



KELLY AFB
TEXAS

ADMINISTRATIVE RECORD
COVER SHEET

AR File Number 3261

Kelly Restoration Advisory Board

Technical Review Subcommittee (TRS)

Meeting Agenda

December 9, 2003, 6:30 p.m.

Environmental Health & Wellness Center

911 Castroville Road

(formerly Las Palmas Clinic)

- | | | |
|--------------|---|--------------------|
| I. | Introduction | Dr. David Smith |
| | a. Agenda Review | |
| | b. Packet Review | |
| | c. Approval of November TRS meeting minutes | |
| II. | TDH report of Leon Creek Fish Study | To be determined |
| III. | ATSDR Process Update | Ms. Larisa Dawkins |
| IV. | Building 361 Update
Water Radioactivity Report | Mr. William Ryan |
| V. | Liquid Incinerator Report | Mr. William Ryan |
| VI. | TAPP Funding Status Report | Mr. Doug Karas |
| VII. | Administrative | |
| | a. BRAC Cleanup Team (BCT) Update | Mr. William Ryan |
| | b. Spill Summary Report | Ms. Brittany Watts |
| | c. Documents to TRS/RAB | Ms. Brittany Watts |
| | d. Action Items | Ms. Brittany Watts |
| | e. Request for Agenda Items | Dr. David Smith |
| VIII. | Next TRS Meeting
Environmental Health and Wellness Center: February 10, 2004, 6:30 p.m. | |
| IX. | Next RAB Meeting
Kennedy High School Auditorium: January 20, 2004, 6:30 p.m. | |
| X. | Adjournment | |

December 9, 2003
Technical Review Subcommittee (TRS)
of the Kelly Restoration Advisory Board (RAB)
Meeting Minutes

Meeting Attendees

Dr. Gene Lené, RAB Community Representative
Mr. Sam Murrah, RAB Community Representative
Mr. Ruben Peña, RAB Community Co-Chair
Mr. George Rice, RAB Community Representative
Mr. Nazarite Perez, RAB Community Representative
Mr. Armando Quintanilla, RAB Community Alternate
Mr. William Ryan, Air Force Real Property Agency (AFRPA)
Mr. Doug Karas, AFRPA
Ms. Larisa Dawkins, AFRPA
Ms. Linda Kauffman, San Antonio Metropolitan Health District (SAMHD)
Mr. Gary Miller, Environmental Protection Agency (EPA)
Ms. Abigail Power, Texas Commission on Environmental Quality (TCEQ)
Mr. Mark Weeger, TCEQ
Ms. Ellie Wehne, TCEQ
Mr. Michael Tennant, Texas Department of Health (TDH)
Mr. Kirk Wiles, TDH
Ms. Jerry Ward, TDH
Ms. Robyn Thompson, Booz Allen Hamilton (Booz Allen)
Mr. Scott Courtney, Booz Allen
Ms. Megan Mabee, Booz Allen
Ms. Susan Hook, Booz Allen
Ms. Brittany Watts, Smith and Associates
Dr. David Smith, Smith and Associates (Facilitator)

The meeting began at 6:34 p.m.

Welcome and Introductions**Dr. David Smith**

Mr. Ruben Peña convened the meeting in the absence of the TRS chair, Mr. Buddy Pletz. Dr. Smith introduced himself as the meeting facilitator and welcomed all RAB members and meeting attendees. He conducted a review of the meeting agenda and pointed out that Mr. Scott Courtney would be presenting the Building 361 update for Mr. Ryan, and the item was moved up on the agenda as Mr. Courtney had to leave early. The approval of the meeting minutes was also moved to the beginning of the meeting agenda, due to a decision made at the November Executive Committee meeting.

Mr. Peña made a motion to approve the minutes from the October 2003 TRS meeting. Dr. Gene Lené and Mr. Sam Murrah seconded the motion. The meeting minutes were approved.

Building 361 Update**Mr. Scott Courtney**

Mr. Courtney explained that his presentation was added to the agenda in response to Mr. Armando Quintanilla's questions about the groundwater data during the November TRS meeting presentation on Building 361. Mr. Courtney presented a PowerPoint briefing and pointed out the difference between the shallow groundwater and Edwards Aquifer data available. He explained the San Antonio Water System (SAWS) and Bexar Metropolitan Water District (BMWD) data, stating that the Edwards Aquifer samples are collected at the points of entry into the distribution system. In contrast, he stated that shallow groundwater samples are collected from monitoring wells as a grab sample, and added that the procedure for gathering water quality data is to sample the water first, and then to dry out the sample well and test the remaining sediment. He also clarified that the water sampling data was collected during the Building 326 investigation, not the Building 361 investigation, as some members had thought.

While difficult to compare, concentrations in both aquifers are very low and do not present a risk to public health.

Mr. Sam Murrah asked Mr. Courtney to clarify the term "soil concentrations" used to describe environmental conditions at Buildings 326 and 361. Mr. Courtney said that "concentrations" in this case means contaminant levels. Mr. George Rice asked if 4.7 is an average number for SAWS data. Mr. Courtney said he was not sure, and explained that the data is from an annual report and there are no descriptions on the Web site of how the data was reported. He added that the information is available to the public, and encouraged those with questions to see him after the meeting for the contact information.

Mr. Rice stated that the quality of the shallow groundwater from Edwards Aquifer used to be very good. He said many San Antonio households received their water from this source. Mr. Courtney said he was sure Mr. Rice was right, but due to urban sprawl, the water quality has been significantly degraded.

Texas Department of Health (TDH) Report of Leon Creek Fish Study**Mr. Michael Tennant**

Mr. Michael Tennant introduced himself as a TDH Seafood Safety Division (SSD) representative, and introduced his colleagues, Mr. Kirk Wiles and Ms. Jerry Ward from the Austin SSD and the TDH Department of Toxicology. Mr. Tennant pointed out three sample sites in Leon Creek where 22 fish were collected. He explained that all metals found there were detected below human health concern levels. Mr. Murrah asked him to clarify whether polychlorinated biphenyls (PCBs) were detected at levels to warrant concern about human health risks. Mr. Tennant confirmed that they were; at Site 3, there were three of four species of fish containing PCBs above the human health concern level.

Mr. Tennant explained that they look at cancer risks and systemic risks associated with their sample findings. He said that at Site 2, next to Lackland Air Force Base property, there is a hazard quotient for PCBs associated with systemic risk concerns. He said no one should consume fish from Site 2, and that TDH issued a fish consumption advisory to inform the community of this. He said TDH should collect samples of additional fish species and continue to monitor fish from Leon Creek.

Mr. Mark Weegar asked if carp suckers and gar are species of fish that are typically consumed. Mr. Tennant replied that these species are not commonly consumed, but might be consumed in lower income families. Ms. Ward added that some large-mouthed bass sampled tested positive for PCBs, which raised concerns. She added that though carp and gar are not often consumed, large-mouthed bass typically are, and this was a reason to alert the public that contaminant levels were of concern.

Mr. George Rice asked why there are different contamination concentrations at different sites. Mr. Tennant replied that fish do not always move freely, as they get concentrated in certain areas when the water levels are low, and this may affect the contaminant levels found in the fish. Mr. Murrah stated that when the creek runs properly, the fish travel upstream. Mr. Tennant agreed with him. Mr. Nazarite Perez mentioned that a few months ago at another TRS meeting, someone said there was no risk posed by eating the fish. Ms. Abbi Power clarified this statement by saying that Mr. Ed Roberson, the Lackland Environmental Chief, came to that meeting and spoke about the area of the creek on Lackland property. She stated that the primary site of concern is located on Lackland AFB, and has very limited access. Mr. Tennant reiterated that the advisory included areas outside of Lackland AFB, and fish should not be consumed from the areas of the creek from Highway 90 to Military Drive.

Mr. Quintanilla asked what is being done to remove the PCBs on the Air Force property. Mr. Tennant replied that this question would be better posed to the appropriate Air Force personnel. Mr. Quintanilla stated he recommends removing the PCBs. Mr. Tennant replied that it is very hard to remove PCBs, as they have a long lifespan. Ms. Powers asked if there are other bodies of water contaminated by PCBs. Mr. Tennant said that Mountain Creek Lake near Austin has had a consumption ban since 1996. He said there was a slight decline in the PCB levels since that time; however, there is still a ban. Ms. Ward said that at one time it was legal to dump substances in these waters. It is often hard to pinpoint the source of the PCBs, she explained, and the contamination is therefore hard to remediate. Ms. Powers asked if there were other bodies of water besides military sites contaminated with PCBs. Ms. Ward stated that there were multiple bodies of water in the state of Texas contaminated by PCBs.

Mr. Rice requested a copy of the TDH presentation. Mr. Quintanilla asked if TDH is done with the cleanup efforts. Mr. Kirk Wiles said that the Air Force is the agency responsible for environmental cleanup of the areas in question.

Mr. Peña asked how many signs had been posted in the advisory area, and if they were bilingual. Mr. Tennant explained that the Air Force is responsible for posting the signs and translating them into Spanish on Lackland AFB. Mr. Peña asked if TDH had any idea of the fish population. Mr. Tennant replied that there are ample fish species and fish populations, but that the sample size collected for this study was very small. Mr. Peña asked why there is not a barrier to prohibit people from fishing under the Highway 90 bridge. He added that some people in this area do not read English, or read at all.

Mr. Peña said he has seen people on nice days out fishing in these areas. He asked if they ate the fish they caught, would they be at risk. Mr. Tennant said they may be if they consumed contaminated fish over many years. He added that the advisory is meant to stop exposures for people in the area. He asked that anyone who sees or hears of fishing in this area send the

information to TDH. Ms. Powers asked if there is a difference between an advisory and a ban. Mr. Tennant replied that unlike a ban, an advisory cannot legally keep people from fishing.

Mr. Ryan asked who is responsible for putting the signage on the land that does not belong to the Air Force. No one at the meeting could provide an answer. Ms. Linda Kaufman of SAMHD said she will revisit this issue with health department. Mr. Quintanilla stated that he knows families that fish under the bridge near Military Drive and asked TDH to contact them.

Mr. Tennant asked everyone to please spread the word that fish from the creek adjacent to the golf course have been found to have high levels of PCBs. Mr. Weeger reiterated that the fish of most concern were on Air Force property adjacent to the golf course, and people cannot enter that property without appropriate permission.

Mr. Ryan asked Mr. Tennant if he had been invited to speak to the Community Council on Restoration (CCR) at Lackland. Mr. Tennant replied that he had not. Mr. Quintanilla then asked if the Agency for Toxic Substances and Disease Registry (ATSDR) was aware of the advisory. Mr. Tennant replied that ATSDR was familiar with the issue, as the agency works closely with TDH. Mr. Weeger added that the Texas Commission on Environmental Quality (TCEQ) is also conducting an ecological risk assessment.

Mr. Quintanilla asked that all RAB members receive a copy of the TDH presentation. Mr. Rice made the motion, Mr. Perez seconded.

ATSDR Process Update

Ms. Larisa Dawkins

Ms. Dawkins said that she understood that TRS members were concerned with the status of the ATSDR past air emissions report. She explained that the ATSDR has submitted the document for an external review process. Ms. Dawkins stated that the Southwest Workers Union (SWU) requested that all publications be translated into Spanish, which will prolong the process of releasing the document. She said the comments from the community comment period (60-90 days) will be addressed by ATSDR and appended to the final report, and then the document will go through another review process to ensure the Spanish translation is accurate. She added that the report should be ready some time next year.

Mr. Karas asked if Mr. Quintanilla had additional information from ATSDR about the release of the report. Mr. Quintanilla replied that he heard the document was to be released in spring 2004. Ms. Dawkins stated that ATSDR works hard to ensure the accuracy of the report before its release.

Liquid Incinerator Report

Mr. William Ryan

Mr. Ryan stated that there was a motion at the last meeting for a briefing on one of the reports submitted to the TRS library. He explained that the liquid incinerator report was a compilation of numerous studies. He handed out a map showing the location of Site OT-1, which housed a liquid waste incinerator used from 1977-82. Mr. Ryan stated that site investigations conducted from 1990-99 revealed concentrations of semivolatile organics.

Mr. Quintanilla asked if emissions data was presented to ATSDR. Mr. Ryan said he would confirm that appropriate emissions data was reported; if it was not reported, he would send it to

ATSDR. Mr. Quintanilla added that he wants to know about the 43 unpermitted sites with emissions. Mr. Ryan asked if he had a title of the report where he got that information. Mr. Quintanilla said he had it written in his notes that it had been documented in a previous report, but could not recall the name of the report. Mr. Ryan stated that the Air Force has provided ATSDR with all of the data they have requested to date on this subject.

Technical Assistance for Public Participation (TAPP) Funding Status Report

Mr. Doug Karas

Mr. Karas gave an overview of the TAPP program. He outlined what TAPP grants can and cannot be used for. He gave a summary of previous and current Kelly TAPP projects. He said waivers can be requested for additional funding, but must be approved by the Air Force. He stated that there is approximately \$9,000 remaining for Kelly TAPP funding. He added that if the TRS wants to request a waiver for additional funding, they need to identify specific projects requiring further TAPP review. Mr. Weeger asked what the timeline is for getting the waiver request. Mr. Karas replied that the sooner the project is identified, the sooner the money is received. Mr. Quintanilla asked about technical training. Mr. Karas said that the TRS needs to identify the type of training and discuss it with the RAB members. Mr. Quintanilla asked if they could use the money to send RAB members to The University of Arizona to hear a Permeable Reactive Barrier (PRB) update from experts. Mr. Karas said the policy is to bring experts to San Antonio to speak with the whole RAB. Mr. Weeger said that the Instructional Technology Resource Center (ITRC) gave training to RAB members a year and a half ago. Mr. Quintanilla said he wants a technology overview given to the RAB, to explain how new technologies might expedite the cleanup process. Mr. Weeger said that ITRC does interactive training, and RAB members should look on the ITRC Web site to identify training courses that might be of interest. Mr. Quintanilla requested that the identification of technical training become an action item. Mr. Ryan added that ITRC has a schedule for Web-based training, and would look into the Air Force bringing the information to the next RAB meeting. Mr. Rice said he wants updates on monitored natural attenuation, and how it works. Mr. Karas asked if Mr. Rice would be willing to give a presentation to the RAB on it. Mr. Rice said it may take a while to prepare, but he will consider it.

Mr. Weeger stated that members could look at the EPA Web site for information on Superfund sites. He stated that the best use of RAB funds is at the onset of a project when they are deciding on a technology. Mr. Karas said he can provide information on projects coming up for next year, and what documents will be presented. Mr. Ryan added that the Air Force provides lists each month to the RAB of the environmental cleanup documents generated. Mr. Weeger said that TCEQ just received the 2004 Annual Work Plan from the Air force. He added that this would be a good place to start identifying other documents to review.

Administrative

BRAC Cleanup Team (BCT) Update

William Ryan

There was no BCT this month.

Spill Summary Report

Brittany Watts

There were no spills to report.

Documents to TRS/RAB**Brittany Watts**

There was one document submitted:

- *241B Closure Report-Fire Control Training Area FC-2, Zone 2, Former KAFB November 2003*

Action Items from previous meeting**Brittany Watts**

All actions items from the previous meeting were completed as requested.

TRS Action Items from current meeting

- Provide copies of TDH Leon Creek fishing advisory report to RAB members
- Kelly to verify that Site OT-1 Air Emissions information has been reported to ATSDR
- Provide listing of ITRC technical training available for consideration as RAB/TRS training.
- Provide natural attenuation outcome studies/status report (EPA/ITRC)
- Provide copies of 2004 Annual Work Plan to RAB members for the development of future TAPP funding requests.

Additional Comments

The next RAB meeting is scheduled for Tuesday, January 20, 2004, at 6:30 p.m., at the Kennedy High School Auditorium. New RAB members will be appointed during this meeting.

The next TRS meeting is scheduled for February 10, 2004, at 6:30 p.m., at the Environmental Health and Wellness Center.

Dr. Smith encouraged everyone to pass along RAB applications to people they know.

Mr. Quintanilla stated that the TRS should review all documents submitted to the TRS library.

Ms. Watts explained that as requested, the executive summaries from each report are placed in the supplemental packets for the TRS to review.

The meeting adjourned at 8:27 p.m.

Attached you will find the draft version of the November TRS meeting minutes. Please review and be ready to approve at the December meeting.

Thank You!

November 12, 2003
Technical Review Subcommittee (TRS)
of the Kelly Restoration Advisory Board (RAB)
Meeting Minutes

Meeting Attendees:

Dr. Gene Lené, RAB Community Representative
Mr. Sam Murrah, RAB Community Representative
Mr. Rodrigo Garcia, RAB Community Representative
Mr. Daniel Gonzales, RAB Community Representative
Mr. Armando Quintanilla, RAB Community Alternate
Mr. William Ryan, Air Force Real Property Agency (AFRPA)
Ms. Larisa Dawkins, AFRPA
Mr. Gary Martin, Greater Kelly Development Authority (GKDA)
Ms. Kyle Cunningham, San Antonio Metropolitan Health District (SAMHD)
Mr. Gary Miller, Environmental Protection Agency (EPA)
Ms. Abigail Power, Texas Commission on Environmental Quality (TCEQ)
Mr. Paul Flanigan, Boeing Communications Representative
Ms. Robyn Thompson, Booz Allen Hamilton (Booz Allen)
Mr. Tim Sueltenfuss, Booz Allen
Ms. Megan Mabee, Booz Allen
Ms. Susan Hook, Booz Allen
Mr. Scott Courtney, Booz Allen
Dr. David Smith, Smith and Associates (Facilitator)
Ms. Brittany Watts, Smith and Associates
Mr. Randy Alvarez
Ms. Crystal Gomez
Ms. Jill Johnston
Mr. Shawn Duffy
Ms. Elizabeth Gomez
Ms. Rachel Lumsdon
Ms. Martha Cave
Mr. Juan Reyes
Ms. Hilary Ramos
Mr. Bill Heasy
Mr. Jslu Siberl

The meeting began at 6:33 p.m.

Welcome and Introductions

Dr. David Smith

Dr. Smith introduced himself as the facilitator and welcomed all the RAB members and meeting attendees. He conducted a review of the meeting agenda and supplemental packets. He stated that Mr. Scott Courtney would be presenting the Palm Heights Permeable Reactive Barrier (PRB) update for Mr. Walt Peck, and Mr. Gary Martin and Mr. William Ryan would be giving the Building 361 update for Mr. Jack Shipman. (Mr. Peck and Mr. Shipman were unable to attend the meeting.)

Discuss Election of TRS Chair

Dr. David Smith

Dr. Smith explained that several RAB members had voiced concerns about the election process at the September TRS meeting. The main concern was that some felt that the voting was not handled appropriately and should be re-approached. He added that no formal voting guidelines for subcommittees had been established by the RAB charter, and stated the Executive Committee would review the process and discuss how to handle it for future elections. He noted that Mr. Buddy Pletz would remain the Chair, with the aid of Mr. Rodrigo Garcia, until after RAB elections in January; at that time, the RAB plans to have established new guidelines and plans to conduct new elections at the February TRS.

Mr. Armando Quintanilla asked if it was the job of the RAB members present at the TRS to appoint the TRS co-chair. Dr. Smith replied that it is the job of the TRS members to elect the co-chair, and the RAB Executive Committee was going to develop guidelines to conduct elections in the future. Dr. Gene Lené asked if any RAB member could be a TRS member and if the TRS appointed its own chair. Dr. Smith answered that, to his understanding, any RAB member could serve as a member of the TRS, and those participants are voting members at the TRS elections.

Building 361 Update

Mr. Gary Martin

Mr. Martin explained that ten employees had come forward and volunteered to be tested for radium exposure; he expected three more volunteers by the end of the week. The Greater Kelly Development Authority (GKDA) took seven urine samples and sent them to the lab. Those results should be back sometime after the Thanksgiving holidays. He explained that Boeing and the Air Force had conducted separate environmental tests, and all excavated soil was located and tested. The Texas Department of Health (TDH) used a radium detector when testing the soil and found nothing alarming. Boeing collected two samples and the results should be available next week.

Mr. William Ryan said there will continue to be a lot of construction at KellyUSA to further the redevelopment efforts. He added that the Air Force continues to work closely with Mr. Martin and GKDA to coordinate plans of excavation and digging. Mr. Ryan noted that the Air Force wants to be actively involved in the process early on and is currently looking at ways to improve the communication process between all parties. The Air Force and GKDA are trying to create this process quickly. They are also developing a plan to close this site, as all parties are anxious to complete the project at Building 361.

Mr. Garcia asked if the Building 361 hangar was still shut down. Mr. Martin said yes, and provided radium and radon fact sheets for the TRS to review. Mr. Garcia said he was concerned and wants the polychlorinated biphenyls (PCB's) and radium issues to be ongoing agenda items. Mr. Martin said that radon and radium are naturally-occurring substances. The soil sample results should be available next week or the following week and GKDA will assess any health and safety dangers. Mr. Dan Gonzales asked about the pre-bid process, stating that maybe GKDA and the Air Force need to emphasize steps more clearly to the contractors coming in to avoid this in the future. He stated that there should be a penalty for contractors who do not follow certain steps. Mr. Martin replied the problem was not with the contractor but with the

information exchanged between the contractor and the Air Force. He continued by stating that there is now an improved communications process and they will ensure that the right people see the right documents at the right time. The Air Force and GKDA are scheduled to meet every Monday morning from now on to discuss construction projects.

Mr. Quintanilla asked if Radium 266 was found at Building 361 and if the half life of Radium is 6.7 years. Mr. Martin said it is more like 1600 years. Mr. Quintanilla then asked if the area was to be cleaned up under CERCLA. He stated that if Kelly is a Superfund site, then the work should be done under CERCLA. Mr. Ryan replied the Air Force has a Radioisotope Committee that will oversee any remediation at the site. Mr. Quintanilla questioned if people at Brooks had looked at it yet and whether the groundwater had been tested. Mr. Ryan said yes. Mr. Quintanilla then asked if it had higher levels of radioactivity. Mr. Ryan said they do not know at this point. Mr. Quintanilla inquired about the Environmental Protection Agency's (EPA) role in this. Mr. Gary Miller, the EPA representative, said that TCEQ is overseeing what is happening at Building 361. However, EPA will eventually have to review the plans, as they are required to sign off when the land is transferred. Mr. Quintanilla said he wanted to see a comparison of the radioactivity data with San Antonio Water System (SAWS) and Bexar Metropolitan Water District data.

Mr. Ryan explained that the PCB issue is being monitored by Lackland Air Force Base. Mr. Garcia stated that the Leon Creek area was Kelly's responsibility before it became a Lackland problem and that Kelly should continue to review it. Mr. Quintanilla said Congressman Rodriguez's staff is looking into the PCB issue. Dr. Smith reviewed the proposed action items from this discussion.

Palm Heights Permeable Reactive Barrier (PRB) Update

Mr. Scott Courtney

Mr. Courtney introduced himself and stated that he has worked as a hydrogeologist with Booz Allen Hamilton (Booz Allen) for the last six years on the groundwater cleanup team. He explained that for the past 6-8 years they have conducted soil and groundwater investigations in Zone 4. The Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI), submitted to TCEQ and EPA, reported the results of the soil and groundwater investigation. Following this, the Air Force completed the Corrective Measures Study (CMS), which evaluated the technologies and determined which ones best fit the site. A combination of remedial approaches was recommended and narrowed down to the preferred alternatives. For Palm Heights, the AFRPA proposed to install PRBs to intercept the groundwater contamination. There are two areas of groundwater contamination along the Union Pacific Railroad (UPRR) line, and the Air Force has installed monitoring wells there. Two PRBs are planned, one 1,000 and the other 500 feet in length. The contractors will drill wells and inject a mixture of iron filings and gel using a high-pressure injection technique.

Mr. Courtney added that once wells have been installed, the PRB and wells will not be noticeable to the community. Mr. Quintanilla inquired about the cost of the project. Mr. Courtney said it will cost approximately \$4 million for construction. Mr. Quintanilla asked the start dates. Mr. Courtney replied the AFRPA is planning to begin construction in early 2004, and the entire process should take a few months. Mr. Quintanilla then asked how often the monitoring wells are checked. Mr. Courtney said they had already collected the first round of samples. He added that once the PRB was installed, another round of samples would be collected. An annual monitoring program will take place that is consistent with regulatory

requirements. Mr. Quintanilla stated his concern about what the Air Force is looking for. Mr. Courtney said the contaminants of concern are tetrachloroethene (PCE), trichloroethene (TCE), dichloroethene (DCE), and vinyl chloride (VC). Mr. Quintanilla asked what streets were in the area. Mr. Courtney stated there are no streets along the UPRR line where this project is taking place. Mr. Quintanilla then asked how the Air Force is handling deed restrictions. Mr. Courtney replied that the Air Force is working access agreements with the railroad. Mr. Garcia asked if this meant they would not have to deal with residents. Mr. Courtney replied this was right.

Mr. Garcia asked what happens if the iron filings become dirty and need to be changed out. Mr. Courtney said there are techniques to rejuvenate the PRB, but that this will not likely be necessary. Mr. Quintanilla asked how long it would take to clean up the area. Mr. Courtney said the PRBs will address plumes coming from off-base sources and will not treat the source area. Mr. Sam Murrah asked how they identify the sources. Mr. Courtney replied there are ongoing investigations at the present.

**Administrative
BRAC Cleanup Team (BCT) Update
William Ryan**

Mr. Ryan gave a Building 361 update. He said the Air Force is in the process of responding to comments from TCEQ on the Zone 3 RFI. In the new fiscal year the Air Force has new goals for property transfers and expects to transfer 200 acres to GKDA by the end of September 2004. The Air Force will determine whether the parcels are suitable for transfer and are trying to transfer properties to GKDA as quickly as possible that do not have restrictions associated with them. Properties with restrictions are more difficult to transfer. Mr. Quintanilla asked if there were any restrictions for the 200 acres. Mr. Ryan said none had been identified. He stated that they have already transferred a new administrative building at 145 Duncan. The 200 acres include Lindberg Park, the Non-commissioned Officers (NCO) club, the base clinic, the terminal area, and Bungalow Colony (a historical district).

Mr. Sam Murrah asked how the Air Force knows what is contaminated. Mr. Ryan replied there are 1400 wells that determine where groundwater is and where it is moving. The Air Force must demonstrate to EPA that the parcel will not be affected. He said all property will be transferred eventually. Mr. Ryan said the Air Force will provide EPA with a history of data from the wells that have been monitored for some time.

Ms. Kyle Cunningham asked to move the minutes up on the agenda for approval as she had to leave early.

**Approval of Minutes from Previous Meeting
Dr. David Smith**

Ms. Cunningham asked to change a comment on page five. She stated that air monitoring will be conducted on a real-time basis. Mr. Quintanilla said the spelling on page five for the Quintana Road project needed to be changed. Mr. Murrah asked to change his title in the attendee's portion of the minutes. Minutes were approved as corrected.

**Spill Summary Report
Ms. Brittany Watts**

There was one spill to report. Ms. Watts explained that a vehicle caught fire while being jump-started. The resulting fire melted the battery and radiator hose, which caused a release of battery

acid and radiator fluid. The spill was contained and cleaned up. The waste is being characterized for disposal. A courtesy notification was made to TCEQ.

Documents to TRS/RAB

Ms. Brittany Watts

Ms. Watts had two documents to be submitted.

- 240B Six Sites Closure Investigation Report for Zone 2 (Revised Section 7, Site CS-2)
- 581A Closure Report for Yard S-01 (DRMO SWMU 018) and Yard U (DRMO SWMU 016)

Mr. Quintanilla expressed his desire to be briefed on submitted reports. Dr. Smith asked if the TRS should put a process in place to review the documents. Ms. Cunningham explained that the reports are available to the community at the Environmental Health and Wellness Center (EHWC) Library. Mr. Quintanilla stated it is the job of the TRS to review the reports. Ms. Cunningham said that Ms. Linda Kaufman at the center would be able to host a group or allow people to come individually to review them. Mr. Garcia said he wants an executive summary of the reports provided to the RAB in their material packets. Dr. Lené asked if any of the reports have executive summaries. Mr. Ryan replied that some do, while others contain only data.

Action Items from Previous Meeting

Ms. Brittany Watts

Ms. Watts explained that the action item from the last meeting was postponed to the December TRS due to scheduling conflicts.

Action Items from Present Meeting

- Compare radioactivity levels in Building 361 groundwater to Edwards Aquifer wells/SAWs data. Mr. Armando Quintanilla motion, Mr. Rodrigo Garcia seconded. The motion was approved.
- Continue to report on radium issue at future meetings. Mr. Garcia made the motion, Mr. Quintanilla seconded. The motion was approved.
- Continue to report PCBs issues at Leon Creek Mr. Gonzales made the motion; Mr. Quintanilla and Mr. Garcia seconded. Dr. Lené and Mr. Murrah expressed concern that this issue is related to Lackland and the Lackland Community Council on Restoration is the forum for discussion on this topic. Ms. Abigail Power stated that there are environmental professionals at Lackland who deal with the Leon Creek PCB questions. Mr. Quintanilla said the meetings are not publicized. Ms. Power replied that the meetings are publicized in area surrounding Lackland and in local papers. At the last TRS, the meeting was announced, and the Booz Allen staff sent notices reminding the RAB to go if interested. She also stated that the next Lackland CCR meeting will be held January 21, 2004 at 7:00 p.m. at Valley High Middle School. Dr. Lené said this issue was taking away time from issues the Kelly RAB should handle. Mr. Gonzales asked if the CCR would forward their meeting minutes to the TRS to incorporate in materials packets. Ms. Power said they could put in a request for this. The motion was approved three votes to two.
- Status report of Technical Assistance for Public Participation (TAPP) funding, overview of TAPP program, and listing of past TAPP projects. All were in favor.
- Liquid incinerator report review.

- Invite Texas Department of Health (TDH) to present findings of fish study in Leon Creek where a health advisory was issued (and for the Agency for Toxic Substances and Disease Registry to review study).

Other topics discussed for future meetings

- Provide executive summaries of submitted reports for review.
- Provide list of Lackland CCR meetings and a copy of meeting minutes.
- Ms. Power requested that photocopied material be duplexed.

Mr. Quintanilla stated that he favored the seating setup at this meeting and asked that we change it at the meetings at the EHWC to reflect this new style.

Additional Comments

Dr. Smith thanked everyone for coming and reminded them of the upcoming meetings. The next TRS is scheduled for December 9, 2003 at the EHWC. The next RAB is scheduled for January 20, 2004 when new RAB members will be elected. He added that application packets were on the sign-in table for those might be interested. He also asked that the TRS members return their nametags.

The meeting adjourned at 7:45 p.m.

Air Force Real Property Agency /
Division Central — Kelly



Environmental Site Cleanup

Shallow Groundwater

vs.

Edwards Aquifer

Air Force
Real
Property
Agency /
Division
Central —
Kelly

Water Quality Radiological Comparison

Hydrogeology

- Shallow Groundwater Zone
 - 15 to 25 feet below ground surface
 - Relatively poor water quality
 - Relatively poor water quantity
- Edwards Aquifer
 - 1000 to 1400 feet below ground surface
 - Very high water quality
 - Very high production capacity



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Data Quality Observations

- SAWS and BMWD water quality data is collected at the Point of Entry
 - After pumping
 - After Storage
 - After Treatment
- Shallow groundwater data is collected from a monitoring well as a grab sample
 - No purging
 - No filtering
- Shallow groundwater data collected during the Building 326 investigation, not Building 361
 - Soil concentrations at Bldg. 326 are much higher than Building 361

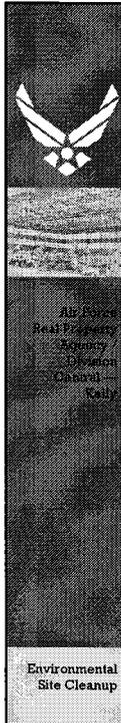


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Water Quality Data

Sample Results Gross Alpha		
300 Area Sample Locations	Groundwater (pCi/L)	Sediment (pCi/g)
SS040MW156	3.0 +/- 1.7	9.2 +/- 2.5
SSO37TW230	7.4 +/- 2.1	8.1 +/- 2.3
SS037TW231	<5.9	<2.3
ST008MW037	<8.4	6.3 +/- 2.2
SSO38MW008	6.0 +/- 2	4.0 +/- 2.0
SS038MW101	12.0 +/- 3.2	7.1 +/- 2.2
SS038MW013	17.0 +/- 6.0	8.5 +/- 2.4
SS038MW103	6.8 +/- 2.7	11.0 +/- 2.6
SS038MW364	<4.6	6.9 +/- 2.2
SS037MW038	2.1 +/- 1.1	4.8 +/- 1.9
SS037MW009	2.3 +/- 1.9	8.1 +/- 2.2
SAWS	4.7	NA
BMWD	NR	NA



Conclusions

- Difficult to compare results of non-like waters
 - Different zones
 - Different collection points
 - Different data quality objectives

- Overall concentrations in shallow groundwater and Edwards are low



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Technical Assistance for Public Participation (TAPP)

Kelly Technical Review Subcommittee
December 2003

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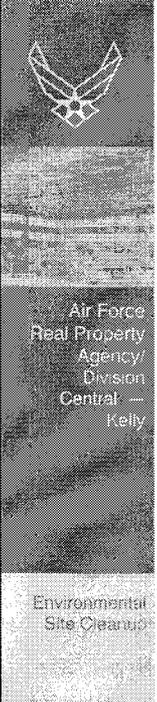


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TAPP Overview

- Department of Defense funded program
- Provides independent technical support to community members of Restoration Advisory Boards (RAB)
- Enhances the public's ability to participate in the decision-making process by improving their understanding of overall conditions and activities
- Utilizes small businesses

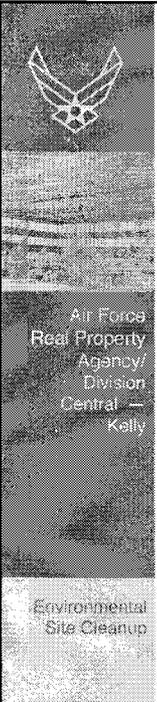
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Projects that qualify for TAPP funding

- Reviews of restoration documents
- Reviews of proposed remedial technologies
- Interpretations of health and environmental effects
- Reviews of relative risk evaluations
- Development of certain types of technical training

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Projects that are not eligible for TAPP funding

- Generation of new primary data
- Litigation or underwriting legal actions
- Reopening final DoD decisions
- Political activity or lobbying
- Epidemiological or health studies
- Community Outreach efforts

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TAPP funding

- \$25,000 per year, or one percent of the total cost of completing environmental restoration at the installation, whichever is less
- \$100,000 limit per installation



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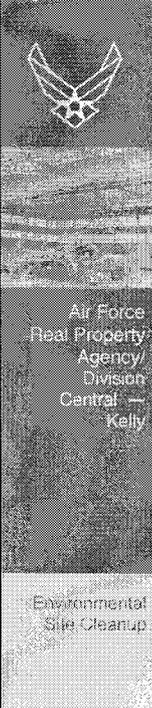


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The TAPP Process

Community members of the RAB or TRS

1. Define a project
2. Evaluate other potential sources of assistance
3. Complete the TAPP application
4. Submit the application to the Air Force Real Property Agency site manager for review and approval
5. Complete a satisfaction survey on the contractor's work

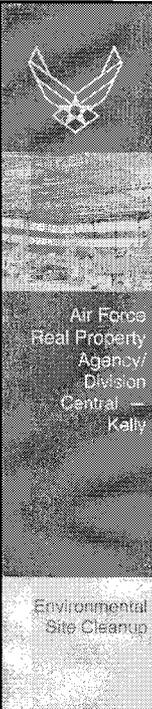


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Kelly RAB TAPP Projects

- 1998
 - ATSDR Water Report
University of Maryland
 - 97 Basewide Remediation Assessment
Clearwater Revival Company
 - OU2 Workplan
Neathery Environmental
- 1999
 - Zone 3 CMS Addendum
Clearwater Revival Company
 - Remedial Investigation Zone 4 OU2
Neathery
 - Final Zone 5 CMS
Geomatrix

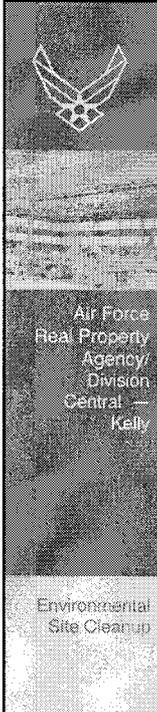


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Kelly RAB TAPP Projects

- 2000
 - Shallow Groundwater Report
Geomatrix
 - Site S-8 Draft Final CMI
Neathery
 - Site MP Draft Final
Clearwater Revival Company
- 2001
 - Zone 4 CMS
Geomatrix
 - ATSDR Health Assessment
University of Maryland



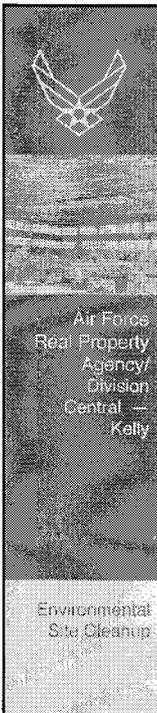
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Kelly RAB TAPP Projects

- 2002
 - Zone 3 RFI
Clearwater Revival Company

- 2003
 - ATSDR Air Emissions Study (pending)
University of Maryland
 - Zone 2/3 CMS (pending)
Neathery



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Kelly RAB TAPP Funding Status

- Obligations to date total \$91,200

- Remaining funding to date is \$8,800



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Additional funding may be available

- Waivers can be requested for more funding
- Additional funds and/or waivers
 - must be requested through AFRPA
 - Must be tied to a specific project

Air Force Real Property Agency

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Liquid Incinerator Area Site OT-1 Revised RCRA Closure Report



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1



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Introduction

- **The objectives of the report are to document the soil conditions beneath Site OT-1 and demonstrate the area meets Risk Reduction Standard number 2 (RRS 2) requirements for industrial use**

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Site History

- Site OT-1 is located in Installation Restoration Program (IRP) Zone 2, the southern portion of the former Kelly Air Force Base (AFB), and operated from 1977 until 1982
- The site consisted of a liquid incinerator, four storage tanks, two concrete lined mixing pits, concrete containment areas, and pesticide storage
- Six investigations and two removal actions have been conducted at the site to date

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Summary of Previous Investigations

- Five investigations were conducted at Site OT-1 from 1990 to 1999. A summary of each investigation follows:
 - OHM Remediation Services Corporation (March 1990)
 - The incinerator and all ancillary equipment were removed and surface soil samples collected at 15 locations
 - Halliburton/NUS Corporation (March/April 1990)
 - Soil samples collected from 13 locations on Site OT-1 as part of a Remedial Investigation (RI) within Zone 2

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Summary of Previous Investigations

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Southwestern Laboratories (September 1990)

- Collected 27 soil samples from 12 borings to evaluate the nature of contamination in subsurface soils and groundwater

○ Halliburton/NUS Corporation (October 1992)

- Collected and analyzed soil samples from two borings to address RI data gaps and sufficiently address downgradient contamination

○ IT Corporation (November 1999)

- Collected additional soil samples to address the sample collection and analyses requirements proposed in the Closure Plan (IT/OHM, 1998), evaluate the nature and extent of contamination, evaluate the leachability of constituents to groundwater and to determine closure options.

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Closure Investigation (February 2001)

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- URS Corporation (URS) performed an evaluation of the historical data sets to determine their adequacy for closure under TCEQ risk reduction standards (RRS). Data was compared to Standard No. 2 industrial use medium-specific concentrations. Surface soil was evaluated based on inhalation, ingestion and dermal contact (SAI-Ind) and groundwater protection (GWP-Ind) concentrations. Subsurface soil was evaluated based on GWP-Ind concentrations.
 - The evaluation identified several constituents of potential concern (COPCs) requiring further delineation.
- Additional soil samples were collected from surface and subsurface soils based on the results of the evaluation.
- Surface soil was excavated at two locations to eliminate soils affected by COPCs greater than RRS 2 SAI-Ind concentrations.
- Excavated areas were replaced with clean fill

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Report Summary

- Report demonstrated that Site OT-1 met all RRS 2 criteria
 - Draft Final Report sent to TCEQ on 12/6/02
 - TCEQ comments received on 4/10/03
 - Final Report submitted to TCEQ on 6/24/03
 - TCEQ approved RRS 2 closure on 10/17/03
- Underlying groundwater will be addressed by Zone 2/3 CMS
 - Groundwater contamination is not from Site OT-1, but from upgradient sources

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Conclusions

- Site OT-1 was used from 1977 to 1982 for incinerating liquid waste cyanide solutions
- Six investigations have been conducted at the site. The earlier investigations were conducted to define the nature and extent of contamination. The later investigations were conducted to address revised regulatory closure requirements (TCEQ-Risk Reduction Standards)
- Affected media at Site OT-1 include both surface and subsurface soil. After the excavation of surface soil in two locations, the contaminants of concern remaining in surface and subsurface soils meet RRS 2 MSCs
- Groundwater will be addressed in the Zone 2 and 3 CMS

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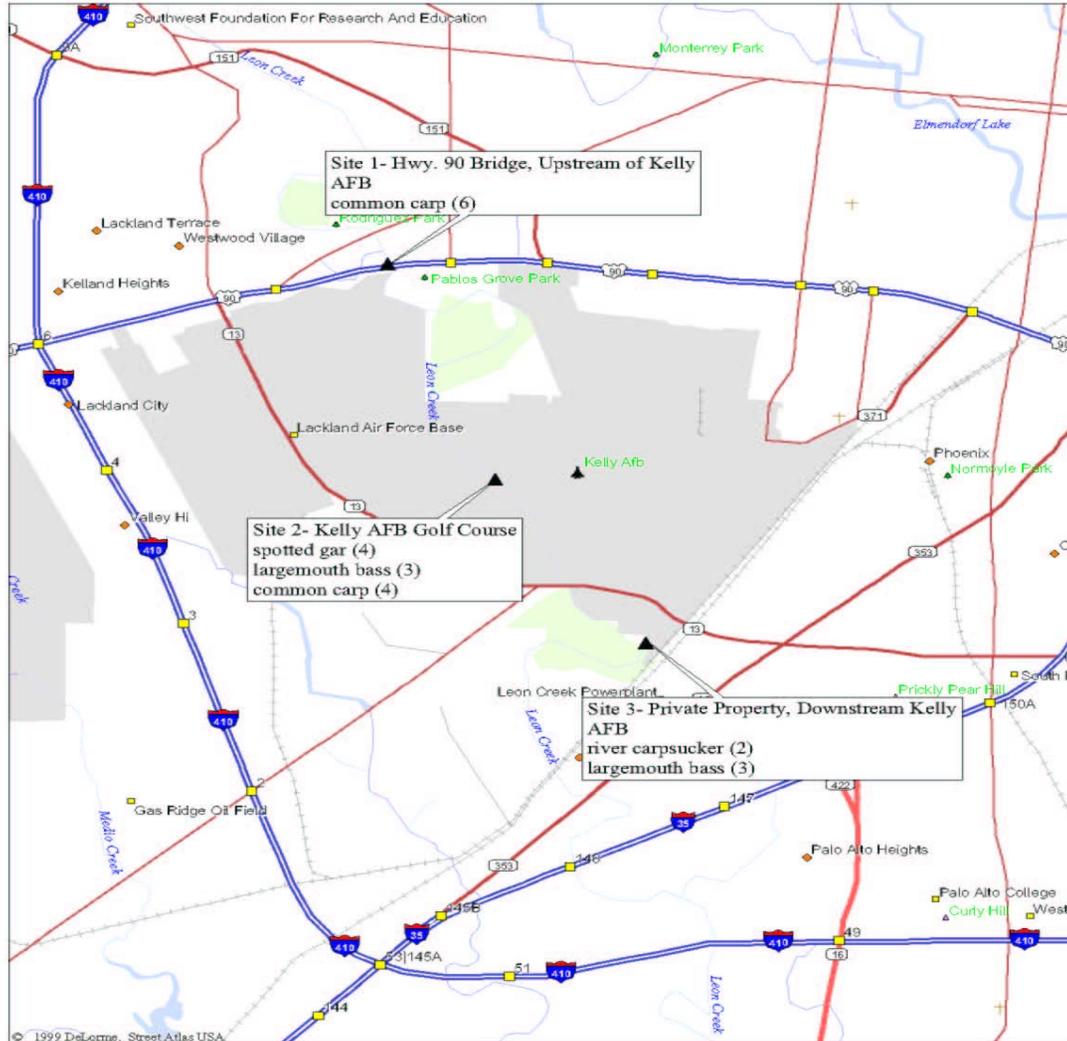
Lower Leon Creek

Quantitative Risk Characterization

2003



Leon Creek 2002 TDH Sample Sites





Metals Detected in Lower Leon Creek Fish Tissue Collected in 2002

- Cadmium
- Copper
- Mercury
- Selenium
- Zinc

Organic Contaminants Detected in Lower Leon Creek Fish Tissue Collected in 2002

- Polychlorinated Biphenyls (PCBs)
- Chlordane
- DDD
- DDE
- DDT
- Heptachlor epoxide
- co-eluted 3/4 methyl phenol
- Tetrachloroethene
- Trichloroethene

PCBs in Fish by Site and Species, 2002

Site 1 (Upstream of Kelly AFB at TX Hwy. 90)

Species	# Detected / # Analyzed	Mean Concentration (mg/kg)
Common carp	1 / 6	0.035



PCBs in Fish by Site and Species, 2002

Site 2 (Golf Course at Kelly AFB)

Species	# Detected / # Analyzed	Mean Concentration (mg/kg)
Common carp	3 / 4	0.345
Largemouth bass	1 / 3	0.028
Spotted gar	4 / 4	0.470
All Species Combined	8 / 11	0.304



PCBs in Fish by Site and Species, 2002

Site 3 (Downstream of Kelly AFB near Military Drive)

Species	# Detected / # Analyzed	Mean Concentration (mg/kg)
Largemouth bass	0 / 3	ND
River carpsucker	2 / 2	0.060
Species Combined	2 / 5	0.036

TDH Risk Calculation

Assumptions

- Standard Adult Weight = 70 kg
- Adult Consumption Rate = 30 grams/day
 - Equivalent to approximately one eight-ounce fish meal per week
- Acceptable risk level (ARL)
 - 1 in 10,000 persons equally exposed
- Exposure period = 30 years

What is a Hazard Quotient?

- A hazard quotient (HQ) is the ratio of the estimated exposure dose of a contaminant to its RfD or MRL
- Systemic health effects are unlikely from consumption of fish for which the HQ is less than 1.0.

What is a Hazard Index?

- A hazard index (HI) is the sum of all hazard quotients (HQ) affecting the same critical organ or having the same critical effect.
- Systemic health effects are unlikely from consumption of fish for which the HI is less than 1.0.

Hazard Quotients for Systemic Health Effects from Consuming Fish from Leon Creek Containing PCBs

Contaminant	Hazard Quotients		
	Site 1	Site 2	Site 3
Chlordane	0.029	0.166	0.017
DDD	ND	0.034	0.002
DDE	0.022	0.193	0.012
DDT	ND	0.014	ND
Total PCBs	0.75	6.51	0.771
Hazard Index	0.8	6.9	0.8

Theoretical Lifetime Excess Cancer Risk, 2002

Contaminant	Calculated Cancer Risks		
	Site 1	Site 2	Site 3
Chlordane	1 in 460,224	1 in 80,183	1 in 762,527
DDD	ND	1 in 564,308	1 in 8,101,852
DDE	1 in 615,807	1 in 71,296	1 in 1,160,368
DDT	ND	1 in 1,013,486	ND
Total PCBs	1 in 77,778	1 in 8,955	1 in 75,617
Cumulative Cancer Risk	1 in 60,047	1 in 7,096	1 in 64,428

Allowable Meals per Month

(Systemic Health Effects)

Sample Site	Hazard Index	Allowable Meals per Month
Site 1	0.8	5.0*
Site 2	6.9	0.6*
Site 3	0.8	5.0*

*one meal = 8 oz serving



Allowable Meals per Month

(Cumulative Excess Cancer Risk)

Sample Site	Cumulative Cancer Risk	Allowable meals per month
Site 1	1 in 60,047	24*
Site 2	1 in 7,096	2.9*
Site 3	1 in 64,428	25.9*

*one meal = 8 oz serving

Public Health Implications

1. Consumption of fish from Leon Creek at or near the Kelly Air Force Base golf course **poses a public health hazard** for cancer and systemic health outcomes, due primarily to polychlorinated biphenyls (PCBs) detected in spotted gar and common carp.

Public Health Implications

2. Consumption of a diet consisting exclusively of river carpsuckers collected from (Site 3) downstream of KAFB *may pose a public health hazard.*

Public Health Actions

- **Fish Consumption Advisory (ADV-26)**, advises people not to consume any species of fish from Leon Creek (from the Hwy. 90 bridge downstream to Military drive) because consumption of fish poses an unacceptable risk to public health due to contamination with PCBs.

Recommendations

- TDH should collect samples of other species to better characterize the likelihood of adverse health effects.
- TDH should continue to monitor fish from Leon Creek to assess the extent of environmental contamination and monitor contamination trends.

For Information

**Texas Department of Health
Seafood Safety Division**

512-719-0215

www.tdh.state.tx.us/bfds/ssd

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE