. If you have a source, the containment, you have to have a pathway or a way for it to get to you. And then there has to be a receptor, you. You take away any one of those three, there's no risk. Because in order to have risk, you have to have all three.

MR. RON PORTER: And to finish that, an

exposure doesn't always result in the health effect. You know, it's not always "If I'm exposed, something is going to happen." Our livers especially have evolved over the years to protect us very well against all sorts of compounds.

Well, thank you very much for your time.

MR. VIRLON SUITS: The second item on the agenda is that of remedial action sites. I'm not going to dwell on that. We've covered this before. Most of the sites, once again, be reminded they're in the operable Unit 2. And specifically those items that we've been working on most recently are the landfills. Along those lines I have put on your agenda there because those are restricted areas. You will notice we have put up some signage. We are going to expand on that because of what we have certainly gathered in the way of data with respect to the landfills and then also with respect to the Fire Training Area and several of the other sites. We're not as much into the 7 sites yet at this point. But of those sites we are going to treat those with more, I guess the terminology would be "urgency." And from that standpoint we will be installing a fence for the

primary purpose of what I just said. We now have enough information to where certainly the fencing is appropriate and needs to be installed.

The sideline issue of that is that the weekend people that are here are getting very frustrated certainly with people driving through there and everything. So this will stop that flow of traffic. But we did want to bring that up to the community, that that will be happening here in the next month or two in the way of fencing in installation.

If there's any questions on that?

MR. RAY BOUDREAUX: Virlon, I think you and I should talk at some other time on that subject, if we can.

MR. VIRLON SUITS: Yes, we will. We have not talked on that yet. We have not established the exact lines or what.

MR. RAY BOUDREAUX: Yes, we need to talk about that. And if there's a hazard, of course we don't object to it being sealed off, but there may be some other ways we can do that besides a fence.

MR. VIRLON SUITS: With that as Agenda Item No. 4, which is Landfills Progress and Status,

I know what we had talked about in terms of length, Bryan. I don't know how innovative you are, but try to hit the real important parts. This is Bryan Rundell. He did speak with you last time.

MR. BRYAN RUNDELL: I'll go quick. I spoke with you last time. What I'd like to do is just give you an update on what we've done. We've collected some information. I think the last time I spoke about it I showed you some nice pretty pictures showing we did a geophysics survey, kind of looked underneath the ground and told us where the... And I'm focusing on the landfills. It told us basically where the waste in the landfills was deposited since we didn't have good enough historical records to say exactly where the waste was. I'm going to go over that. Field investigations that (inaudible). I will show you some of the data we've collected showing there is some contaminants we've detected in soils and in water in the landfills that are above published values that IEPA and EPA publishes.

And that kind of leads into what Virlon was saying, which kind of puts us into a situation where we probably need to take some action to

restrict access to these landfills. I'll try to go quick here. I'm just going to go right on into it.

The last time I spoke that we were going to do a CPT investigation. And what that was is it was a way to... Very similar to drilling wells ...it's a way to punch an instrument which measures the resistance as you push it down, and it tells the difference between the sand and the clay. And I think the most important thing we probably determine from that investigation using the CPT, and that's what this color map shows, it led us to a conclusion that we really didn't know at the time, and that is if there's a pretty thick sand unit underneath the area where the landfills are at OU-2.

If you look in here, these areas that are pink on the diagram, they show the sand unit is about 8 feet thick. And that's in your upper shallow unit, your Wisconsin till. And that's a pretty thick sand unit for that till, which means it makes a substantial amount of water. And when you do a risk assessment I was talking about earlier, you have to assume a future scenario for

groundwater. That's one of the things you do. You imagine somebody builds a house here or a company puts a building there, would they use this groundwater for drinking water or for industrial use?

Originally we thought that there wasn't thick sand units in this upper portion. And it's not the part of the geology in this area they normally use for groundwater. But based on this investigation you can see there's a pretty good-sized sand unit underneath the landfills. So it's likely this water in the future could be used as a groundwater source. So that will make us put wells in that and monitor it. And it's just something to know that I think originally in the other meetings you were told. And maybe there wasn't that much sand in the unit. And there is quite a bit. That is kind of the result of CPT. We found other things, too. There's a lot of clay out there. These areas that are white, we found no sand. But that's some conclusion of the investigation we did I think is important to present as knowledge. And I'll move on. I talked about...

MR. RAY BOUDREAUX: Give us a little idea how far down. 5 feet? 6 feet?

MR. BRYAN RUNDELL: It's about 15 to 20 feet down from the ground surface.

MR. RAY BOUDREAUX: 15 feet?

MR. BRYAN RUNDELL: Yes. I think an important thing about that is Illinois EPA has regulations where they designate where an aquifer is a Class 1 or a Class 2. The Class 1 means that that aquifer could be used as drinking water, that it has enough yield that would sustain a well in that unit. And it's likely that based on the thickness of that sand unit or its depth that it would probably be Class 1 in this investigation.

MR. RAY BOUDREAUX: At 20 feet?

MR. BRYAN RUNDELL: But it makes the risk assessment adhere to more stricter standards is basically what that means. And I talked about the weed. We did the geophysics. It shows Landfill 1 and 2. And I'll show you pictures of the landfills, they're basically random pits, we didn't see. It looks like they... Whereas Landfills 3 and 4 I'll show you the diagrams. You see very linear trenches. They had long basically cuts that

they made into the ground surface. They put the waste in there. A very systematic manner. And they were probably older.

And then the next one was filled, the next one was filled. And that is good information for us because it will give us an idea where to investigate. It also gives us an idea of how the landfills were used historically. And stop me. I'm going to go pretty quick because I agreed to save time here on some information. This is just a subset of the data that we have available for the landfills. But when I spoke, what we did is we collected these samples. This is Landfill 1. And you see kind of the pink areas? That's where we determined there was waste material when we did the geophysics investigation.

And then what we did at each location, we took a surface sample, a subsurface sample, we took a backhoe, dug into the ground, took a subsurface sample. Then if any water flowed into the trench, we sampled that material, too. And what we then did is we took those results and EPA, USEPA and IEPA they published values where they precalculated whether a certain contaminant at a certain level

would probably pose a risk. It's called "screening." It's not (inaudible), but it's a good idea to give you an idea if there's contaminants in that area that could pose risk to the human health or environment.

This shows one of the screening levels is TCLP, which is a record screening (inaudible). This shows on Landfill 1 here, you can see that we did exceed, this red area, you can't see very well, that that exceeded for lead. So at that location in surface soil we collected a sample that shows that it exceeded the TCLP risk level for lead.

MR. RAY BOUDREAUX: I bet there was skeet in there.

MR. BRYAN RUNDELL: Well, what's interesting... It's possible. But this is one of the furthest samples from the skeet range. So we're not sure where it came from, but it certainly exceeds the regulatory levels. It is a long ways from the skeet range. We are talking today, we have other theories about possibly where this came from. But it doesn't really matter where it came from. It exceeds TCLP levels. And I'll go through a few more of the landfills.

This is Landfill 2. Again, I'm focusing here first on metals that exceeded risk levels. We've got a sample down here which is in red right there. And this is in subsurface soil. And that also exceeded TCLP level for lead.

UNIDENTIFIED SPEAKER: What is TCLP?

MR. BRYAN RUNDELL: TCLP is what we use to determine whether it's hazardous waste or nonhazardous waste. It's called Toxicity Characteristic (inaudible).

UNIDENTIFIED SPEAKER: It basically is a calculation to show (inaudible). This is very similar to the test that we did for the lead in the playground. The leachability of the contaminants to get into the soil and get into the groundwater.

MR. RAY BOUDREAUX: The groundwater.

MR. BRYAN RUNDELL: Now this is a different contaminant. This is dioxins. Dioxins, there's different theories about how they form. And certainly they keep their form by incomplete combustion. Basically when you burn something, you can't destroy all of the material, the ash that is left. We know they probably did burning at these landfills. They threw the waste in the pits and

burned some of the material. And we did, we took the samples that we took in surface soil for dioxins, we screened them against the IEPA level. I think... I don't think it's IEPA. I think it's EPA.

UNIDENTIFIED SPEAKER: Yes.

MR. BRYAN RUNDELL: You can see on this one, all of these here that are in blue, yeah, in blue, those are above residential screening levels for dioxins. And that means that USEPA has determined, kind of based on what they spoke about earlier on the risk assessment, that a person who's exposed to these, using the standard residential scenario, assuming you lived on these landfills and were out there basically 350 days a year, that this is unacceptable risk. And that's what that shows. In surface soils you do have some contaminants out there right now that are probably unacceptable if a person was going to build a house on those in terms of the health effects from those.

MR. RAY BOUDREAUX: And we know we can't build a house on that landfill because it's in runway visibility range, so you'd never ever have that happen as long as there was an airport here.

MR. BRYAN RUNDELL: Right. But I think you do a real conservative comparison to get an idea what was out there.

MR. RAY BOUDREAUX: I agree.

MR. BRYAN RUNDELL: That would lead us to (inaudible). We don't want people walking on the landfills. We show here right now in the surface soil you could potentially be exposed to these contaminants.

UNIDENTIFIED SPEAKER: There's been no decision yet on what the remedy will be. We're far from that right now. We're trying to get there.

MR. RAY BOUDREAUX: We will have an opportunity to talk about what the land is going to be used for and those kind of things at some time when we start doing that remedy determination. Right?

UNIDENTIFIED SPEAKER: Actually on all brag sites, in this case the authority would be City of Rantoul. I'm sure several years ago to the Secretary of the Air Force for approval outlining their general concept for what portions of the base, if any, you want for residential, what you want for industrial, agricultural, so on and so

forth. That document, once that's approved by the Secretary of the Air Force, that is the guidance that the brag cleanup team uses in terms of looking at the various risk scenarios. Those are the reuse criteria.

MR. RAY BOUDREAUX: This is all industrial.

UNIDENTIFIED SPEAKER: We're looking... The reason we're looking at residential is because if, in fact, it was safe for residential...

MR. RAY BOUDREAUX: It would be safe for everybody.

UNIDENTIFIED SPEAKER: Then the Air Force to transfer to the City, you could do whatever the heck you wanted to it. If it's above residential, they need to put a (inaudible) before they transfer saying "No, you can't use if for residential," to deal with their liability, and that also addresses the City's liability.

UNIDENTIFIED SPEAKER: I would also point out in point of fact there's more than industrial activities going on. There are agricultural activities now that USEPA is going to assume are going to go on. There are also recreational

activities going on around here.

MR. RAY BOUDREAUX: That's right.

MR. BRYAN RUNDELL: Kind of flowing with that, this Landfill 4, this is dioxins. Landfill 4, this also is above industrial. In this case above residential levels and plus then it was higher than that in above industrial. So I think this is the only one that had dioxins and furans that we detected when we did the sampling that is above commercial industrial levels. I think this is the highest level that we found in dioxins and furans. It's not really important concentration. Basically once it's above the screening level, you know, you would in the, our report preparation, you do a full risk assessment. You consider this information.

But at this point we're trying to present the data just to show that there is stuff out there above published values that IEPA developed.

MR. RAY BOUDREAUX: What do those come from?

MR. BRYAN RUNDELL: This one, dioxins, like I said. There's some theories about how it's formed. It's probably incomplete combustion.

Probably burning.

UNIDENTIFIED SPEAKER: Plastics, like the plastic that have the ordinary compounds of the chlorine in them, you know, chlorinated solvents, things of that. You burn them, and generally you're going to get a dioxin.

UNIDENTIFIED SPEAKER: What about the furans? Same thing?

UNIDENTIFIED SPEAKER: It's having the chlorine there and doing the burning activities at lower temperatures. If you do it in an incinerator at 2,000 degrees, you don't have that formulation that you have when you are just doing it out in the open, open burning.

UNIDENTIFIED SPEAKER: You say this is Landfill 4?

MR. BRYAN RUNDELL: Yes.

UNIDENTIFIED SPEAKER: Where would that be?

MR. RAY BOUDREAUX: All the way on the southeast corner. Way, way out on the southeast corner, the intersection of...

UNIDENTIFIED SPEAKER: (inaudible).

MR. RAY BOUDREAUX: See that black spot

on the top center? That's J. B. Hunt's old building.

UNIDENTIFIED SPEAKER: So this is...

MR. RAY BOUDREAUX: The Gordon, all that wide space. If you look there on the west where it says "A" and "B," that's where the Art Gordon plats were.

MR. BRYAN RUNDELL: Landfill 4 is over here. It's over here. It says "A13." It's kind of in the corner of the base. I'll throw a few more of these up here.

MR. RAY BOUDREAUX: Is that stuff all going to the library now, so I can check it off?

MR. BRYAN RUNDELL: This information? Not yet. But I'm sure it will.

MR. VIRLON SUITS: What was the question?

MR. RAY BOUDREAUX: Is it going to the library?

UNIDENTIFIED SPEAKER: It's not in a published final document.

UNIDENTIFIED SPEAKER: It's also not in the form that the regulators have reviewed. You're seeing it almost right after we're seeing it.

UNIDENTIFIED SPEAKER: I saw it before Gary. This is the first time I saw it, today. So...

MR. BRYAN RUNDELL: This is... I wanted to show this one. Another contaminant that we detected in surface soils, it's actually a group of contaminant pH's. It stands for (inaudible). If you have diesel fuel, diesel fuel is a component, or it's a liquid that has a huge amount of compounds in it. And some of them are very heavy chain, what they call them, meaning that they tend not to migrate. Basically they have a lot of hydrogen and carbon. It's really not that important.

But these contaminants are typically left behind. They don't dissolve in the water very easily. They also are formed, too, we think, too, during burning possibly. And we commonly found these type of contaminants on the landfills under surface soil. Landfill 2 is a good example. You see all the red on here? These are all above our screening levels. There are a lot of different types of pH's. Some of those are known carcinogens. I'm not sure if there's any Type A.

It's certainly not all these are carcinogens. Some on the list are. We did depict on most. Polyaromatic hydrocarbons. I have another slide. Landfill 4 of the same at pH's.

What I'd like to do is get to the recommendations, and then if we have people who have questions. I think our recommendations are... Again, this is preliminary data. It was just collected. It has the EPA. IEPA has not reviewed it. Our intent here was just to give you an idea what we've done to this point. Since we talked to you last time we've moved quite a bit further along, collected some data. (inaudible).

The report has been completed. It was a presentation for the Air Force that we did, and that's what this data came from. And based on this information, we still have a lot more work to do. When we talk about groundwater, we've got to characterize groundwater. We only did 8 test pits at each landfill. We did that quickly to collect data. There has to be more sampling done in the creek and lake. More sampling at the landfills to define basically the nature and extent of this that we detected.

So certainly one of the things we recommended after we did this initial sampling effort is that we need to continue on with this program to define the contamination at the site to properly assess what is the risk of human health? What is the risk to the environment from the site? And I've got a list on here of the other activities that we will be continuing to do for the next... through the summer and certainly through the fall. We've got to install groundwater wells and sample those. We've got to sample and characterize the creek and the lake at the site.

UNIDENTIFIED SPEAKER: What is OU-2?

MR. BRYAN RUNDELL: OU-2 is that whole area again. OU-2 refers to this whole area right here inside there. It includes all 4 landfills. It includes all of the sites that Jeff mentioned, the 7 sites. And then it includes... Is there an 8th site in there? Anyway, it includes all the sites that we're currently investigating. And then also we still have more trenching activities. We found basically where the landfills' limits are. We had to go in there and verify those are the limits of the landfill.

We determined what the thickness of the waste is, what the lateral extent of the waste is. And then we also need to put some wells. Actually in the landfill we found leachate in samples. We found leachate in the samples that we dug. Water flowed into the pits. We sampled that. Some samples did exceed risk levels. The next step is to put wells in the landfill, figure out where the leachate is at, how much is there, is it flowing into groundwater, basically to determine what risk these landfills are to people who potentially could be exposed to this contamination we identified.

And that's really, I think, all I've got to give to you.

MR. VIRLON SUITS: Any questions of Bryan? (No response.)

Excellent briefing, Bryan. I apologize a little bit to the group because the slides will appear to be technical, you know, particularly from the standpoint of terminology. I know you've been doing that. So interrupt us at any time, you know, when the technical buzzwords are in there that you don't understand.

MR. RAY BOUDREAUX: Can we get a

definition of "surface soil"? Is that at the surface or surface plus 12 inches or surface plus...

MR. BRYAN RUNDELL: Our definition... It varies usually sometimes by project. But generally the definition is...

MR. VIRLON SUITS: Surface down to 6 inches. 0 to 6 inches. That is what we used on this project. So soil from the actual area we walk on down to a depth of 6 inches.

MR. RAY BOUDREAUX: Good. That's all I need.

MR. BRYAN RUNDELL: And then to clarify... That's a good question. Sub as far as soil is really basically anything below there that when we were digging these pits with the backhoe that we thought we should sample. If we saw an odor there... Or smelled an odor, saw a stain or saw nothing, we still took a sample, because it doesn't always mean (inaudible). The leachate samples. The pits typically were about 15 feet deep when you go down and the landfills, a backhoe. Our objective is to try to get at least down to where we encounter water.

Are there other questions?

UNIDENTIFIED SPEAKER: Did you just have a total that...

MR. BRYAN RUNDELL: We did speciates, and I presented. I got kind of an education on dioxins at this site. Most of these were speciated. That means something to you.

UNIDENTIFIED SPEAKER: That's fine. I was just wondering.

UNIDENTIFIED SPEAKER: What he's saying is there are a lot of dioxin compounds. Okay? And when they say speciated, it means (inaudible). And what USEPA has done is said, "Okay, in order to do a risk assessment when you have all these dioxins, you put them into what you... into one term, 'dioxin.' And then you calculate what's called the 'Toxicity Equivalency Factor' or 'Equivalence Factor,' TEF, and it ranges from 1 to .001 times for each one you multiply this factor, fudge factor ultimately.'" And against the toxicity that, most toxics. The most conservative toxicity value we have for dioxin, and then you use that and add those up to come up with toxicity equivalency factors.

MR. RAY BOUDREAUX: That would be an interesting question. How close or how far did we enter into the danger level with the calculations that we got? In other words, if we're using the most conservative number and you have a continuum that says "This is nontoxic and this is toxic," someplace in between there's going to be a place where you break from toxic to non someplace. Or is there?

UNIDENTIFIED SPEAKER: I know it's probably... We're going to be doing... We're going to be doing what the regulations and the guidance tells us to.

MR. RAY BOUDREAUX: Go through zero.

UNIDENTIFIED SPEAKER: And we're not attempting to be overly conservative, but we're also wanting to protect the most sensitive individual.

MR. RAY BOUDREAUX: Absolutely.

UNIDENTIFIED SPEAKER: And like you said before, there's going to be a range that that number represents plus or minus.

MR. RAY BOUDREAUX: Yes.

UNIDENTIFIED SPEAKER: It's a number, but

it can go up or down and... But probably more down than up. And we won't know what that is until the end. Right, Ray?

MR. RAY BOUDREAUX: Yes. Yes. And essentially the goal of all of this is to determine what type of a cap to put on the top of these things or whether or not they have to be removed or whether or not they have to be...

UNIDENTIFIED SPEAKER: We're required to put on a remedy that meets the 9 criteria on the list.

MR. RAY BOUDREAUX: To spy the risk that is determined when you're finished; right?

UNIDENTIFIED SPEAKER: Right.

MR. RAY BOUDREAUX: Okay. Good.

MR. VIRLON SUITS: Okay. Thank you, Bryan. Timewise we've blown it this evening. I hope that you can bear with us a little longer this evening. I promise not to do this to you every time. But with this we're not quite halfway through the agenda. And, Mike, you're on.

MR. MIKE WILLIAMS: How much time do we have?

MR. RAY BOUDREAUX: 40 seconds, plus or

minus 10.

MR. MIKE WILLIAMS: I have 3 hours of presentation material.

MR. VIRLON SUITS: I see that. I'm sure you haven't got (inaudible). Put a slide on for each one, and we'll discuss it. And perhaps it will generate the questions.

MR. MIKE WILLIAMS: Okay. I'm Mike Williams, again, with Jacobs. And I have been working on the Fire Training Area 2 site primarily and also on the Building 932 site. To a lesser extent I will briefly mention what's going on at the 747 and 700 sites.

The Fire Training Area 2, is everybody familiar with kind of those sites? I guess maybe we should... I'll show this to you. Fire Training Area 2 is located right here. And this is all in the OU-2, Operable Unit 2 area that Bryan was talking about. Building 932 site is located here. Fire Training Area 2 was used for fire training practice purposes. They had a number of mock-up units where they placed planes, or I'm not sure if they were fake planes or actually real planes.

MR. RAY BOUDREAUX: Fake.

MR. MIKE WILLIAMS: And they practiced lighting and extinguishing them. So you can imagine, there was plenty of materials they used for ignition. And some of those materials eventually made it into the ground. And we suspected that going into the investigation. Building 932 was used for training purposes, for refueling planes. It's basically a big concrete apron that had some pumps and underground storage tanks. Some of the residual or the leftover material ended up in a sludge pit kind of located about right here. And there was also a bladder tank area.

So there's kind of three primary areas that we looked into at that site. Okay. So status, I guess I'm going to try to be extraneous here a little bit. As far as free product, that project was initiated a little bit to help the EECA, the Engineering Evaluation Cost Analysis portion of the Fire Training Area 2 site to address the product or the petroleum hydrocarbons that are actually existing in the soil that was suspected may be floating on top of the water, the groundwater.

And so at present what we've done there is we've kind of combined the two investigations to a certain extent. We expedited it a little bit and went in with some investigative tools. Bryan kind of touched on one of them. Basically some tools to punch through the ground and measure different properties of the subsurface. One of the other tools that he didn't talk about that we did at that site that helped us quite a bit in characterizing it is a tool called "ultraviolet floor resins" which basically as you're punching down emits a little laser, and the petroleum that's in the soil causes the laser to fluoresce. And then they used that as kind of a relative indication of where the petroleum is at. Boom! Here it is. Boom! It's gone again. And so...

MR. RAY BOUDREAUX: Have we started pumping that stuff off there yet?

MR. MIKE WILLIAMS: No, we haven't.

MR. RAY BOUDREAUX: It would be a perfect time though. The water table is very high.

MR. MIKE WILLIAMS: It is very high. That's a problem as far as characterization actually.

MR. RAY BOUDREAUX: Sure, because it's all probably floating up on the ground by now. That's not very safe.

MR. MIKE WILLIAMS: We are in the process of getting ready to pump out the drainage ditches that exist there, pump them down to a level that we can actually go back in there and do some additional characterization.

Let me show you some pictures here. Pictures are always better than words. Well, let me back up for a minute. We did characterize Fire Training Area 2 using some geophysical methods which allowed us to come up with a determination of some areas that we suspected would be good to investigate. And this is an interpretation of that where we came up with some what we call "anomalous" or different than the background-type areas.

MR. RAY BOUDREAUX: Is that north to south top to bottom?

MR. MIKE WILLIAMS: Yes. This is north.

MR. RAY BOUDREAUX: Thank you.

MR. MIKE WILLIAMS: And that's the Fire Training Area. These are the drainage ditches that are full of water. They're concrete-lined ditches

approximately 12 feet. And we're not sure how much sediment is in them right now. We suspect anywhere from 4 to 5 feet, maybe as much as 6, 7 feet of sediment. Results of the geophysical study that we did came up with some areas where we suspect there may be some existing drainage lines. And we went back to the as-built civil engineering type drawings. And those line up pretty well with the drawings. So these are in addition to the former mock-up areas. These are also good, potentially good areas to find some of the petroleum.

We also noted a couple of, again, anomalous areas. One of them up here in particular was an area where there used to be a lagoon. That lagoon was removed. I'm not sure what year. Do you remember what year? Well, it's out of there now. But we do have a little bit of deeper contamination in this area as opposed to other areas.

MR. RAY BOUDREAUX: Anything below the 12-foot depth of the concrete barriers that divide that off?

MR. MIKE WILLIAMS: We...

MR. RAY BOUDREAUX: Hopefully not?

MR. MIKE WILLIAMS: Let me answer it this way. We did detect some contamination outside of the drainage ditches.

MR. RAY BOUDREAUX: Oh, you did? Too bad.

MR. MIKE WILLIAMS: Inside here, we didn't want to punch too deep because we also don't want to send contamination down deeper than it actually is. At the same time we want to fully investigate it and make sure we detect everything. So it's kind of a balancing act. And so in a few locations in site here we did go as deep as 12 feet. However, right in the heart of some of the most contaminated areas we only went down to 7, 8 feet, maybe 9 at the most. We didn't want to...

We had done some CPT, some of those bores that Bryan talked about, on the outskirts of that area where we didn't suspect any contamination to a deeper depth to kind of characterize what was there. As Bryan pointed out, we detected a pretty significant sand unit. It was our feeling we definitely didn't want to go down and penetrate into that sand. So like I said, there was a little bit of a balancing act kind of characterizing and

protecting the environment.

I'll just show you one of these. I can't help myself. These are some of the borings inside of that area. This also kind of shows you where the former mock-up areas were at. There were at least five mock-up areas. We're showing seven. I'm not totally convinced that these three... With respect to one mock-up area (inaudible). But we set up...

MR. RAY BOUDREAUX: There were three.

MR. MIKE WILLIAMS: Pardon?

MR. RAY BOUDREAUX: There were three. I remember seeing them. There was a Jeep on this little one and a helicopter.

MR. MIKE WILLIAMS: Oh, you do? Okay.

UNIDENTIFIED SPEAKER: Yes, there were three.

UNIDENTIFIED SPEAKER: You remember pulling pipes out a...

MR. MIKE WILLIAMS: Some of the diagrams showed five. I didn't know.

UNIDENTIFIED SPEAKER: Those were newer ones.

MR. RAY BOUDREAUX: One was a Jeep or

truck and one was a helicopter.

MR. MIKE WILLIAMS: Okay. So we punched some of these borings through the soil. And we used that to not only characterize the subsurface soil, the underlying geology, but also like I was talking about, we used the ultraviolet fluorescent laser to come up with zones. And that's what this is right here. Basically as it's being punched down, it spikes when it sees petroleum-related product. And it comes back down basically when it (inaudible).

So you can kind of follow this. You can see with depth where we suspect some of the petroleum is trapped in the soil. This is kind of a cross section. You can see, this is plan view obviously, and this is a cut right through the soil. So... This yellowish color is representative of the gravel that's on the surface. So that's why it has kind of a different color. It was interpreted by the CPT as sand, but it's actually more of a gravel. And then this CL material is clay primarily. At that particular site you don't pick up the sand until about 17 1/2 feet.

MR. RAY BOUDREAUX: From that... While you're trying to find your slide... From that, it looks like about 8 or 9 feet, all the stuff was above that. So...

MR. MIKE WILLIAMS: So we also have several of these where we just basically took our data and we sliced it and we kind of come up with areas that are... that show higher levels of contamination than the other areas. And a lot of these areas correspond pretty well to where the mock-up units were at, as you might expect.

Another thing we hadn't done previously, we had really no idea, was groundwater flow direction in there. We installed some temporary little wells. And we measured those to determine, you know, which way is the groundwater flowing? We'd like to know for risk purposes who might be at risk? So one thing we found is that those concrete line drainage ditches are actually causing the water inside there to mound higher than the area outside here by at least a foot or two. So we recognize that. And these are separated, these three wells lie outside of the concrete drainage ditch, and we show flow direction to the southeast

basically. Salt Fork Creek is over here, by the way. Groundwater flow up here is more straight south to southwest. So there's a little bit of a difference there. This is kind of just a one shot picture. And it's a lot better if you go back and substantiate water levels or groundwater flow, you know, a few times at different seasons. Sometimes when it's...

MR. RAY BOUDREAUX: What depth there?

MR. MIKE WILLIAMS: Pardon?

MR. RAY BOUDREAUX: What depth there?

MR. MIKE WILLIAMS: When I took these, I believe inside of here we're talking about a foot or less below the ground surface. And outside of here, anywhere from 2 to 5 feet.

I'll try to speed this up just a little bit.

MR. RAY BOUDREAUX: Gary, tell him what he needs to tell us. You've seen all this. Do you know what he needs to tell?

MR. GARY SCHAFER: Actually I've seen portions of this today. I don't know if I've seen every slide he has.

UNIDENTIFIED SPEAKER: Gary, don't push

it.

MR. GARY SCHAFER: I'm not asking.

UNIDENTIFIED SPEAKER: Thank you. Thank you.

MR. MIKE WILLIAMS: I'll throw up some analytical results.

In addition to doing some of the other things we described, we took soil samples obviously trying to discover if there is a risk at this site. And what we found was we detected some VOC's, volatile organic carbons. Those are the lighter-type hydrocarbons. Like Bryan mentioned, Benzene, that's one of them that we typically look at.

We detected TCE. That's a solvent. I think that was mentioned earlier in the presentation. We also detected the PAH's again, polycyclic or polypneumatic hydrocarbons. Several of those. And we, like Bryan and the landfill investigation, use a couple different screening criteria. We've used IEPA's screening criteria, USEPA's screening criteria. And we also did some preliminary back calculations based on risk numbers to come up with what are called "remedial

objectives." Those are termed "preliminary" because we don't have the full understanding of all the, you know, all the exposure preliminary stuff that we discussed earlier. And then also we had, especially in the surface soil, several dioxins and furan detections.

Subsurface soil pretty much mirrored the surface soil, not quite as heavy on dioxin and furans. But many of the same were detected.

Okay. What I'll do now is just quickly talk about 932, Building 932, tell you what we found at 932.

MR. RAY BOUDREAUX: I was going to say, a summary slide would be real good about now.

MR. MIKE WILLIAMS: This is a challenge to summarize.

MR. VIRLON SUITS: I'm sorry about this.

MR. MIKE WILLIAMS: This is Building 932. I just wanted to show you some of the areas that I was talking about. These are the bermed areas that form bladder tank areas. This is the concrete apron. That's still a concrete apron.

MR. RAY BOUDREAUX: It's a bus parking lot.

UNIDENTIFIED SPEAKER: Future bus parking lot.

UNIDENTIFIED SPEAKER: I was going to say.

MR. MIKE WILLIAMS: And this is basically the former Building 932. So at that site we had a number of underground storage tanks that held jet fuel for training purposes. And then over here there was a sludge pit identified. I'm not going to go through it, but we did some of the same things at Building 932 at the FTA-02 site. We didn't do the ultraviolet fluorescent, but we took soil samples in the same manner. At this particular site we came up with detections, as you might expect. DVOC's and PAH's.

At the Building 932 site it was kind of interesting. We detected actually more PAH's or more different types of PAH's than we did at the Fire Training No. 2 site. And a number of those were above the screening levels that I talked about for the Fire Training Area 2 site. Okay. Let's see. All right. Skipping through hundreds of hours of work...

MR. VIRLON SUITS: This is what's so

unfair to these guys. You can tell what he was saying a while ago when he said "I'm sorry, Jim." I know exactly what he's saying. He has got all this stuff, and it's pretty. I mean it's good stuff. It's pretty and it's colorful and everything, and they're aching to just show all of this.

MR. RAY BOUDREAUX: What we should do is one of these at a time. I can tell you right now, you go much over an hour in any meeting, you lose them.

MR. MIKE WILLIAMS: You do. You do. I agree.

So we're into the conclusion section.

UNIDENTIFIED SPEAKER: Would it be the preference of the group then to save this?

MR. RAY BOUDREAUX: Let's get the conclusions. I think that's important.

MR. MIKE WILLIAMS: Okay, I'll go through them as quickly as possible here. We detected a number of geophysical anomalies. We think we have a good handle on what a lot of those are. There are a few of them that we're going to need to continue and investigate. We have a good handle on

where the jet fuel petroleum-type contamination exists in the soil at the Fire Training Area based on the analytical sampling and based on the ultraviolet fluorescence technique that we used. Okay.

We have a better handle on groundwater flow. Although I would say that another, at least another round is needed to substantiate what I showed. And then primary contaminants detected at both sites, some volatile organics, some of the PAH's that we talked about, and dioxins and furans.

So based on this, some type of removal and/or remediation is going to be needed at both sites. Not, you know, to abide by not only regulations that are in place, but also to address human health and ecological risks. And for purposes of transferring the property to the Village of Rantoul.

That's basically it. We have recommendations on additional sampling. That will be done. Basically we're just going to fill in some of the data gaps. We went through a little bit of an expedited sampling effort. And there are

areas where we feel like we need to go back in and just clarify a few things.

MR. RAY BOUDREAUX: Did you do any borings through the concrete in the bus parking lot there?

MR. MIKE WILLIAMS: Pardon?

MR. RAY BOUDREAUX: Did you bore through the concrete at all?

MR. MIKE WILLIAMS: Yes, we did.

MR. RAY BOUDREAUX: Did you replace that back in there or put something to...

MR. MIKE WILLIAMS: Asphalt patch, I believe.

MR. RAY BOUDREAUX: Just so that there's something to repair the concrete.

MR. VIRLON SUITS: 747. Any questions of him at this point? (No response.)

Okay, you've got the 747.

MR. MIKE WILLIAMS: I do apologize for taking up so much time.

MR. VIRLON SUITS: 747 is not inoperable.

MR. RAY BOUDREAUX: They know where that is.

MR. VIRLON SUITS: Does everybody? Okay.

UNIDENTIFIED SPEAKER: I don't. Oh.

MR. RAY BOUDREAUX: You couldn't even fit the landing gear in there.

MR. MIKE WILLIAMS: Okay. Basically what's going on at 747 is that we are in an investigative-type process to find out there's been some TCE detected. TCE is a solvent. It's probably one of the most common solvents used in the industry.

MR. RAY BOUDREAUX: PD680 in the Air Force.

MR. MIKE WILLIAMS: Is that what it is?

And so in this process right now we've prepared a draft work plan. We've also... And that was given to the Air Force. The Air Force had some comments. And we just recently submitted a, what we're calling a "Draft Final Work Plan" to the agencies. That was actually sent out on May 5th. That's wrong.

Really that's pretty much it. I mean in that work plan we have, you know, we've identified where we need to take some groundwater samples,

where we need to take some soil samples and what parameters we need to analyze for basically to determine again if there's a risk at this site, then what needs to be done.

UNIDENTIFIED SPEAKER: The building and how much area around the building, are you considering that?

MR. RAY BOUDREAUX: It's not a very good site.

UNIDENTIFIED SPEAKER: What happened to this site was it was an underground water tank closure. When they sampled the monitoring wells around the underground storage tank, they detected chlorinated solvents. We had some problems or questions about the data from the old contractor. So Jacobs came in, tested it again. They were there again. So it's not a fallacy. So what we're trying to do is they found... We found something in groundwater that exceeds state groundwater standards. So we're kind of working backward to find out where it came from.

UNIDENTIFIED SPEAKER: Again, I guess I would add the fact that that's a chlorinated solvent, is a bit of a spray. We wouldn't have

expected to see the chlorinated solvents associated with the underground storage tank that had been pulled. Therefore, there must have been a tank other than the tank for these chlorinated solvents. And that's what we're trying to find right now. There must have been a source detector.

UNIDENTIFIED SPEAKER: I think that's what they've done, (inaudible).

MR. MIKE WILLIAMS: Do you want me to talk about 700?

MR. VIRLON SUITS: Go ahead. It's the old base filling station. Does that help? Okay.

MR. MIKE WILLIAMS: Okay. Building 700, as you know, there's been remediation system pump and treat-type system that's been in place. It's currently been shut down since, as you can see, since January 27th. We submitted a preliminary Tier 2 evaluation. And what that is is using Illinois EPA's system, you can either go... You can either look at their numbers, their Tier 1 numbers which are basically screening numbers and compare that to the analytical values that you're getting and say "We're above" or "We're below" and

then make decisions. You can go a step further and do what's called a Tier 2 evaluation, kind of like risk assessment, where you take site specific numbers to come up with maybe a better idea of what's going on there and maybe a better number. And that kind of in a rough nutshell, I guess, is what that report is that was submitted on April 14th.

MR. RAY BOUDREAUX: What did it say? Say it's good, clean, or needs more or what?

MR. MIKE WILLIAMS: It says that, well, I don't know if I want to say that it's clean. I guess it depends on a number of factors that... Well, there are a few other things that have to be addressed, I guess. We have to determine... Well, we have to do some additional sampling to determine a few other things before we can actually say that. That's kind of why we're calling it a preliminary Tier 2 evaluation.

MR. RAY BOUDREAUX: That's why I asked the question.

MR. MIKE WILLIAMS: Maybe I'll ask for your help on this.

UNIDENTIFIED SPEAKER: Basically what

we've submitted is a plan to make the Tier 2 determination. And the Tier 2 determination would, in effect, be, is the calculated value that comes up with the Tier 2, have we shown that the remediation system has drawn the contaminant values to something below that? And that remains to be seen, whether we have succeeded or not.

MR. VIRLON SUITS: We don't have a slide on 952. The 952 attenuation report has been with the State. What will be happening there is the State will be issuing a letter to us, the FPCA. I need to get that letter recorded like we would get a deed recorded. And I've checked with the County Recorder's Office, and they will be receiving, they will be receiving that from me and recording it at the time that I bring it to them.

Yes, Gary.

MR. GARY SCHAFER: It might be useful if you explain what it is you're having the Recorder record on the deed. I'm assuming it's a use restriction of some sort.

Steve, is that correct?

MR. STEPHEN NUSSBAUM: Yes. For the Leaking Underground Storage Tank Program, the State

has adopted regulations. And the regulations we're using is, and I can explain this at a later time, it's Tier Approach to Cleanup Corrective Action Objectives. TACCAO. And when they come in under that program, they can make assumptions... This is kind of using that risk assessment we talked about, they can make assumptions about what exposures are going to happen. And under the regulations it allows them to assume that no residential exposure is going to happen. But they would have to put on deed restrictions, institutional controls, things like that onto the deed to make sure that nobody would be exposed, and then we would be less conservative with the numbers that we looked at for risk. Okay? So, but the letter will come out without saying you're clean if you do this and you have 45 days to file with the County Recorder's Office. So we've kind of been sitting on this until Virlon found out, yes, I can get that done in 45 days, so we don't have to go through and do it again.

MR. RAY BOUDREAUX: In that particular site you're saying that no residential... The last lady that was here that gave the presentation out

there said that it was... met all the objectives of the Natural Attenuation Program and all the buggies had eaten the right things.

MR. STEPHEN NUSSBAUM: What she wanted to prove was natural attenuation was working. What she ended up proving was we can close this site out under TACCAO.

MR. RAY BOUDREAUX: Okay. I see. Yes. There's not ever going to be anything.

MR. STEPHEN NUSSBAUM: Instead of running off and making this a science experiment, the Air Force said, "We'll just slide out," which is a good thing.

MR. RAY BOUDREAUX: Fine. As long as the EPA agrees that's fine. Yes.

MR. STEPHEN NUSSBAUM: But the property will have a deed restriction on it.

MR. RAY BOUDREAUX: It says "No redemption."

MR. STEPHEN NUSSBAUM: And no use of groundwater. The issue is no use of groundwater because the groundwater has levels above.

MR. RAY BOUDREAUX: And "groundwater" meaning water within 20 feet or 30 feet of the

surface.

MR. STEPHEN NUSSBAUM: Groundwater is below the site, groundwater. No wells can be put in.

MR. RAY BOUDREAUX: Well, you're not allowed to drill a well in the city of Rantoul without permission anyway. So that works for me. And that is within the city limits.

MR. STEPHEN NUSSBAUM: That's pretty much what we talked about.

MR. VIRLON SUITS: Okay. Finally, we have gotten to the OU-2 update. And Jeff, will you give us a fast rundown on that.

MR. JEFF VILMAN: All I need to say, since the last meeting we've continued working on our planning documents. The work plans are into the agencies for review. We're starting to respond to comments. And we hope to be in the field collecting data by late summer/early fall if all goes well. I'm done.

(APPLAUSE!!!)

MR. VIRLON SUITS: Okay. Any questions of Jeff? (No response.)

Item No. 8, Update on Lead Fragments

found in Parcel G. I don't have that much of an update for you. I have addressed this with the EPA as far as us doing some additional investigative work to see if we can more precisely or more adequately determine what the source of this may have been. I guess our feeling is that we could limit ourselves as far as the... If it ends up being a hot spot removal, for example, we could limit ourselves possibly by finding out more of what the actual material is.

If the actual material is solder, for example, we also find out that the particular solder that was used at that time would be consistent with that, that it would help us more adequately determine, you know, particularly areas to go down and to locate them and remove them. We're also going to go into the library here, into the museum and look for photographs, aerial photographs of the time of the construction, as many as we can find, as many as your wife can help us find, Ray.

MR. RAY BOUDREAUX: Yes, she will be happy to do that.

MR. VIRLON SUITS: And we'll go through

them in detail.

We do have with us, we're privileged to have with us this evening Cary Ware. We had wanted him at the last meeting, and I think you were unable to make it at that point or you were out of town. I can't recall just what it was. But I think at that time I had met with a number of you and with Cathy and her husband, and we had said to you at that point, you know, there's certain services certainly available to, you know, to the people with children, if there is concern with the children. So Mr. Ware is here to address any questions. Cathy did call me. I had specifically invited her. But then she was unable to make it. I don't know if she called in. So I don't know if she would have expressed any questions she may have had to any of you. But at that point, I thank you for coming. And if you have questions of Mr. Ware, why go ahead and ask him at this time.

(No response.)

I'll go on then to the issuance of deeds. We have not issued any of the deeds to the public bodies, such as the Village of Rantoul. We also lack three deeds to be issued to the private

developers. One of these that's in the process, one thing I want to say at this point, with what we have discovered in the Operable Unit 2 and actually some of the concerns, maybe greater concerns, I would say, as far as what happens to groundwater here is that with that USEPA has taken a position that they wish to see more information and more data and more conclusions as far as which way groundwater is flowing before issuing additional (inaudible). We have faxed into their office, and Gary graciously sent back to me and said, "We need additional information."

I don't know at this point, Gary, if you want to expound on that some more. But at any rate, that's where we stand.

MR. GARY SCHAFER: I don't know how tolerant everybody is for time. I can be very southern. As Virlon said, our concern is groundwater. As you know, it's USEPA's responsibility to concur with the transfer of property from the Air Force to the private sector. We can't make that concurrence unless we know it's clean. And what's happened is the gentleman that spoke before, first of all, Mr. O'Dell talked about

the sand layer. When we went into this and we started transferring property. We had some old information from previous studies we were relying very heavily on that seemed to indicate there was not a pervasive sand layer. And there's sufficient aquifer that can convey large amounts of groundwater... "Large" is a relative term ...relatively large distances.

Some of the work that Jacobs has done recently in discovering a sand layer has sort of given us better information. And it looks like there is a greater capability for groundwater to become contaminated and to move out of OU-2 than we had originally thought.

The second part of that, the concern is when Mr. Williams was talking and he put up a little chart about groundwater flow direction that's the second part of our concern. Up until now we were always assuming that groundwater in this aquifer was being controlled by the creek. In other words, the creek was the discharge point. And what we're finding, what Jacobs is finding that's not always necessarily so. So combined with some of the data we're finding with the

contamination, we don't feel comfortable enough where we can say to you these parcels are not contaminated by groundwater. So we feel that we have to get more information. The direction it's going, it seems like there is a greater possibility of contamination could go out of OU-2 perhaps into OU-1. We don't know right now.

MR. RAY BOUDREAUX: And OU-1 is essentially the City property separates OU-2 from any property that's owned by the private sector by a long distance. But that doesn't necessarily mean that it couldn't transverse that public property.

UNIDENTIFIED SPEAKER: We're talking about the aquifer then is...

MR. RAY BOUDREAUX: 20 feet.

UNIDENTIFIED SPEAKER: Right. It's above what we use in the city.

MR. RAY BOUDREAUX: Oh, we use way, way down for drinking water.

UNIDENTIFIED SPEAKER: The same.

MR. RAY BOUDREAUX: But there's also problems... And they can tell you better about it ...whenever you punch through and go all the way down, then you have chances for things to flow down

and flow up and do all kinds of weird things. So that's why there's reasons you have to close wells when wells have been dug. And they have to be done properly. And there was a whole bunch of them out here.

MR. VIRLON SUITS: So that's where we're at.

MR. GARY SCHAFER: Is there any questions about that that I can help with?

UNIDENTIFIED SPEAKER: You said private developers now. Which parcels are those that you're talking about?

MR. VIRLON SUITS: The church and the library.

MR. RAY BOUDREAUX: And B3.

MR. VIRLON SUITS: And B3.

UNIDENTIFIED SPEAKER: What's that?

MR. VIRLON SUITS: White Elephant.

MR. RAY BOUDREAUX: And they're all owned or purchased by the same guy.

UNIDENTIFIED SPEAKER: I notice you call it B3 instead of White Hall.

UNIDENTIFIED SPEAKER: White Elephant.

MR. VIRLON SUITS: Not really. I've

still got that so (inaudible) in me. It's hard for me to get out of that mode.

MR. RAY BOUDREAUX: Isn't it convenient?

MR. VIRLON SUITS: I'm falling into the trap, too, going into the technical jargon.

MR. RAY BOUDREAUX: Isn't it convenient that the three parcels owned by one person has not been....

UNIDENTIFIED SPEAKER: Convenient for him.

MR. RAY BOUDREAUX: And now all of a reason... And now all of a sudden we find a reason that he is not...

MR. VIRLON SUITS: Is into the reuse. What's the latest?

MR. RAY BOUDREAUX: I'm not going to say anything. It's getting too late. But I do have a question.

UNIDENTIFIED SPEAKER: This is the highlight of the meeting.

MR. RAY BOUDREAUX: Okay. We're talking to a guy about aviation reuse.

UNIDENTIFIED SPEAKER: Aviation reuse.

MR. RAY BOUDREAUX: Yes. Talking about

building a 55,000 square foot addition to one of our factories. We're talking about... I'm not going to tell you who because it's all very, very hush-hush-hush. You get the latest and greatest. This is not for public release. This is all very quiet. We're also talking to a gentleman about building a 150,000 square foot warehouse. So we are just about ready to do the T hangar project. We're getting very close getting that on the street, to start construction over there.

The balloon thing went off very, very well tonight. We announced a lot of new sponsors. We're working... I can't tell you who.

UNIDENTIFIED SPEAKER: Different participation from what I hear.

UNIDENTIFIED SPEAKER: Curt was talking 150 balloonists already.

MR. RAY BOUDREAUX: No more than that. All the competition division is full. 100 balloonists, and 100 balloonists are there. We're installing things out back for the sewer for all the... You know, the Health Department requires if you're going to be in a trailer for a long period of time and you are washing dishes and stuff like

that, you have to have a sewer. So we're installing a sewer out back for all of our... But we're doing it neat. We're doing it with volunteers. But it's interesting. And everything is going along very well.

But I do have a question. On the RF for OU-2, you said they wouldn't start until summer or fall. I would prefer we get started as soon as we can on that. Especially since we have (inaudible)... And that RAFS included the sample and all that stuff to the farmland and all the rest of that stuff out there; is that right? Everything. That excludes the seven sites and the four landfills and the fire training pits. But everything else; is that right?

MR. VIRLON SUITS: Well, actually these will be combined into one final document, Ray. They are two.

MR. RAY BOUDREAUX: That's what I kind of thought.

MR. VIRLON SUITS: Well, we are treating them separately because actually they're separate contractors.

MR. RAY BOUDREAUX: I would hope that we

would go to Mock 6 on this.

MR. STEPHEN NUSSBAUM: Here, this is something that I think you really need to put on the table, Virlon, with respect to we're trying to get this stuff finalized, but one of the critical problems, and I don't know that everybody is aware of this, and maybe I shouldn't say, is the funding issue. Chanute has been hanging out there for a long time. There are a lot of other bases that have gotten there RI's done and gotten projects awarded, done remedials. They're way out of here. They're shutting the doors. They're gone. Chanute, because of the problems that we've had, the base realignment and closure money is running out. And there's a pot of money that's been set up for Chanute. The problem is, we've got to get it obligated at the end of this year.

MR. RAY BOUDREAUX: That's why I'm saying, I think we're...

MR. STEPHEN NUSSBAUM: So what we're trying to do is... I'll be honest. What my job is for the citizens of Illinois...

MR. RAY BOUDREAUX: Is to get the money.

MR. STEPHEN NUSSBAUM: ...is to work with

the Air Force and USEPA before it goes away, it's not available for that for 6 years.

MR. RAY BOUDREAUX: That's right. You've got it.

MR. STEPHEN NUSSBAUM: So what's going to happen, some things have been delayed. The start of the RI has been delayed trying to secure the money. We spent an extra, what, 3 hours today...

MR. VIRLON SUITS: That's right.

MR. STEPHEN NUSSBAUM: ...trying to get the folks at headquarters and other folks together to try and get this money preserved for Chanute and get it used.

MR. RAY BOUDREAUX: Is it time for us to jump in? We do not interfere as the City of Rantoul. And I do have a statement to make. I think it's very important that everybody understand that we understand your jobs, the jobs that you have to do, and we'll cooperate fully with you to get those jobs done. And we encourage you to do them and to the very, very best of your ability. And we appreciate what all the gentlemen do.

And sorry that we don't spend hours and hours going over your pretty pictures. But, you

know, there are ways that we can get meetings done very, very quickly and see all that data if we were very, very organized when we sit, when we get ready to do it. And when we have to... It's nothing, none of your fault, and we appreciate all the work that you have done.

And the City of Rantoul is very, very much interested in this property being as clean as it possibly can be so that there's no impact to the humans and to the environment. I mean that's the whole goal. But we also want to see it done as quickly as possible basically because we know the money is running out. Because back in the early days when we started this, Virlon, I don't know if you remember, we would sit around tables and holler at people because they didn't do anything. And they didn't. When I first got here, they weren't doing anything. And they didn't do anything for a long time. And it's too bad, but there doesn't seem to be any remedy, except for us to keep working and working hard and trying to get it done as quickly as we can.

Now it's time for us to jump in and get the politicians where they need to be in order to

secure the right kind of funding that we might need in order to do the projects that we deserve and that we need. Then it's time for me to get the Mayor to do the things that he needs to do. But I sure don't want to do that if it's out of line or if it's too early or if it's not the right timing or any of those things.

But if it is, you just need to let us know. Because we do not interfere other than try to make sure that we all understand we are in a cooperative reuse environment here. We are no longer a military base. But we still want it clean. So...

MR. VIRLON SUITS: And, Ray, we will do that, you know.

MR. RAY BOUDREAUX: But if there's a need now to get our politicians involved, we will most certainly do that. And we have a very strong contingent of politicians that can probably get what we need. But we're not a Superfund site by any means. But what are we talking about in numbers? Do you need $5 million? $200 million? A billion? How much do you need?

MR. STEPHEN NUSSBAUM: Well, I want to be

very cautious about this. We're not saying that we're going to have to spend everything or whatever. But the Air Force has, the Federal Government is very interesting. If you get money awarded and you don't spend it by the third quarter, they try to take it back and give it to somebody that's going to spend it.

MR. RAY BOUDREAUX: Hey, I know! I've been there.

MR. STEPHEN NUSSBAUM: And our projects that come on the book... I'm sorry, Virlon. Do you want to go into this?

MR. VIRLON SUITS: Go ahead. You're doing fine.

MR. STEPHEN NUSSBAUM: The project on the book is slated to be awarded the last quarter of this fiscal year, which means not only that... Christine, where's she at? She's the person that's got to take all this stuff and then give it to, say, Jacobs or another contractor and get a contract written and awarded so that they can prove that they spent the money, so that it doesn't get taken way. Is that accurate, Chris?

MS. CHRISTINE OLGUIN: Yes.

MR. RAY BOUDREAUX: She's got a warrant and she can't speak. She can't speak too freely because it's very, very difficult for her in her position, I understand, contracting officers. And I appreciate the compromising position that you're in trying to answer that question.

MR. STEPHEN NUSSBAUM: But, see, we're all trying to get all these things done in a short period of time.

MR. RAY BOUDREAUX: And all these people understand that. And if you need for us... I mean every person here, Lorraine understands that. She was the head guy's secretary. She understands all this stuff and how you have to spend money. So you don't have to explain. All you have to do is tell us when you want us to jump in and start getting the work done. Okay? Because don't wait too late, because we can't do things overnight. But if it's time for us to do things and pull some strings and talk to some people, I sure know some people. The Mayor has some very good contacts throughout the state and throughout the government. So...

MR. VIRLON SUITS: Okay.

MR. RAY BOUDREAUX: We'd be happy to pull

the strings.

MR. STEPHEN NUSSBAUM: It's not to encourage you or discourage you, Ray. It's just that so everybody knows there are push-backs because we're trying to secure funding. The start of the RI did get pushed back because we're trying to secure funding. That's a fact. But we have data that we think we're trying to use to lock the funding up. So...

MR. VIRLON SUITS: And some of what was briefed relative to the levels.

MR. RAY BOUDREAUX: Oh, that's been forwarded up. So somebody has got it.

MR. VIRLON SUITS: Yes, my understanding.

MR. RAY BOUDREAUX: Doesn't FC have a method of getting funding?

MR. VIRLON SUITS: The funding is, we get the funding, AFBCA gets the funding. We get it to AFCEE, and then the AFCEE does the contracting. Okay.

MR. RAY BOUDREAUX: So you're getting it through closure accounts. That's even worse.

MR. VIRLON SUITS: The brag closure.

Lorraine.

MS. LORRAINE WIRGES: Off the record.

(Whereupon a brief discussion was held off the record.)

MR. VIRLON SUITS: Open discussion? If there's no open discussion, we're done.

UNIDENTIFIED SPEAKER: If the funds run out, then you wait for another 6 years; is that what you're saying?

MR. VIRLON SUITS: No. It does look bleak.

MR. STEPHEN NUSSBAUM: After this fiscal year, the money, the budget is dramatically reduced. And they may even have to be put in to fund it with regular Army installations and the (inaudible). So they don't get special attention.

MS. LORRAINE WIRGES: And you have more base closures coming up, so you're going to be in trouble.

MR. VIRLON SUITS: That's why we were in there, the middle of the record.

MR. GARY SCHAFER: I would say, Jackie, your point to me, I think that was for USBCA to offer its observation on this. We are aware that

brag accounts are dwindling. We are doing everything we can to strongly encourage the Air Force to obligate this money for Chanute Air Force Base as soon as possible. If the brag accounts... If this money is not obligated and this goes into DERA, like Steve said, you know, the brag accounts come to an end, there could be a long wait. We don't want to see that happen. We are doing everything we can to encourage the Air Force to get this money now. So there are some decisions that I think are pending that are being discussed at fairly high levels as we speak.

MR. VIRLON SUITS: There is Defense Environmental Restoration Account.

MR. STEPHEN NUSSBAUM: It's where all the installations get their money, not just special brag funds.

MR. RAY BOUDREAUX: Then is when they decide who has the highest risk, who has the greatest need? And so now you fall into... You get racked up. So you may be way down at the bottom of the rack.

MR. GARY SCHAFER: That's exactly right. What happens with DERA is the sites that are the

Superfund national priorities list sites, those go to the front of the line because it becomes an enforcement issue for the military. If they don't clean it up, then the regulators start extracting penalties over time. So obviously there is, you know, in terms of prioritizing things, the Superfund sites get the top priority. Chanute Air Force Base is not a Superfund site.

UNIDENTIFIED SPEAKER: And so much work has been done already that it just gets less and less on the list.

MR. RAY BOUDREAUX: And the same thing is true on Superfund sites. There's been a lot of work, a lot of investigation, a lot of remediation, a lot of characterization, a lot of stuff to design remediation. It's very, very, very costly.

Okay. We're done, I think.

MR. VIRLON SUITS: Anything else? (No response.) Thank you.

(Which were all of the proceedings held before the Restoration Advisory Board this date, said meeting being adjourned at 9:07 p.m.)

STATE OF ILLINOIS)
) SS
COUNTY OF MACON)

CERTIFICATE OF REPORTER

I, MARLA K. DARSHAM, Certified Shorthand Reporter and Notary Public in and for the County of Macon, State of Illinois, do hereby certify that I reported in shorthand the proceedings had on the hearing of the aforementioned cause on the 7th day of May, A.D. 1998, before the Restoration Advisory Board.

I do further certify that the foregoing 99 pages are a true and correct transcript of my shorthand notes so taken as aforesaid and contain all of the proceedings directed by the Restoration Advisory Board.

I do further certify that I have no interest in the outcome of this action.

Given under my hand and seal this 4th day of June, A.D. 1998, at Decatur, Illinois.

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and Notary Public

STATE OF ILLINOIS)
) SS
COUNTY OF CHAMPAIGN)

BEFORE THE

RESTORATION ADVISORY BOARD

IN RE: CHANUTE AIR FORCE BASE)

PUBLIC MEETING HELD

May 7, 1998

Aviation and Development Office
One Aviation Drive
Rantoul, Illinois
7:00 p.m.

AFFIRMATIVE REPORTING COMPANY
1478 Glenn
Decatur, Illinois 62526
(217) 875-1414 or (800) 886-DEPO
Fax (217) 875-1472

TRANSCRIPT OF PROCEEDINGS

MR. VIRLON SUITS: You should have a copy of this in front of you. I hope we didn't run out. We probably came fairly close to having not enough copies, but hope you do have a copy in front of you.

I do welcome you. Just in the matter of introductions here, I always get myself in trouble doing this, so I guess actually, Dean, we'll start with you. Just introduce yourself. Go right down the line. We'll take enough time to do this.

MR. DEAN WILLIAMS: My name is Dean Williams. I'm from Jacobs Engineering. I'm just here to observe.

MR. MIKE WILLIAMS: My name is Mike Williams. I'm with Jacobs Engineering also. I'm specifically working on the FTA-02 and -932 projects at Chanute Air Force Base, and a few others.

MR. RAY BOUDREAUX: There is no Chanute Air Force Base.

MR. MIKE WILLIAMS: The former Chanute Air Force Base.

MR. BRYAN RUNDELL: I'm Bryan Rundell. I also work for Jacobs and am Department Manager for the (inaudible).

MR. JIM SKRIDOLLS: Jim Skridolls. I'm the Program Manager for Jacobs' work here at the former Chanute Air Force Base.

MR. RAY BOUDREAUX. Good, Jim.

MS. ANNE WALKER: Anne Walker, Quality Institute (inaudible).

MR. DAN BRADY: My name is Dan Brady. I'm the AFCEE Field Engineer here at Chanute, the former Chanute Air Force Base.

MS. CHRISTINE OLGUIN: I'm Chris Olguin. I'm the contracting officer with AFCEE for the former Chanute Air Force Base.

MS. MARY UREY: I'm Mary Urey. I'm here to observe.

MS. SYLVIA CROWEN: Sylvia Crowen, AFCEE Team from San Antonio.

MR. RON PORTER: Ron Porter from the Human Systems Center in San Antonio.

MR. DREW RAK: Drew Rak. I'm a toxicologist with AFCEE, and I work for Sylvia.

MR. JEFF VILMAN: I'm Jeff Vilman with

The Environmental Company. I'm the Project Manager for what's called the "Seven Sites Remedial Investigation."

MR. CRAIG THOMAS: I'm Craig Thomas. I'm a geologist with USEPA.

MR. CARY WARE: Cary Ware with the Illinois Department of Public Health, Champaign (inaudible).

MS. LORRAINE WIRGES: Lorraine Wirges, Rantoul Garden Club.

MR. VIRGIL KRONE: Virgil Krone, Environmental Engineer, Chanute.

MR. GARY SCHAFER: Gary Schafer, USEPA Project Manager.

MR. RAY BOUDREAUX: Ray Boudreaux with the City of Rantoul.

MR. FRED RAUCH: Fred and Barb Rauch, residents.

MS. JACQUELINE FOTHERGILL: Jacqueline Fothergill, resident also.

MR. STEVE NUSSBAUM: Steve Nussbaum, Illinois EPA.

MR. VIRLON SUITS: Thank you very much. The last time, we had intended to say something to

this group here about risk assessment and how those procedures were done. We didn't have a person here at that time. So I guess actually between the time we put out the mail or sent out the mail and we printed the agenda, we took that off. We do, in fact, tonight have someone who is able to address that.

And I guess at this point I would again call on Sylvia Crowen as Team Chief to go ahead and introduce the person that will be doing that for us. Sylvia...

MS. SYLVIA CROWEN: Yes. We brought with us from San Antonio both Drew and Roy... or Ron, I'm sorry, Ron, to present to you risk assessment. And you know basically what it is, what it means. So feel free to ask them any questions. They do have handouts that they will be giving to each of you.

MR. RON PORTER: My name is Ron Porter again. I work for the Air Force and Air Force Base and I work for the Surgeon General. Drew and Sylvia work with Civil Engineering. And Drew and I have similar jobs, only Drew's reporting chain goes up the side of the house where risk assessment is

used to develop cleanup goals as to evaluate a site and see if there's a risk at that site from exposure. And then the information that's generated in that risk assessment is used by the cleanup team to choose remediation technology and then implement that technology with the funds that are available. My side of the house works more with some of the other agencies like Departments of Health in states and Agency for Toxic Substances and Disease Registry. And these folks are more into the public health assessment activities. And not only do they look at baseline risk assessments and the information that comes in as part of a remediation project, but they also collect information from local health agencies, those people who interview residents who live nearby. They interview activists and other stakeholders in the process. And they try to take a more global look.

MR. DREW RAK: Just briefly, what's getting passed around is a glossary of risk assessment terms. So if there's some group of words that... We tend to be very colloquial a lot of times. The other is a full set of slides. We

will not be using all the slides that are in that set. But all the ones we do use are in there.

And then lastly is a handout that we borrowed from EPA. It's from Superfund Today publication, and it's entitled "Focus on Risk Assessment." And I think it provides an excellent overview of Superfund risk assessments. So those three items are going around.

Thank you, Ron.

MR. RON PORTER: Sure. And my presentation is designed to be an interactive presentation. It's one that has sort of developed over the last 5 years as we've been invited as representatives of the Surgeon General to go out to bases, and brag bases as well as active bases, and to talk to groups like this, Restoration Advisory Boards that are not quite sure in some instances what their job is. They understand that they're there to represent the community. And most of them have some concerns of their own about where they live, and maybe they have a history, some knowledge about some of the activities that occurred on the base. And they want to know about how the risk from those activities is evaluated.

So we have developed this to go out to the community and say "Here's the way the risk assessment process works." We try to do it in terms that lay people can understand, because in the Federal Government we use lots of acronyms and big terms and then on the scientific side we also use a lot of big terms. And we try not to talk down, but to use language that is easily understood.

And then lastly, to give you some information from our experience, some information about where you fit into the process, what is it that the Restoration Advisory Board is allowed to do and is maybe directed to do by the establishment of that group.

To get some just basic terminology out of the way, what is "Risk"? It's the probability of an adverse outcome. And "adverse" is the key word there. Risk inherently includes some adverse outcome. For environmental risk, generally we're talking about that adverse outcome is an adverse health effect. And that could be applied both to the human side and it also can be applied to the ecological side. Or there are inputs to the bugs

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and bunnies that will be exposed to the contaminants at a particular site.

The National Academy of Science was charged to develop a method to do risk assessments. And back in the '80s they came up with a book, it's called "the Red Book," a little small guy, and its title includes the words process for doing risk assessments in the Federal Government. And that was a long time before EPA got involved with these cleanup sites. EPA took that Red Book and EPA developed their methodology for doing risk assessments. And that's basically the same methodology that you'll see in the products that come out of the cleanup program here at the former Chanute Air Force Base.

Here are the things that we know we have to look at. The nature and the amount of hazard. What is the "Hazard"? Is it a chemical? Is it a physical hazard? Could it be radiation, some of those other things? Could it be a safety hazard? And then, what is the amount of that hazard? Is it a very high concentration in certain areas or is it a very low concentration spread out over a large area?

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Also from EPA we get most of our information about what the expected health effects are. If I find lead at a site, I can go to a document published by EPA and I can look up "Lead," and I will see a number that EPA has determined as a cutoff number, a screening number. And if the lead concentration is lower than that number, then EPA, in general, will say "Well, that's probably not a hazard." We need to spend our time and our resources on other chemicals that might exceed some screening values.

We also look at characteristics of exposed population. Kids, pregnant women, healthy adult males that are in a work place environment, in an industrial environment. Why do we do a risk assessment? These are the reasons that sites are identified for risk assessments. Because we have some historical information about something that took place at that site, either accidentally or on purpose. On that site there was a spill. That was an accident. Or on that site we had some sort of process. The Air Force cleaned equipment there. And from that cleaning of equipment it generated metals or organic contaminants or something like

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that. And so we know that from history that there was something that happened there and we need to check and see when we stopped that activity and cleared that property, if there is some risk that's left over.

The baseline risk assessment looks at the site, and that's what occurs in the remedial investigation in the RI. The baseline risk assessment does the evaluation, and it tells you what the risk is if we don't do anything. We can go out to this yard out here and we can do a baseline risk assessment. There's some prescribed methods that we follow about sampling. There are some prescribed methods that we follow about the analysis of those samples, where we take the samples, how many we take. And then we calculate the risk. We use numbers from EPA. We make some assumptions about exposures, and we calculate the risk. That's the baseline risk.

Now we hand that information over to the CE guys on the other side, the Risk Managers, and they determine what to do about it. How do we mitigate this risk? Or is this a risk that needs to be mitigated. If it's 10 feet under this grass,

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there may be a risk if you crawl 10 feet under the grass. But as long as it's buried and has grass growing on top of it and it's the type of chemical that doesn't move around, then there's very little risk. You could dig it up, you could spend a lot of money digging it up and move it out of the way. But if you're doing that, you're taking money away from maybe another site on your property that might need a quicker response.

This is just our general remediation flowchart for the circle process for the cleanup process. You probably maybe even know what those acronyms up there are for. The remedial investigation, feasibility study, and some work that Drew and I have been doing. These are the places where we've identified, that we have identified that are opportunities for risk assessment. This baseline risk assessment that we do in the RI, in the feasibility study we're looking at this level of contaminant here, and the engineer now has to make a decision about is there a method out there first that I can use to clean it up? And if so, do I have the money to do it? If there is a high risk and I don't have the money to

do it, then as a Risk Manager I've got to go out there and get that money and clean it up.

Questions so far? Interrupt me if I'm going too fast. I've got more than I should try to cover in the length of time that I have. But stop me as we go.

Here are the steps in the risk assessment process. And it goes all the way back to the early (inaudible) when the National Academy of Science said "This is the way the best scientists in the United States and Canada thinks we should do risk assessment."

Data collection and evaluation. And I'll briefly describe each one of those. Exposure assessment and the toxicity assessment. And notice that these two guys, they can occur at the same time. It's not that linear process. We can do exposure assessment and the toxicity evaluation at the same time. At the end of that process I probably have a number. Engineers love numbers: "Give me a number. If it's above it, I'll do this. If it's below that, I'll do that." But I have a number now that I need to put into some context. How comfortable am I with that number? I

have to tell the engineer that "Yes, I've got this number. But, you know, I really don't know how much time people spend on this property." I made some assumptions about that, and I may have made assumptions based on some statistical package I saw or some research project that evaluated people's time on the flights.

So I tell the Risk Manager, the engineer that's responsible for the cleanup, "I have this number. I'm very comfortable with it because the data I have is solid. The toxicity data is solid. The exposure data is solid. The concentrations, I pretty much know where the contamination is. And that's a good number." So that's good for the engineer.

What's bad for the engineer is I'll give him a number and it's really soft. "Here's the number that you wanted, but I'm not too crazy about the numbers that I got for the toxicity." I'm not sure that we're actually looking at the right chemical for toxicity. I know that it's a solvent. But I couldn't find any good data on this solvent, so I substituted something else. Something that's kind of like it that may act like

it. But I don't have good data. And that's the information that the Project Manager needs to know to strengthen his decision-making process.

To data collection, these are made-up numbers. Please don't assume that those are the former Chanute Air Force Base numbers. I think they were numbers somewhere like in California. And this is the historical record of sampling from a sampling well for truckload ethylene. So you can see back in '89, August/September, we had some pretty high hits. Now we sampled monthly, down here in December, and we've got pretty low numbers. Well, a couple, there can be a couple of reasons for that.

Back in July, July through September the methodology that I used to measure TC and groundwater might not have been that great. Because these methods are developing every day, the technology is getting better. So I may have, I may be able to see it more clearly. And that's maybe a hard analogy. I'm more confident in the analysis. It could go the other way, too. The numbers can be higher. The technology can get better and say what we were measuring earlier is actually lower than

what we saw.

So we look at what did Chanute do? Was Chanute ever a sack base? Did it do training stuff? We can sort of look back through the history and say Chanute did this for the first 10 years and then for the next 30 it did this, and it gives us an idea of the activities that occurred at Chanute. And then we can sample for the things that we know are related to those activities. We look at old aerial photographs. The corporate memory is very important. If I go to a new site, I try to find the oldest guy that works at CE, that's been there 45 years, because that guy can tell you "I remember back in the 40's, we did this over here. I remember that we used to have a landfill over here."

And we found a lot of stuff that way. We found old wells. We found lots of stuff talking to that guy who has been around a long time. The blue suiters may not be your best source of information. They've got the books; they look through the book. But they don't have that on-site history that a lot of folks will have, the sampling records, the emergency spills. The public source,

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also you go to the newspaper. It says we had a plane crash at this site in 1949. Well, that may have escaped, you know, our collection of information. And we need to go out to that site, do some sampling and say "There's nothing here" or "Maybe there is something here that we need to look at."

And so at the (inaudible) of our data collection step, that very first step, I now have identified sites. I've gone over the base with a fine tooth comb. I've talked to everybody I can. And now I have a list of maybe a hundred sites that are potentially impacted. I also have a list of chemicals based on the activities. Whether the spill? Was it a crash? What occurred there? I know which media or what are contaminated. By "media," I mean is it surface water? Is it groundwater? Or is it soil? Because I know that based on what it was the physical and chemical characteristics of the compound. If it's TCE, I know that it goes through soil pretty readily. It goes into groundwater and hangs around for a long time. If it's some other metals, it may not move as much. It's going to be right there in the

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soil. And maybe my best bet is to come here with a backhoe, scrape up a couple yards of soil, and I'm done with that site.

That's all right. I know how high my concentrations are. And very important, I also know what I don't know, or maybe I don't know all of what I don't know, if that makes any sense, but I recognize it was data gaps. I don't have any information on this groundwater out here where I think there was some activity. So I need to get mobilized and get a contract on mine (inaudible) and get somebody out there to sample.

Exposure assessment is next. We can go ahead with that. And this is a real busy graph, I know. It tries to capture in one picture. It has the different media that we look at and the different pathways. So I've got this industrial activity out here. I see some air contamination coming out of that stack. It looks like it's fallen on. It has the ground there. And I've got kids playing in a sandbox. So I've got some sort of... Something raining down out of the air. Here's's something that looks like I've got some off-gassing there, and I've also got some

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groundwater contamination in the stream. And here's Old John out here. He's been fishing in this stream for, it was the last 30 years. He's out there catching that fish.

Depending on what that chemical is, not all chemicals will move into fish. Depending on what that chemical is, it could be something that might be in fish tissue and that might be something else we look at. So not only do we look at air and water and soil, but we also look at the other potential pathways. Can I be exposed through gardening? Can I be exposed through catching fish or killing deer? And then after I've looked at the potential ways that a person is exposed, I also look at the types of, the duration of the exposure and the frequency of the exposure.

If I'm an industrial worker and I work at a tire plant, there are going to be some industrial solvents there. Benzene is the one we used to use a lot in the tire business. And I'm going to be exposed generally speaking for 8 hours a day for 250 days a year. I get 2 weeks off for vacation. So that takes care of those other guys. It's 5 days a week. I have a pretty good idea about

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that exposure. I also have a pretty good idea about the concentration of the exposure because probably that plant has some data about how much we used and what the temperature was and all those things that would affect.

Do I drink 2 liters of water a day? That's another. We've got some assumptions we make about how much people eat, how much they drink, how much they breathe. How long do they live in a house? That's an important one. You know, if it's a residential scenario, does a person in Illinois live in a house 30 years? Is that sort of the average? Or is it like some bigger cities where the average is like 3 years or 5 years? In the military it's like 7 years or 9 years. We did some assessments where we went back and went through military housing records because there were pesticides in the soils. Well, how long is a person exposed in this house? The military records showed us with pretty good clarity that the maximum time was 9 years and the average time was a lot less than that. Another busy slide. But these are the things we look at.

For a brag base, this is important. Am I

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going to use this section of grass out here? Am I ever going to build a house on it? I don't know. I can't answer that question. Or is it going to be like this place, is it going to be a commercial endeavor, or is it going to be agricultural? Is it going to be turned into a park? And for each of these future land use activities there's a set of values that you plug into the calculation of the risk.

If it's residential, we assume that people are there for 300 and how many, 350 days a year. They also get 2 weeks' vacation. So if I live in this house, the number that EPA puts into that calculation of risk is 350, assuming you get 2 weeks off for vacation and you're not going to stay at home and mow the grass, you're going to go somewhere else.

Intake rates, you know, all of us drink 2 liters of water a day. Our kids ingest 200 milligrams of soil a day. Us adults ingest 100 milligrams of soil a day incidentally. You know, we work in the garden, we have hand to mouth contact, or putting our pens in our mouth and things like that. Those are the defaults that EPA

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has out there for us to use. If those defaults... If we don't feel like those are really representative, if you're in a warmer climate. Drew and I come from San Antonio. And 2 liters of day is probably not appropriate. That includes coffee, tea, soft drinks, all that. We drink a lot more down there. It was 95 and like 90 percent humidity when we left.

So we've identified our sites, and now we're doing the exposure assessment. And here are the things that we... Here's the things that we have in hand when we finish the exposure assessment. We know something about the populations that live nearby. We have an idea about the physical setting, how much rainfall it gets and temperature and some of those other things. And we also know something about how much an individual is exposed to based on his time on-site and the concentration of the chemical.

I'll just spend the shortest time ever on toxicity because this is the one that we don't fool with too much because that's a number that's generated by EPA. And for somebody from the Air Force to say we don't agree with that number, EPA

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would say "Well, let's put in a fund of $100 million and let's do the research and change the number if you don't think it's that good." So we don't do a lot with the toxicity stuff. What I will tell you about the toxicity is that the data is divided among those, between those chemicals that are either cancer-causing or noncancer-causing. And the assumptions that are plugged into the risk assessment are a little bit different for each of those.

To give you an idea... And most of our information on this toxicity stuff is from animals, right? It only makes sense. We've got some human data on some things where we have known exposures to a discrete compound, not a mixture. We've got some information on that. But for the most part, for most of the chemicals in the data base for toxicity, the information is rats and mice. And so they take an experiment, here's the health effect in the rat. And that health effect may be something only like watery eyes. That may be the effect they measure. And as the dose went up, as we increased the dose of this gas to this rat, his eyes watered more and more, or he was anxious, more

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and more anxious they could tell. So they measured the levels. At what point did that effect start in the rat? And then they watch to see how that effect went up.

Now how do you relate that to the human? That's as hard as can be. You have to build in safety factors, times the safety factors. Depending on which animal you use and which exposure you use, it may be a thousand. So I take 1 as the number that caused the effect in this rat. It was just 1 milligram of this stuff. Well, then, in order to make it safe for a human, I have to divide it by 1,000. That's the way EPA has chosen to arrive at a number from animal data that they presume to be protective of human. That's important for you to understand, I think. Most of the data is in animal data. And all of that business that I talked about earlier about how certain amount (inaudible), that information is available for us, too. This is a real strong number. We feel like the number for Benzene is a good one or this number is a little softer.

Yes, sir.

UNIDENTIFIED SPEAKER: I just want to

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add, you said 1,000. Most numbers are between 10,000 and 30,000. So you take a safe dose for a rat, you divide a minimum 10,000, a maximum of 30,000.

MR. RON PORTER: Because it's a factor of each, I'm going from a rat to a human, and that's 10. I expose the rat orally. I expose the rat orally, but I'm looking at some other input that's another factor. They just keep building in these, dividing by these factors of 10 until they arrive at a dose that they think is safe for humans. And then finally, which at that point, as I mentioned earlier, I've come up with all I can do or the person that's doing that risk assessment now has a number for this site for this chemical, for this exposure root, for this future use of this land, and I hand it to the engineer. But I need to add those qualifiers in there that let him know how comfortable I am with the risk assessment. So I give him something.

Yes, sir.

UNIDENTIFIED SPEAKER: On toxicity, I think it's very important to indicate for a hazard and history for nontoxicity.

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MR. RON PORTER: That's right.

UNIDENTIFIED SPEAKER: I really hate to leave these people with an idea that there's a threshold effect.

MR. RON PORTER: I think there is.

UNIDENTIFIED SPEAKER: You may think there is, but we're not allowed to do that.

MR. RON PORTER: I understand. And I will... Let me put that graph up there. And I didn't mean to slight that in any way. There it is. What's the obvious difference there in that? It goes to zero. The thinking up until this year, the philosophy, or maybe the political stance up until this year has been that a molecule of a cancer-causing substance can cause cancer. That's the EPA philosophy. So no matter where this curve started in this experiment as I showed in the other, they draw that line through zero. So they're saying that if you go out into the sun and you're susceptible to skin cancer and you get one UV radiation, whatever that packet of energy is, it can knock off a molecule and affect your DNA and you can get cancer from that.

We now know though based on some research

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that for some chemicals there's a threshold. Probably for TCE there's a threshold because, because it doesn't affect the DNA. It controls something. In fact, it affects something else that controls the DNA, the repair mechanism or something. If I was misleading, I didn't mean to be on that.

UNIDENTIFIED SPEAKER: Well, it's just important to educate the people on the two ways we do this. One is a non-cancer health effect and one is (inaudible).

MR. RON PORTER: And the bottom line of this... He's exactly right. The bottom line of this is these are not things that we really debate. We take what the State of Illinois says is their cancer slope factor or noncancer comparison value or what EPA says. That's just what we do. And that's what we're allowed to do by our risk assessment philosophy.

Now the Risk Manager is the guy that's got the tough job. I will not... The Risk Assessor, our jobs are easy. The Risk Assessor's job is easy compared to the Risk Manager. Because now he has to take this number or series of numbers

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and has to make a decision about "Where do I allocate my money? How do I rank these sites? How do I address maybe some contamination that we don't have the technology to really clean it up effective? I can pump groundwater and treat it, but I don't get a lot for my dollar in a lot of places. Once I get down to low levels of contamination there, I don't get much in my opinion."

Go ahead, Drew. I won't say a lot about this except that for the cancer, and this gentleman brought up this cancer stuff, this is one of these things that we have trouble reconciling. And these are background levels of cancer. And I've been to communities all over that say "I know four people on my street that had cancer. My mother died of cancer." And those things are all true. Those are not falsehoods. The fact is that 1 in 4 deaths results from a cancer, all causes. I heard a statistic on cancer from environmental exposure. It was... Do you remember, Drew, what it was?

MR. DREW RAK: (Nodding negatively.)

MR. RON PORTER: No? It was low. It was low. No exposure, no risk. That's what I think

the end of that one was supposed to be.

Okay. Here is my summary. Risk assessment is an evaluation of potential human health and environmental impact from chemical exposure. Or other things. It could be radiation. It could be from chemicals that are in medicine. It helps determine which of the risks on sites need to be reduced or eliminated. And then it forms the foundation for the Risk Manager to make some decisions about which sites to do first, what types of remediation strategies to use for each one.

Is that the last one?

MR. DREW RAK: Yes, it was.

MR. RON PORTER: That was the last one. Oh, no, it's not. What did I do?

MR. DREW RAK: Oh, I'm sorry.

MR. RON PORTER: Those are the things that RAB members... These are not an exclusive list. These are the things RAB members have participated at other raps. They give us historical perspective. They remember things new people on-site don't remember. They also have that memory about potential exposures or know something

about landfills or some other sites that could provide an exposure. They help evaluate, especially on brag sites, what the future land uses can be. What are each of these parcels and buildings going to be used for? And that will directly affect maybe the money allocated, the risk assessment that's done on that site. Which sites are most important for you to get cleaned up first? Is it sort of that cost benefit thing? I can spend some money here and get some good value out of this site or I can work on this site for a long time and not have it available for use. Maybe that's your goal though. Maybe that site bothers you so much that you would feel better living near it if it was cleaned up.

And finally, the other thing is to share knowledge with the community. As RAB members you represent a larger constituency out there that knows what goes on in these meetings and what is going to happen in the future out here at the former Chanute. I wasn't going to do that one, Drew, but you forced me.

MR. DREW RAK: I'm sorry. It looks like you took it out.

MR. RON PORTER: Risk assessment is not a lot of things. As I used to be a hard scientist and now I'm a soft scientist, which means I used to do stuff that was pretty cut and dry. When I did my experiment, I got some numbers. I got something I could really put my hands around. And in the risk assessment business sometimes you can't really get a firm grasp on things and you have to build the end on these uncertainties that in your professional judgment will be protective of human health and environment.

That's all I'm going to say about that one. Thank you for your time.

MR. VIRLON SUITS: Any quick questions?

MR. RON PORTER: Sorry I took so long.

MR. VIRLON SUITS: No. It was informative. One of our goals of our advisory meeting is to go into more of an educational type of process, to educate the RAB membership as far as what we're up against and what we're doing. We'll try to get one of these at probably each and every meeting. And next time we'll have another one here. So...

MR. DREW RAK: If there's a specific part

of that 4-part risk process that maybe you would want us to come back in some more detail, we can do that as well. This is kind of the overview. Ron presented 4 boxes. And if there's one that kind of grabs people's attention, we can come back.

MR. RON PORTER: Drew and I are consultants to the Air Force, and our telephone numbers are on that sign-up sheet. If there's questions you're not comfortable in asking in a public forum, or if there's someone you might know who might not ask a question in this forum, we'll be glad to respond to those questions. If you're not comfortable with an Air Force person answering them, we can certainly connect you with our colleagues that work at EPA or in the states that would give you information I think that would help you understand the process.

UNIDENTIFIED SPEAKER: (Inaudible question.)

MR. RON PORTER: That discussion is in the handout, and I pulled it out. But you're right. The important thing... And I had that as a bullet at the bottom, and I sort of went over that quickly. It says "No exposure, no risk." In order

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for there to be any risk from that chemical, it has to be available in the body at the tissue at which it affects. That sounds kind of complex. But the chemical, you have to be exposed to that chemical and that chemical has to be in the form in your body that causes the effect that for which it's famous, whatever that is.

So if you're not exposed to groundwater and there's something in the groundwater, there will be no effect. Or if you're not exposed to this soil out here and there's something in the soil, or you think there's something in the soil, there won't be an effect. That has to be complete. That pathway has to be complete. And I'm not sure where you wanted me to go with that.

UNIDENTIFIED SPEAKER: It's kind of like a fire triangle where you've got dots and fuel. The same thing applies to risk assessment. If you have a source, the containment, you have to have a pathway or a way for it to get to you. And then there has to be a receptor, you. You take away any one of those three, there's no risk. Because in order to have risk, you have to have all three.

MR. RON PORTER: And to finish that, an

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exposure doesn't always result in the health effect. You know, it's not always "If I'm exposed, something is going to happen." Our livers especially have evolved over the years to protect us very well against all sorts of compounds.

Well, thank you very much for your time.

MR. VIRLON SUITS: The second item on the agenda is that of remedial action sites. I'm not going to dwell on that. We've covered this before. Most of the sites, once again, be reminded they're in the operable Unit 2. And specifically those items that we've been working on most recently are the landfills. Along those lines I have put on your agenda there because those are restricted areas. You will notice we have put up some signage. We are going to expand on that because of what we have certainly gathered in the way of data with respect to the landfills and then also with respect to the Fire Training Area and several of the other sites. We're not as much into the 7 sites yet at this point. But of those sites we are going to treat those with more, I guess the terminology would be "urgency." And from that standpoint we will be installing a fence for the

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primary purpose of what I just said. We now have enough information to where certainly the fencing is appropriate and needs to be installed.

The sideline issue of that is that the weekend people that are here are getting very frustrated certainly with people driving through there and everything. So this will stop that flow of traffic. But we did want to bring that up to the community, that that will be happening here in the next month or two in the way of fencing in installation.

If there's any questions on that?

MR. RAY BOUDREAUX: Virlon, I think you and I should talk at some other time on that subject, if we can.

MR. VIRLON SUITS: Yes, we will. We have not talked on that yet. We have not established the exact lines or what.

MR. RAY BOUDREAUX: Yes, we need to talk about that. And if there's a hazard, of course we don't object to it being sealed off, but there may be some other ways we can do that besides a fence.

MR. VIRLON SUITS: With that as Agenda Item No. 4, which is Landfills Progress and Status,

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I know what we had talked about in terms of length, Bryan. I don't know how innovative you are, but try to hit the real important parts. This is Bryan Rundell. He did speak with you last time.

MR. BRYAN RUNDELL: I'll go quick. I spoke with you last time. What I'd like to do is just give you an update on what we've done. We've collected some information. I think the last time I spoke about it I showed you some nice pretty pictures showing we did a geophysics survey, kind of looked underneath the ground and told us where the... And I'm focusing on the landfills. It told us basically where the waste in the landfills was deposited since we didn't have good enough historical records to say exactly where the waste was. I'm going to go over that. Field investigations that (inaudible). I will show you some of the data we've collected showing there is some contaminants we've detected in soils and in water in the landfills that are above published values that IEPA and EPA publishes.

And that kind of leads into what Virlon was saying, which kind of puts us into a situation where we probably need to take some action to

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restrict access to these landfills. I'll try to go quick here. I'm just going to go right on into it.

The last time I spoke that we were going to do a CPT investigation. And what that was is it was a way to... Very similar to drilling wells ...it's a way to punch an instrument which measures the resistance as you push it down, and it tells the difference between the sand and the clay. And I think the most important thing we probably determine from that investigation using the CPT, and that's what this color map shows, it led us to a conclusion that we really didn't know at the time, and that is if there's a pretty thick sand unit underneath the area where the landfills are at OU-2.

If you look in here, these areas that are pink on the diagram, they show the sand unit is about 8 feet thick. And that's in your upper shallow unit, your Wisconsin till. And that's a pretty thick sand unit for that till, which means it makes a substantial amount of water. And when you do a risk assessment I was talking about earlier, you have to assume a future scenario for

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groundwater. That's one of the things you do. You imagine somebody builds a house here or a company puts a building there, would they use this groundwater for drinking water or for industrial use?

Originally we thought that there wasn't thick sand units in this upper portion. And it's not the part of the geology in this area they normally use for groundwater. But based on this investigation you can see there's a pretty good-sized sand unit underneath the landfills. So it's likely this water in the future could be used as a groundwater source. So that will make us put wells in that and monitor it. And it's just something to know that I think originally in the other meetings you were told. And maybe there wasn't that much sand in the unit. And there is quite a bit. That is kind of the result of CPT. We found other things, too. There's a lot of clay out there. These areas that are white, we found no sand. But that's some conclusion of the investigation we did I think is important to present as knowledge. And I'll move on. I talked about...

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MR. RAY BOUDREAUX: Give us a little idea how far down. 5 feet? 6 feet?

MR. BRYAN RUNDELL: It's about 15 to 20 feet down from the ground surface.

MR. RAY BOUDREAUX: 15 feet?

MR. BRYAN RUNDELL: Yes. I think an important thing about that is Illinois EPA has regulations where they designate where an aquifer is a Class 1 or a Class 2. The Class 1 means that that aquifer could be used as drinking water, that it has enough yield that would sustain a well in that unit. And it's likely that based on the thickness of that sand unit or its depth that it would probably be Class 1 in this investigation.

MR. RAY BOUDREAUX: At 20 feet?

MR. BRYAN RUNDELL: But it makes the risk assessment adhere to more stricter standards is basically what that means. And I talked about the weed. We did the geophysics. It shows Landfill 1 and 2. And I'll show you pictures of the landfills, they're basically random pits, we didn't see. It looks like they... Whereas Landfills 3 and 4 I'll show you the diagrams. You see very linear trenches. They had long basically cuts that

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they made into the ground surface. They put the waste in there. A very systematic manner. And they were probably older.

And then the next one was filled, the next one was filled. And that is good information for us because it will give us an idea where to investigate. It also gives us an idea of how the landfills were used historically. And stop me. I'm going to go pretty quick because I agreed to save time here on some information. This is just a subset of the data that we have available for the landfills. But when I spoke, what we did is we collected these samples. This is Landfill 1. And you see kind of the pink areas? That's where we determined there was waste material when we did the geophysics investigation.

And then what we did at each location, we took a surface sample, a subsurface sample, we took a backhoe, dug into the ground, took a subsurface sample. Then if any water flowed into the trench, we sampled that material, too. And what we then did is we took those results and EPA, USEPA and IEPA they published values where they precalculated whether a certain contaminant at a certain level

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would probably pose a risk. It's called "screening." It's not (inaudible), but it's a good idea to give you an idea if there's contaminants in that area that could pose risk to the human health or environment.

This shows one of the screening levels is TCLP, which is a record screening (inaudible). This shows on Landfill 1 here, you can see that we did exceed, this red area, you can't see very well, that that exceeded for lead. So at that location in surface soil we collected a sample that shows that it exceeded the TCLP risk level for lead.

MR. RAY BOUDREAUX: I bet there was skeet in there.

MR. BRYAN RUNDELL: Well, what's interesting... It's possible. But this is one of the furthest samples from the skeet range. So we're not sure where it came from, but it certainly exceeds the regulatory levels. It is a long ways from the skeet range. We are talking today, we have other theories about possibly where this came from. But it doesn't really matter where it came from. It exceeds TCLP levels. And I'll go through a few more of the landfills.

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This is Landfill 2. Again, I'm focusing here first on metals that exceeded risk levels. We've got a sample down here which is in red right there. And this is in subsurface soil. And that also exceeded TCLP level for lead.

UNIDENTIFIED SPEAKER: What is TCLP?

MR. BRYAN RUNDELL: TCLP is what we use to determine whether it's hazardous waste or nonhazardous waste. It's called Toxicity Characteristic (inaudible).

UNIDENTIFIED SPEAKER: It basically is a calculation to show (inaudible). This is very similar to the test that we did for the lead in the playground. The leachability of the contaminants to get into the soil and get into the groundwater.

MR RAY BOUDREAUX: The groundwater.

MR. BRYAN RUNDELL: Now this is a different contaminant. This is dioxins. Dioxins, there's different theories about how they form. And certainly they keep their form by incomplete combustion. Basically when you burn something, you can't destroy all of the material, the ash that is left. We know they probably did burning at these landfills. They threw the waste in the pits and

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burned some of the material. And we did, we took the samples that we took in surface soil for dioxins, we screened them against the IEPA level. I think... I don't think it's IEPA. I think it's EPA

UNIDENTIFIED SPEAKER: Yes.

MR. BRYAN RUNDELL: You can see on this one, all of these here that are in blue, yeah, in blue, those are above residential screening levels for dioxins. And that means that USEPA has determined, kind of based on what they spoke about earlier on the risk assessment, that a person who's exposed to these, using the standard residential scenario, assuming you lived on these landfills and were out there basically 350 days a year, that this is unacceptable risk. And that's what that shows. In surface soils you do have some contaminants out there right now that are probably unacceptable if a person was going to build a house on those in terms of the health effects from those.

MR RAY BOUDREAUX. And we know we can't build a house on that landfill because it's in runway visibility range, so you'd never ever have that happen as long as there was an airport here.

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MR. BRYAN RUNDELL: Right. But I think you do a real conservative comparison to get an idea what was out there.

MR. RAY BOUDREAUX: I agree.

MR. BRYAN RUNDELL: That would lead us to (inaudible). We don't want people walking on the landfills. We show here right now in the surface soil you could potentially be exposed to these contaminants.

UNIDENTIFIED SPEAKER: There's been no decision yet on what the remedy will be. We're far from that right now. We're trying to get there.

MR. RAY BOUDREAUX: We will have an opportunity to talk about what the land is going to be used for and those kind of things at some time when we start doing that remedy determination. Right?

UNIDENTIFIED SPEAKER: Actually on all brag sites, in this case the authority would be City of Rantoul. I'm sure several years ago to the Secretary of the Air Force for approval outlining their general concept for what portions of the base, if any, you want for residential, what you want for industrial, agricultural, so on and so

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forth. That document, once that's approved by the Secretary of the Air Force, that is the guidance that the brag cleanup team uses in terms of looking at the various risk scenarios. Those are the reuse criteria.

MR. RAY BOUDREAUX: This is all industrial.

UNIDENTIFIED SPEAKER: We're looking... The reason we're looking at residential is because if, in fact, it was safe for residential...

MR. RAY BOUDREAUX: It would be safe for everybody.

UNIDENTIFIED SPEAKER: Then the Air Force to transfer to the City, you could do whatever the heck you wanted to it. If it's above residential, they need to put a (inaudible) before they transfer saying "No, you can't use if for residential," to deal with their liability, and that also addresses the City's liability.

UNIDENTIFIED SPEAKER: I would also point out in point of fact there's more than industrial activities going on. There are agricultural activities now that USEPA is going to assume are going to go on. There are also recreational

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activities going on around here.

MR. RAY BOUDREAUX: That's right.

MR. BRYAN RUNDELL: Kind of flowing with that, this Landfill 4, this is dioxins. Landfill 4, this also is above industrial. In this case above residential levels and plus then it was higher than that in above industrial. So I think this is the only one that had dioxins and furans that we detected when we did the sampling that is above commercial industrial levels. I think this is the highest level that we found in dioxins and furans. It's not really important concentration. Basically once it's above the screening level, you know, you would in the, our report preparation, you do a full risk assessment. You consider this information.

But at this point we're trying to present the data just to show that there is stuff out there above published values that IEPA developed.

MR. RAY BOUDREAUX: What do those come from?

MR. BRYAN RUNDELL: This one, dioxins, like I said. There's some theories about how it's formed. It's probably incomplete combustion.

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Probably burning.

UNIDENTIFIED SPEAKER: Plastics, like the plastic that have the ordinary compounds of the chlorine in them, you know, chlorinated solvents, things of that. You burn them, and generally you're going to get a dioxin.

UNIDENTIFIED SPEAKER: What about the furans? Same thing?

UNIDENTIFIED SPEAKER: It's having the chlorine there and doing the burning activities at lower temperatures. If you do it in an incinerator at 2,000 degrees, you don't have that formulation that you have when you are just doing it out in the open, open burning.

UNIDENTIFIED SPEAKER: You say this is Landfill 4?

MR. BRYAN RUNDELL: Yes.

UNIDENTIFIED SPEAKER: Where would that be?

MR. RAY BOUDREAUX: All the way on the southeast corner. Way, way out on the southeast corner, the intersection of...

UNIDENTIFIED SPEAKER: (inaudible).

MR. RAY BOUDREAUX: See that black spot

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on the top center? That's J. B. Hunt's old building.

UNIDENTIFIED SPEAKER: So this is...

MR. RAY BOUDREAUX: The Gordon, all that wide space. If you look there on the west where it says "A" and "B," that's where the Art Gordon plats were.

MR. BRYAN RUNDELL: Landfill 4 is over here. It's over here. It says "A13." It's kind of in the corner of the base. I'll throw a few more of these up here.

MR. RAY BOUDREAUX: Is that stuff all going to the library now, so I can check it off?

MR. BRYAN RUNDELL: This information? Not yet. But I'm sure it will.

MR. VIRLON SUITS: What was the question?

MR. RAY BOUDREAUX: Is it going to the library?

UNIDENTIFIED SPEAKER: It's not in a published final document.

UNIDENTIFIED SPEAKER: It's also not in the form that the regulators have reviewed. You're seeing it almost right after we're seeing it.

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UNIDENTIFIED SPEAKER: I saw it before Gary. This is the first time I saw it, today. So...

MR. BRYAN RUNDELL. This is... I wanted to show this one. Another contaminant that we detected in surface soils, it's actually a group of contaminant pH's. It stands for (inaudible). If you have diesel fuel, diesel fuel is a component, or it's a liquid that has a huge amount of compounds in it. And some of them are very heavy chain, what they call them, meaning that they tend not to migrate. Basically they have a lot of hydrogen and carbon. It's really not that important.

But these contaminants are typically left behind. They don't dissolve in the water very easily. They also are formed, too, we think, too, during burning possibly. And we commonly found these type of contaminants on the landfills under surface soil. Landfill 2 is a good example. You see all the red on here? These are all above our screening levels. There are a lot of different types of pH's. Some of those are known carcinogens. I'm not sure if there's any Type A.

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It's certainly not all these are carcinogens. Some on the list are. We did depict on most. Polyaromatic hydrocarbons. I have another slide. Landfill 4 of the same at pH's.

What I'd like to do is get to the recommendations, and then if we have people who have questions. I think our recommendations are... Again, this is preliminary data. It was just collected. It has the EPA. IEPA has not reviewed it. Our intent here was just to give you an idea what we've done to this point. Since we talked to you last time we've moved quite a bit further along, collected some data. (inaudible).

The report has been completed. It was a presentation for the Air Force that we did, and that's what this data came from. And based on this information, we still have a lot more work to do. When we talk about groundwater, we've got to characterize groundwater. We only did 8 test pits at each landfill. We did that quickly to collect data. There has to be more sampling done in the creek and lake. More sampling at the landfills to define basically the nature and extent of this that we detected.

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So certainly one of the things we recommended after we did this initial sampling effort is that we need to continue on with this program to define the contamination at the site to properly assess what is the risk of human health? What is the risk to the environment from the site? And I've got a list on here of the other activities that we will be continuing to do for the next... through the summer and certainly through the fall. We've got to install groundwater wells and sample those. We've got to sample and characterize the creek and the lake at the site.

UNIDENTIFIED SPEAKER: What is OU-2?

MR. BRYAN RUNDELL: OU-2 is that whole area again. OU-2 refers to this whole area right here inside there. It includes all 4 landfills. It includes all of the sites that Jeff mentioned, the 7 sites. And then it includes... Is there an 8th site in there? Anyway, it includes all the sites that we're currently investigating. And then also we still have more trenching activities. We found basically where the landfills' limits are. We had to go in there and verify those are the limits of the landfill.

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We determined what the thickness of the waste is, what the lateral extent of the waste is. And then we also need to put some wells. Actually in the landfill we found leachate in samples. We found leachate in the samples that we dug. Water flowed into the pits. We sampled that. Some samples did exceed risk levels. The next step is to put wells in the landfill, figure out where the leachate is at, how much is there, is it flowing into groundwater, basically to determine what risk these landfills are to people who potentially could be exposed to this contamination we identified.

And that's really, I think, all I've got to give to you.

MR. VIRLON SUITS: Any questions of Bryan? (No response.)

Excellent briefing, Bryan. I apologize a little bit to the group because the slides will appear to be technical, you know, particularly from the standpoint of terminology. I know you've been doing that. So interrupt us at any time, you know, when the technical buzzwords are in there that you don't understand.

MR. RAY BOUDREAUX: Can we get a

definition of "surface soil"? Is that at the surface or surface plus 12 inches or surface plus...

MR. BRYAN RUNDELL: Our definition... It varies usually sometimes by project. But generally the definition is...

MR. VIRLON SUITS: Surface down to 6 inches. 0 to 6 inches. That is what we used on this project. So soil from the actual area we walk on down to a depth of 6 inches.

MR. RAY BOUDREAUX: Good. That's all I need.

MR. BRYAN RUNDELL: And then to clarify... That's a good question. Sub as far as soil is really basically anything below there that when we were digging these pits with the backhoe that we thought we should sample. If we saw an odor there... Or smelled an odor, saw a stain or saw nothing, we still took a sample, because it doesn't always mean (inaudible). The leachate samples. The pits typically were about 15 feet deep when you go down and the landfills, a backhoe. Our objective is to try to get at least down to where we encounter water.

Are there other questions?

UNIDENTIFIED SPEAKER: Did you just have a total that...

MR. BRYAN RUNDELL: We did speciates, and I presented. I got kind of an education on dioxins at this site. Most of these were speciated. That means something to you.

UNIDENTIFIED SPEAKER: That's fine. I was just wondering.

UNIDENTIFIED SPEAKER: What he's saying is there are a lot of dioxin compounds. Okay? And when they say speciated, it means (inaudible). And what USEPA has done is said, "Okay, in order to do a risk assessment when you have all these dioxins, you put them into what you... into one term, 'dioxin.' And then you calculate what's called the 'Toxicity Equivalency Factor' or 'Equivalence Factor,' TEF, and it ranges from 1 to .001 times for each one you multiply this factor, fudge factor ultimately.'" And against the toxicity that, most toxics. The most conservative toxicity value we have for dioxin, and then you use that and add those up to come up with toxicity equivalency factors.

MR. RAY BOUDREAUX: That would be an interesting question. How close or how far did we enter into the danger level with the calculations that we got? In other words, if we're using the most conservative number and you have a continuum that says "This is nontoxic and this is toxic," someplace in between there's going to be a place where you break from toxic to non someplace. Or is there?

UNIDENTIFIED SPEAKER: I know it's probably... We're going to be doing... We're going to be doing what the regulations and the guidance tells us to.

MR. RAY BOUDREAUX: Go through zero.

UNIDENTIFIED SPEAKER: And we're not attempting to be overly conservative, but we're also wanting to protect the most sensitive individual.

MR. RAY BOUDREAUX: Absolutely.

UNIDENTIFIED SPEAKER: And like you said before, there's going to be a range that that number represents plus or minus.

MR. RAY BOUDREAUX: Yes.

UNIDENTIFIED SPEAKER: It's a number, but

it can go up or down and... But probably more down than up. And we won't know what that is until the end. Right, Ray?

MR. RAY BOUDREAUX: Yes. Yes. And essentially the goal of all of this is to determine what type of a cap to put on the top of these things or whether or not they have to be removed or whether or not they have to be...

UNIDENTIFIED SPEAKER: We're required to put on a remedy that meets the 9 criteria on the list.

MR. RAY BOUDREAUX: To spy the risk that is determined when you're finished; right?

UNIDENTIFIED SPEAKER: Right.

MR. RAY BOUDREAUX: Okay. Good.

MR. VIRLON SUITS: Okay. Thank you, Bryan. Timewise we've blown it this evening. I hope that you can bear with us a little longer this evening. I promise not to do this to you every time. But with this we're not quite halfway through the agenda. And, Mike, you're on.

MR. MIKE WILLIAMS: How much time do we have?

MR. RAY BOUDREAUX: 40 seconds, plus or

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minus 10.
MR MIKE WILLIAMS. I have 3 hours of presentation material.
MR. VIRLON SUITS: I see that. I'm sure you haven't got (inaudible). Put a slide on for each one, and we'll discuss it. And perhaps it will generate the questions.
MR. MIKE WILLIAMS: Okay. I'm Mike Williams, again, with Jacobs. And I have been working on the Fire Training Area 2 site primarily and also on the Building 932 site. To a lesser extent I will briefly mention what's going on at the 747 and 700 sites.
The Fire Training Area 2, is everybody familiar with kind of those sites? I guess maybe we should... I'll show this to you. Fire Training Area 2 is located right here. And this is all in the OU-2, Operable Unit 2 area that Bryan was talking about. Building 932 site is located here. Fire Training Area 2 was used for fire training practice purposes. They had a number of mock-up units where they placed planes, or I'm not sure if they were fake planes or actually real planes.
MR. RAY BOUDREAUX: Fake.

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MR. MIKE WILLIAMS. And they practiced lighting and extinguishing them. So you can imagine, there was plenty of materials they used for iguition. And some of those materials eventually made it into the ground. And we suspected that going into the investigation. Building 932 was used for training purposes, for refueling planes. It's basically a big concrete apron that had some pumps and underground storage tanks. Some of the residual or the leftover material ended up in a sludge pit kind of located about right here. And there was also a bladder tank area.
So there's kind of three primary areas that we looked into at that site. Okay. So status, I guess I'm going to try to be extraneous here a little bit. As far as free product, that project was initiated a little bit to help the EECA, the Engineering Evaluation Cost Analysis portion of the Fire Training Area 2 site to address the product or the petroleum hydrocarbons that are actually existing in the soil that was suspected may be floating on top of the water, the groundwater.

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And so at present what we've done there is we've kind of combined the two investigations to a certain extent. We expedited it a little bit and went in with some investigative tools. Bryan kind of touched on one of them. Basically some tools to punch through the ground and measure different properties of the subsurface. One of the other tools that he didn't talk about that we did at that site that helped us quite a bit in characterizing it is a tool called "ultraviolet floor resins" which basically as you're punching down emits a little laser, and the petroleum that's in the soil causes the laser to fluoresce. And then they used that as kind of a relative indication of where the petroleum is at. Boom! Here it is. Boom! It's gone again. And so...
MR. RAY BOUDREAUX: Have we started pumping that stuff off there yet?
MR. MIKE WILLIAMS: No, we haven't.
MR. RAY BOUDREAUX: It would be a perfect time though. The water table is very high.
MR. MIKE WILLIAMS: It is very high. That's a problem as far as characterization actually.

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MR. RAY BOUDREAUX: Sure, because it's all probably floating up on the ground by now. That's not very safe.
MR. MIKE WILLIAMS: We are in the process of getting ready to pump out the drainage ditches that exist there, pump them down to a level that we can actually go back in there and do some additional characterization.
Let me show you some pictures here. Pictures are always better than words. Well, let me back up for a minute. We did characterize Fire Training Area 2 using some geophysical methods which allowed us to come up with a determination of some areas that we suspected would be good to investigate. And this is an interpretation of that where we came up with some what we call "anomalous" or different than the background-type areas.
MR. RAY BOUDREAUX: Is that north to south top to bottom?
MR. MIKE WILLIAMS: Yes. This is north.
MR. RAY BOUDREAUX: Thank you.
MR. MIKE WILLIAMS: And that's the Fire Training Area. These are the drainage ditches that are full of water. They're concrete-lined ditches

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approximately 12 feet. And we're not sure how much sediment is in them right now. We suspect anywhere from 4 to 5 feet, maybe as much as 6, 7 feet of sediment. Results of the geophysical study that we did came up with some areas where we suspect there may be some existing drainage lines. And we went back to the as-built civil engineering type drawings. And those line up pretty well with the drawings. So these are in addition to the former mock-up areas. These are also good, potentially good areas to find some of the petroleum.

We also noted a couple of, again, anomalous areas. One of them up here in particular was an area where there used to be a lagoon. That lagoon was removed. I'm not sure what year. Do you remember what year? Well, it's out of there now. But we do have a little bit of deeper contamination in this area as opposed to other areas.

MR. RAY BOUDREAUX: Anything below the 12-foot depth of the concrete barriers that divide that off?

MR. MIKE WILLIAMS: We...

MR. RAY BOUDREAUX: Hopefully not?

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MR. MIKE WILLIAMS: Let me answer it this way. We did detect some contamination outside of the drainage ditches.

MR. RAY BOUDREAUX: Oh, you did? Too bad.

MR. MIKE WILLIAMS: Inside here, we didn't want to punch too deep because we also don't want to send contamination down deeper than it actually is. At the same time we want to fully investigate it and make sure we detect everything. So it's kind of a balancing act. And so in a few locations in site here we did go as deep as 12 feet. However, right in the heart of some of the most contaminated areas we only went down to 7, 8 feet, maybe 9 at the most. We didn't want to...

We had done some CPT, some of those bores that Bryan talked about, on the outskirts of that area where we didn't suspect any contamination to a deeper depth to kind of characterize what was there. As Bryan pointed out, we detected a pretty significant sand unit. It was our feeling we definitely didn't want to go down and penetrate into that sand. So like I said, there was a little bit of a balancing act kind of characterizing and protecting the environment.

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I'll just show you one of these. I can't help myself. These are some of the borings inside of that area. This also kind of shows you where the former mock-up areas were at. There were at least five mock-up areas. We're showing seven. I'm not totally convinced that these three... With respect to one mock-up area (inaudible). But we set up...

MR. RAY BOUDREAUX. There were three.

MR. MIKE WILLIAMS: Pardon?

MR RAY BOUDREAUX: There were three. I remember seeing them. There was a Jeep on this little one and a helicopter.

MR. MIKE WILLIAMS: Oh, you do? Okay.

UNIDENTIFIED SPEAKER: Yes, there were three.

UNIDENTIFIED SPEAKER: You remember pulling pipes out a...

MR. MIKE WILLIAMS: Some of the diagrams showed five. I didn't know.

UNIDENTIFIED SPEAKER: Those were newer ones.

MR. RAY BOUDREAUX: One was a Jeep or

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truck and one was a helicopter.

MR. MIKE WILLIAMS: Okay. So we punched some of these borings through the soil. And we used that to not only characterize the subsurface soil, the underlying geology, but also like I was talking about, we used the ultraviolet fluorescent laser to come up with zones. And that's what this is right here. Basically as it's being punched down, it spikes when it sees petroleum-related product. And it comes back down basically when it (inaudible).

So you can kind of follow this. You can see with depth where we suspect some of the petroleum is trapped in the soil. This is kind of a cross section. You can see, this is plan view obviously, and this is a cut right through the soil. So... This yellowish color is representative of the gravel that's on the surface. So that's why it has kind of a different color. It was interpreted by the CPT as sand, but it's actually more of a gravel. And then this CL material is clay primarily. At that particular site you don't pick up the sand until about 17 1/2 feet.

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MR. RAY BOUDREAUX: From that... While you're trying to find your slide... From that, it looks like about 8 or 9 feet, all the stuff was above that. So...

MR. MIKE WILLIAMS: So we also have several of these where we just basically took our data and we sliced it and we kind of come up with areas that are... that show higher levels of contamination than the other areas. And a lot of these areas correspond pretty well to where the mock-up units were at, as you might expect.

Another thing we hadn't done previously, we had really no idea, was groundwater flow direction in there. We installed some temporary little wells. And we measured those to determine, you know, which way is the groundwater flowing? We'd like to know for risk purposes who might be at risk? So one thing we found is that those concrete line drainage ditches are actually causing the water inside there to mound higher than the area outside here by at least a foot or two. So we recognize that. And these are separated, these three wells lie outside of the concrete drainage ditch, and we show flow direction to the southeast

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basically. Salt Fork Creek is over here, by the way. Groundwater flow up here is more straight south to southwest. So there's a little bit of a difference there. This is kind of just a one shot picture. And it's a lot better if you go back and substantiate water levels or groundwater flow, you know, a few times at different seasons. Sometimes when it's...

MR. RAY BOUDREAUX: What depth there?

MR. MIKE WILLIAMS: Pardon?

MR. RAY BOUDREAUX: What depth there?

MR. MIKE WILLIAMS: When I took these, I believe inside of here we're talking about a foot or less below the ground surface. And outside of here, anywhere from 2 to 5 feet.

I'll try to speed this up just a little bit.

MR. RAY BOUDREAUX: Gary, tell him what he needs to tell us. You've seen all this. Do you know what he needs to tell?

MR. GARY SCHAFER: Actually I've seen portions of this today. I don't know if I've seen every slide he has.

UNIDENTIFIED SPEAKER: Gary, don't push

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it.

MR. GARY SCHAFER: I'm not asking.

UNIDENTIFIED SPEAKER: Thank you. Thank you.

MR. MIKE WILLIAMS: I'll throw up some analytical results.

In addition to doing some of the other things we described, we took soil samples obviously trying to discover if there is a risk at this site. And what we found was we detected some VOC's, volatile organic carbons. Those are the lighter-type hydrocarbons. Like Bryan mentioned, Benzene, that's one of them that we typically look at.

We detected TCE. That's a solvent. I think that was mentioned earlier in the presentation. We also detected the PAH's again, polycyclic or polypneumatic hydrocarbons. Several of those. And we, like Bryan and the landfill investigation, use a couple different screening criteria. We've used IEPA's screening criteria, USEPA's screening criteria. And we also did some preliminary back calculations based on risk numbers to come up with what are called "remedial

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objectives." Those are termed "preliminary" because we don't have the full understanding of all the, you know, all the exposure preliminary stuff that we discussed earlier. And then also we had, especially in the surface soil, several dioxins and furan detections.

Subsurface soil pretty much mirrored the surface soil, not quite as heavy on dioxin and furans. But many of the same were detected.

Okay. What I'll do now is just quickly talk about 932, Building 932, tell you what we found at 932.

MR. RAY BOUDREAUX: I was going to say, a summary slide would be real good about now.

MR. MIKE WILLIAMS: This is a challenge to summarize.

MR. VIRLON SUITS: I'm sorry about this.

MR. MIKE WILLIAMS: This is Building 932. I just wanted to show you some of the areas that I was talking about. These are the bermed areas that form bladder tank areas. This is the concrete apron. That's still a concrete apron.

MR RAY BOUDREAUX: It's a bus parking lot.

UNIDENTIFIED SPEAKER: Future bus parking lot.

UNIDENTIFIED SPEAKER: I was going to say.

MR. MIKE WILLIAMS: And this is basically the former Building 932. So at that site we had a number of underground storage tanks that held jet fuel for training purposes. And then over here there was a sludge pit identified. I'm not going to go through it, but we did some of the same things at Building 932 at the FTA-02 site. We didn't do the ultraviolet fluorescent, but we took soil samples in the same manner. At this particular site we came up with detections, as you might expect. DVOC's and PAH's.

At the Building 932 site it was kind of interesting. We detected actually more PAH's or more different types of PAH's than we did at the Fire Training No. 2 site. And a number of those were above the screening levels that I talked about for the Fire Training Area 2 site. Okay. Let's see. All right. Skipping through hundreds of hours of work...

MR. VIRLON SUITS: This is what's so

unfair to these guys. You can tell what he was saying a while ago when he said "I'm sorry, Jim." I know exactly what he's saying. He has got all this stuff, and it's pretty. I mean it's good stuff. It's pretty and it's colorful and everything, and they're aching to just show all of this.

MR. RAY BOUDREAUX: What we should do is one of these at a time. I can tell you right now, you go much over an hour in any meeting, you lose them.

MR. MIKE WILLIAMS. You do. You do. I agree.

So we're into the conclusion section.

UNIDENTIFIED SPEAKER: Would it be the preference of the group then to save this?

MR RAY BOUDREAUX: Let's get the conclusions. I think that's important.

MR. MIKE WILLIAMS: Okay, I'll go through them as quickly as possible here. We detected a number of geophysical anomalies. We think we have a good handle on what a lot of those are. There are a few of them that we're going to need to continue and investigate. We have a good handle on

where the jet fuel petroleum-type contamination exists in the soil at the Fire Training Area based on the analytical sampling and based on the ultraviolet fluorescence technique that we used. Okay.

We have a better handle on groundwater flow. Although I would say that another, at least another round is needed to substantiate what I showed. And then primary contaminants detected at both sites, some volatile organics, some of the PAH's that we talked about, and dioxins and furans.

So based on this, some type of removal and/or remediation is going to be needed at both sites. Not, you know, to abide by not only regulations that are in place, but also to address human health and ecological risks. And for purposes of transferring the property to the Village of Rantoul.

That's basically it. We have recommendations on additional sampling. That will be done. Basically we're just going to fill in some of the data gaps. We went through a little bit of an expedited sampling effort. And there are

areas where we feel like we need to go back in and just clarify a few things.

MR. RAY BOUDREAUX: Did you do any borings through the concrete in the bus parking lot there?

MR. MIKE WILLIAMS: Pardon?

MR. RAY BOUDREAUX: Did you bore through the concrete at all?

MR. MIKE WILLIAMS: Yes, we did.

MR. RAY BOUDREAUX: Did you replace that back in there or put something to...

MR. MIKE WILLIAMS: Asphalt patch, I believe.

MR. RAY BOUDREAUX: Just so that there's something to repair the concrete.

MR. VIRLON SUITS: 747. Any questions of him at this point? (No response.)

Okay, you've got the 747.

MR. MIKE WILLIAMS: I do apologize for taking up so much time.

MR. VIRLON SUITS: 747 is not inoperable.

MR. RAY BOUDREAUX: They know where that is.

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MR. VIRLON SUITS: Does everybody? Okay.
UNIDENTIFIED SPEAKER: I don't. Oh.
MR. RAY BOUDREAUX: You couldn't even fit the landing gear in there.
MR. MIKE WILLIAMS: Okay. Basically what's going on at 747 is that we are in an investigative-type process to find out there's been some TCE detected. TCE is a solvent. It's probably one of the most common solvents used in the industry.
MR. RAY BOUDREAUX: PD680 in the Air Force.
MR. MIKE WILLIAMS: Is that what it is?
And so in this process right now we've prepared a draft work plan. We've also... And that was given to the Air Force. The Air Force had some comments. And we just recently submitted a, what we're calling a "Draft Final Work Plan" to the agencies. That was actually sent out on May 5th. That's wrong.
Really that's pretty much it. I mean in that work plan we have, you know, we've identified where we need to take some groundwater samples,

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where we need to take some soil samples and what parameters we need to analyze for basically to determine again if there's a risk at this site, then what needs to be done.
UNIDENTIFIED SPEAKER: The building and how much area around the building, are you considering that?
MR. RAY BOUDREAUX: It's not a very good site.
UNIDENTIFIED SPEAKER: What happened to this site was it was an underground water tank closure. When they sampled the monitoring wells around the underground storage tank, they detected chlorinated solvents. We had some problems or questions about the data from the old contractor. So Jacobs came in, tested it again. They were there again. So it's not a fallacy. So what we're trying to do is they found... We found something in groundwater that exceeds state groundwater standards. So we're kind of working backward to find out where it came from.
UNIDENTIFIED SPEAKER: I guess I would add the fact that that's a chlorinated solvent, is a bit of a spray. We wouldn't have

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expected to see the chlorinated solvents associated with the underground storage tank that had been pulled. Therefore, there must have been a tank other than the tank for these chlorinated solvents. And that's what we're trying to find right now. There must have been a source detector.
UNIDENTIFIED SPEAKER: I think that's what they've done, (inaudible).
MR. MIKE WILLIAMS: Do you want me to talk about 700?
MR. VIRLON SUITS: Go ahead. It's the old base filling station. Does that help? Okay.
MR. MIKE WILLIAMS: Okay. Building 700, as you know, there's been remediation system pump and treat-type system that's been in place. It's currently been shut down since, as you can see, since January 27th. We submitted a preliminary Tier 2 evaluation. And what that is is using Illinois EPA's system, you can either go... You can either look at their numbers, their Tier 1 numbers which are basically screening numbers and compare that to the analytical values that you're getting and say "We're above" or "We're below" and

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then make decisions. You can go a step further and do what's called a Tier 2 evaluation, kind of like risk assessment, where you take site specific numbers to come up with maybe a better idea of what's going on there and maybe a better number. And that kind of is a rough nutshell, I guess, is what that report is that was submitted on April 14th.
MR. RAY BOUDREAUX: What did it say? Say it's good, clean, or needs more or what?
MR. MIKE WILLIAMS: It says that, well, I don't know if I want to say that it's clean. I guess it depends on a number of factors that... Well, there are a few other things that have to be addressed, I guess. We have to determine... Well, we have to do some additional sampling to determine a few other things before we can actually say that. That's kind of why we're calling it a preliminary Tier 2 evaluation.
MR. RAY BOUDREAUX: That's why I asked the question.
MR. MIKE WILLIAMS: Maybe I'll ask for your help on this.
UNIDENTIFIED SPEAKER: Basically what

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we've submitted is a plan to make the Tier 2 determination. And the Tier 2 determination would, in effect, be, is the calculated value that comes up with the Tier 2, have we shown that the remediation system has drawn the contaminant values to something below that? And that remains to be seen, whether we have succeeded or not.

MR. VIRLON SUITS: We don't have a slide on 952. The 952 attenuation report has been with the State. What will be happening there is the State will be issuing a letter to us, the FPCA. I need to get that letter recorded like we would get a deed recorded. And I've checked with the County Recorder's Office, and they will be receiving, they will be receiving that from me and recording it at the time that I bring it to them.

Yes, Gary.

MR. GARY SCHAFER: It might be useful if you explain what it is you're having the Recorder record on the deed. I'm assuming it's a use restriction of some sort.

Steve, is that correct?

MR. STEPHEN NUSSBAUM: Yes. For the Leaking Underground Storage Tank Program, the State

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has adopted regulations. And the regulations we're using is, and I can explain this at a later time, it's Tier Approach to Cleanup Corrective Action Objectives. TACCAO. And when they come in under that program, they can make assumptions... This is kind of using that risk assessment we talked about, they can make assumptions about what exposures are going to happen. And under the regulations it allows them to assume that no residential exposure is going to happen. But they would have to put on deed restrictions, institutional controls, things like that onto the deed to make sure that nobody would be exposed, and then we would be less conservative with the numbers that we looked at for risk. Okay? So, but the letter will come out without saying you're clean if you do this and you have 45 days to file with the County Recorder's Office. So we've kind of been sitting on this until Virlon found out, yes, I can get that done in 45 days, so we don't have to go through and do it again.

MR. RAY BOUDREAUX: In that particular site you're saying that no residential... The last lady that was here that gave the presentation out

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there said that it was... met all the objectives of the Natural Attenuation Program and all the buggies had eaten the right things.

MR. STEPHEN NUSSBAUM: What she wanted to prove was natural attenuation was working. What she ended up proving was we can close this site out under TACCAO.

MR. RAY BOUDREAUX: Okay. I see. Yes. There's not ever going to be anything.

MR. STEPHEN NUSSBAUM: Instead of running off and making this a science experiment, the Air Force said, "We'll just slide out," which is a good thing.

MR. RAY BOUDREAUX: Fine. As long as the EPA agrees that's fine. Yes.

MR. STEPHEN NUSSBAUM: But the property will have a deed restriction on it.

MR. RAY BOUDREAUX: It says "No redemption.

MR. STEPHEN NUSSBAUM: And no use of groundwater. The issue is no use of groundwater because the groundwater has levels above.

MR. RAY BOUDREAUX: And "groundwater" meaning water within 20 feet or 30 feet of the

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surface.

MR. STEPHEN NUSSBAUM: Groundwater is below the site, groundwater. No wells can be put in.

MR. RAY BOUDREAUX: Well, you're not allowed to drill a well in the city of Rantoul without permission anyway. So that works for me. And that is within the city limits.

MR. STEPHEN NUSSBAUM: That's pretty much what we talked about.

MR. VIRLON SUITS: Okay. Finally, we have gotten to the OU-2 update. And Jeff, will you give us a fast rundown on that.

MR. JEFF VILMAN: All I need to say, since the last meeting we've continued working on our planning documents. The work plans are into the agencies for review. We're starting to respond to comments. And we hope to be in the field collecting data by late summer/early fall if all goes well. I'm done.

(APPLAUSE!!!)

MR. VIRLON SUITS: Okay. Any questions of Jeff? (No response.)

Item No. 8, Update on Lead Fragments

found in Parcel G. I don't have that much of an update for you. I have addressed this with the EPA as far as us doing some additional investigative work to see if we can more precisely or more adequately determine what the source of this may have been. I guess our feeling is that we could limit ourselves as far as the... If it ends up being a hot spot removal, for example, we could limit ourselves possibly by finding out more of what the actual material is.

If the actual material is solder, for example, we also find out that the particular solder that was used at that time would be consistent with that, that it would help us more adequately determine, you know, particularly areas to go down and to locate them and remove them. We're also going to go into the library here, into the museum and look for photographs, aerial photographs of the time of the construction, as many as we can find, as many as your wife can help us find, Ray.

MR. RAY BOUDREAUX: Yes, she will be happy to do that.

MR. VIRLON SUITS: And we'll go through

them in detail.

We do have with us, we're privileged to have with us this evening Cary Ware. We had wanted him at the last meeting, and I think you were unable to make it at that point or you were out of town. I can't recall just what it was. But I think at that time I had met with a number of you and with Cathy and her husband, and we had said to you at that point, you know, there's certain services certainly available to, you know, to the people with children, if there is concern with the children. So Mr. Ware is here to address any questions. Cathy did call me. I had specifically invited her. But then she was unable to make it. I don't know if she called in. So I don't know if she would have expressed any questions she may have had to any of you. But at that point, I thank you for coming. And if you have questions of Mr. Ware, why go ahead and ask him at this time.

(No response.)

I'll go on then to the issuance of deeds. We have not issued any of the deeds to the public bodies, such as the Village of Rantoul. We also lack three deeds to be issued to the private

developers. One of these that's in the process, one thing I want to say at this point, with what we have discovered in the Operable Unit 2 and actually some of the concerns, maybe greater concerns, I would say, as far as what happens to groundwater here is that with that USEPA has taken a position that they wish to see more information and more data and more conclusions as far as which way groundwater is flowing before issuing additional (inaudible). We have faxed into their office, and Gary graciously sent back to me and said, "We need additional information."

I don't know at this point, Gary, if you want to expound on that some more. But at any rate, that's where we stand.

MR. GARY SCHAFER: I don't know how tolerant everybody is for time. I can be very southern. As Virlon said, our concern is groundwater. As you know, it's USEPA's responsibility to concur with the transfer of property from the Air Force to the private sector. We can't make that concurrence unless we know it's clean. And what's happened is the gentleman that spoke before, first of all, Mr. O'Dell talked about

the sand layer. When we went into this and we started transferring property. We had some old information from previous studies we were relying very heavily on that seemed to indicate there was not a pervasive sand layer. And there's sufficient aquifer that can convey large amounts of groundwater... "Large" is a relative term ...relatively large distances.

Some of the work that Jacobs has done recently in discovering a sand layer has sort of given us better information. And it looks like there is a greater capability for groundwater to become contaminated and to move out of OU-2 than we had originally thought.

The second part of that, the concern is when Mr. Williams was talking and he put up a little chart about groundwater flow direction that's the second part of our concern. Up until now we were always assuming that groundwater in this aquifer was being controlled by the creek. In other words, the creek was the discharge point. And what we're finding, what Jacobs is finding that's not always necessarily so. So combined with some of the data we're finding with the

contamination, we don't feel comfortable enough where we can say to you these parcels are not contaminated by groundwater. So we feel that we have to get more information. The direction it's going, it seems like there is a greater possibility of contamination could go out of OU-2 perhaps into OU-1. We don't know right now.

MR. RAY BOUDREAUX: And OU-1 is essentially the City property separates OU-2 from any property that's owned by the private sector by a long distance. But that doesn't necessarily mean that it couldn't transverse that public property.

UNIDENTIFIED SPEAKER: We're talking about the aquifer then is...

MR. RAY BOUDREAUX: 20 feet.

UNIDENTIFIED SPEAKER: Right. It's above what we use in the city.

MR. RAY BOUDREAUX: Oh, we use way, way down for drinking water.

UNIDENTIFIED SPEAKER: The same.

MR. RAY BOUDREAUX: But there's also problems... And they can tell you better about it ...whenever you punch through and go all the way down, then you have chances for things to flow down

and flow up and do all kinds of weird things. So that's why there's reasons you have to close wells when wells have been dug. And they have to be done properly. And there was a whole bunch of them out here.

MR. VIRLON SUITS: So that's where we're at.

MR. GARY SCHAFER: Is there any questions about that that I can help with?

UNIDENTIFIED SPEAKER: You said private developers now. Which parcels are those that you're talking about?

MR. VIRLON SUITS: The church and the library.

MR. RAY BOUDREAUX: And B3.

MR. VIRLON SUITS: And B3.

UNIDENTIFIED SPEAKER: What's that?

MR. VIRLON SUITS: White Elephant.

MR. RAY BOUDREAUX: And they're all owned or purchased by the same guy.

UNIDENTIFIED SPEAKER: I notice you call it B3 instead of White Hall.

UNIDENTIFIED SPEAKER: White Elephant.

MR. VIRLON SUITS: Not really. I've

still got that so (inaudible) in me. It's hard for me to get out of that mode.

MR. RAY BOUDREAUX: Isn't it convenient?

MR. VIRLON SUITS: I'm falling into the trap, too, going into the technical jargon.

MR. RAY BOUDREAUX: Isn't it convenient that the three parcels owned by one person has not been....

UNIDENTIFIED SPEAKER: Convenient for him.

MR. RAY BOUDREAUX: And now all of a reason... And now all of a sudden we find a reason that he is not...

MR. VIRLON SUITS: Is into the reuse. What's the latest?

MR. RAY BOUDREAUX: I'm not going to say anything. It's getting too late. But I do have a question.

UNIDENTIFIED SPEAKER: This is the highlight of the meeting.

MR. RAY BOUDREAUX: Okay. We're talking to a guy about aviation reuse.

UNIDENTIFIED SPEAKER: Aviation reuse.

MR. RAY BOUDREAUX: Yes. Talking about

building a 55,000 square foot addition to one of our factories. We're talking about... I'm not going to tell you who because it's all very, very hush-hush-hush. You get the latest and greatest. This is not for public release. This is all very quiet. We're also talking to a gentleman about building a 150,000 square foot warehouse. So we are just about ready to do the T hangar project. We're getting very close getting that on the street, to start construction over there.

The balloon thing went off very, very well tonight. We announced a lot of new sponsors. We're working... I can't tell you who.

UNIDENTIFIED SPEAKER: Different participation from what I hear.

UNIDENTIFIED SPEAKER: Curt was talking 150 balloonists already.

MR. RAY BOUDREAUX: No more than that. All the competition division is full. 100 balloonists, and 100 balloonists are there. We're installing things out back for the sewer for all the... You know, the Health Department requires if you're going to be in a trailer for a long period of time and you are washing dishes and stuff like

that, you have to have a sewer. So we're installing a sewer out back for all of our... But we're doing it neat. We're doing it with volunteers. But it's interesting. And everything is going along very well.

But I do have a question. On the RF for OU-2, you said they wouldn't start until summer or fall. I would prefer we get started as soon as we can on that. Especially since we have (inaudible)... And that RAFS included the sample and all that stuff to the farmland and all the rest of that stuff out there; is that right? Everything. That excludes the seven sites and the four landfills and the fire training pits. But everything else; is that right?

MR. VIRLON SUITS: Well, actually these will be combined into one final document, Ray. They are two.

MR. RAY BOUDREAUX: That's what I kind of thought.

MR. VIRLON SUITS: Well, we are treating them separately because actually they're separate contractors.

MR. RAY BOUDREAUX: I would hope that we

would go to Mock 6 on this.

MR. STEPHEN NUSSBAUM: Here, this is something that I think you really need to put on the table, Virlon, with respect to we're trying to get this stuff finalized, but one of the critical problems, and I don't know that everybody is aware of this, and maybe I shouldn't say, is the funding issue. Chanute has been hanging out there for a long time. There are a lot of other bases that have gotten there RI's done and gotten projects awarded, done remedials. They're way out of here. They're shutting the doors. They're gone. Chanute, because of the problems that we've had, the base realignment and closure money is running out. And there's a pot of money that's been set up for Chanute. The problem is, we've got to get it obligated at the end of this year.

MR. RAY BOUDREAUX: That's why I'm saying, I think we're...

MR. STEPHEN NUSSBAUM: So what we're trying to do is... I'll be honest. What my job is for the citizens of Illinois...

MR. RAY BOUDREAUX: Is to get the money.

MR. STEPHEN NUSSBAUM: ...is to work with

the Air Force and USEPA before it goes away, it's not available for that for 6 years.

MR. RAY BOUDREAUX: That's right. You've got it.

MR. STEPHEN NUSSBAUM: So what's going to happen, some things have been delayed. The start of the RI has been delayed trying to secure the money. We spent an extra, what, 3 hours today...

MR. VIRLON SUITS: That's right.

MR. STEPHEN NUSSBAUM: ...trying to get the folks at headquarters and other folks together to try and get this money preserved for Chanute and get it used.

MR. RAY BOUDREAUX: Is it time for us to jump in? We do not interfere as the City of Rantoul. And I do have a statement to make. I think it's very important that everybody understand that we understand your jobs, the jobs that you have to do, and we'll cooperate fully with you to get those jobs done. And we encourage you to do them and to the very, very best of your ability. And we appreciate what all the gentlemen do.

And sorry that we don't spend hours and hours going over your pretty pictures. But, you

know, there are ways that we can get meetings done very, very quickly and see all that data if we were very, very organized when we sit, when we get ready to do it. And when we have to... It's nothing, none of your fault, and we appreciate all the work that you have done.

And the City of Rantoul is very, very much interested in this property being as clean as it possibly can be so that there's no impact to the humans and to the environment. I mean that's the whole goal. But we also want to see it done as quickly as possible basically because we know the money is running out. Because back in the early days when we started this, Virlon, I don't know if you remember, we would sit around tables and holler at people because they didn't do anything. And they didn't. When I first got here, they weren't doing anything. And they didn't do anything for a long time. And it's too bad, but there doesn't seem to be any remedy, except for us to keep working and working hard and trying to get it done as quickly as we can.

Now it's time for us to jump in and get the politicians where they need to be in order to

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secure the right kind of funding that we might need in order to do the projects that we deserve and that we need. Then it's time for me to get the Mayor to do the things that he needs to do. But I sure don't want to do that if it's out of line or if it's too early or if it's not the right timing or any of those things.

But if it is, you just need to let us know. Because we do not interfere other than try to make sure that we all understand we are in a cooperative reuse environment here. We are no longer a military base. But we still want it clean. So...

MR. VIRLON SUITS: And, Ray, we will do that, you know.

MR. RAY BOUDREAUX: But if there's a need now to get our politicians involved, we will most certainly do that. And we have a very strong contingent of politicians that can probably get what we need. But we're not a Superfund site by any means. But what are we talking about in numbers? Do you need $5 million? $200 million? A billion? How much do you need?

MR. STEPHEN NUSSBAUM: Well, I want to be

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very cautious about this. We're not saying that we're going to have to spend everything or whatever. But the Air Force has, the Federal Government is very interesting. If you get money awarded and you don't spend it by the third quarter, they try to take it back and give it to somebody that's going to spend it.

MR. RAY BOUDREAUX: Hey, I know! I've been there.

MR. STEPHEN NUSSBAUM: And our projects that come on the book... I'm sorry, Virlon. Do you want to go into this?

MR. VIRLON SUITS: Go ahead. You're doing fine.

MR. STEPHEN NUSSBAUM: The project on the book is slated to be awarded the last quarter of this fiscal year, which means not only that... Christine, where's she at? She's the person that's got to take all this stuff and then give it to, say, Jacobs or another contractor and get a contract written and awarded so that they can prove that they spent the money, so that it doesn't get taken way. Is that accurate, Chris?

MS. CHRISTINE OLGUIN: Yes.

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MR. RAY BOUDREAUX: She's got a warrant and she can't speak. She can't speak too freely because it's very, very difficult for her in her position, I understand, contracting officers. And I appreciate the compromising position that you're in trying to answer that question.

MR. STEPHEN NUSSBAUM: But, see, we're all trying to get all these things done in a short period of time.

MR. RAY BOUDREAUX: And all these people understand that. And if you need for us... I mean every person here, Lorraine understands that. She was the head guy's secretary. She understands all this stuff and how you have to spend money. So you don't have to explain. All you have to do is tell us when you want us to jump in and start getting the work done. Okay? Because don't wait too late, because we can't do things overnight. But if it's time for us to do things and pull some strings and talk to some people, I sure know some people. The Mayor has some very good contacts throughout the state and throughout the government. So...

MR. VIRLON SUITS: Okay.

MR. RAY BOUDREAUX: We'd be happy to pull

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the strings.

MR. STEPHEN NUSSBAUM: It's not to encourage you or discourage you, Ray. It's just that so everybody knows there are push-backs because we're trying to secure funding. The start of the RI did get pushed back because we're trying to secure funding. That's a fact. But we have data that we think we're trying to use to lock the funding up. So...

MR. VIRLON SUITS: And some of what was briefed relative to the levels.

MR. RAY BOUDREAUX: Oh, that's been forwarded up. So somebody has got it.

MR. VIRLON SUITS: Yes, my understanding.

MR. RAY BOUDREAUX: Doesn't FC have a method of getting funding?

MR. VIRLON SUITS: The funding is, we get the funding, AFBCA gets the funding. We get it to AFCEE, and then the AFCEE does the contracting. Okay.

MR. RAY BOUDREAUX: So you're getting it through closure accounts. That's even worse.

MR. VIRLON SUITS: The brag closure.

Lorraine.

MS. LORRAINE WIRGES: Off the record.

(Whereupon a brief discussion was held off the record.)

MR. VIRLON SUITS: Open discussion? If there's no open discussion, we're done.

UNIDENTIFIED SPEAKER: If the funds run out, then you wait for another 6 years; is that what you're saying?

MR. VIRLON SUITS: No. It does look bleak.

MR. STEPHEN NUSSBAUM. After this fiscal year, the money, the budget is dramatically reduced. And they may even have to be put in to fund it with regular Army installations and the (inaudible). So they don't get special attention.

MS. LORRAINE WIRGES: And you have more base closures coming up, so you're going to be in trouble.

MR. VIRLON SUITS: That's why we were in there, the middle of the record.

MR. GARY SCHAFER: I would say, Jackie, your point to me, I think that was for USBCA to offer its observation on this. We are aware that

brag accounts are dwindling. We are doing everything we can to strongly encourage the Air Force to obligate this money for Chanute Air Force Base as soon as possible. If the brag accounts... If this money is not obligated and this goes into DERA, like Steve said, you know, the brag accounts come to an end, there could be a long wait. We don't want to see that happen. We are doing everything we can to encourage the Air Force to get this money now. So there are some decisions that I think are pending that are being discussed at fairly high levels as we speak.

MR. VIRLON SUITS. There is Defense Environmental Restoration Account.

MR. STEPHEN NUSSBAUM: It's where all the installations get their money, not just special brag funds.

MR. RAY BOUDREAUX: Then is when they decide who has the highest risk, who has the greatest need? And so now you fall into... You get racked up. So you may be way down at the bottom of the rack.

MR. GARY SCHAFER: That's exactly right. What happens with DERA is the sites that are the

Superfund national priorities list sites, those go to the front of the line because it becomes an enforcement issue for the military. If they don't clean it up, then the regulators start extracting penalties over time. So obviously there is, you know, in terms of prioritizing things, the Superfund sites get the top priority. Chanute Air Force Base is not a Superfund site.

UNIDENTIFIED SPEAKER· And so much work has been done already that it just gets less and less on the list.

MR. RAY BOUDREAUX: And the same thing is true on Superfund sites. There's been a lot of work, a lot of investigation, a lot of remediation, a lot of characterization, a lot of stuff to design remediation. It's very, very, very costly.

Okay. We're done, I think.

MR. VIRLON SUITS: Anything else? (No response.) Thank you.

(Which were all of the proceedings held before the Restoration Advisory Board this date, said meeting being adjourned at 9:07 p.m.)

STATE OF ILLINOIS)
) SS
COUNTY OF MACON)

CERTIFICATE OF REPORTER

I, MARLA K. DARSHAM, Certified Shorthand Reporter and Notary Public in and for the County of Macon, State of Illinois, do hereby certify that I reported in shorthand the proceedings had on the hearing of the aforementioned cause on the 7th day of May, A.D 1998, before the Restoration Advisory Board.

I do further certify that the foregoing 99 pages are a true and correct transcript of my shorthand notes so taken as aforesaid and contain all of the proceedings directed by the Restoration Advisory Board.

I do further certify that I have no interest in the outcome of this action.

Given under my hand and seal this 4th day of June, A.D. 1998, at Decatur, Illinois.

AFFIRMATIVE REPORTING COMPANY

By.

MARLA K. DARSHAM, CSR
and Notary Public

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