

Dr. David Smith

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#### Kelly Restoration Advisory Board (RAB) **Meeting Agenda**

Tuesday, May 11, 2004 - 6:30 p.m. Greater Kelly Development Authority 143 Billy Mitchell, Suite 6

**RAB** Co-chairs

Mr. Ruben Peña, Community Mr. Adam Antwine, AFRPA

#### **Meeting Goals**

The RAB will:

- Advise and comment on former Kelly Air Force Base environmental matters/documents
- Receive updates on environmental remediation projects

I.	Roll call begins at 6:30 p.m.	
	- RAB Co-chair will convene the meeting	Mr. Adam Antwine
	- Pledge of Allegiance	Mr. Adam Antwine
	- Moment of silence	Mr. Adam Antwine
	- Welcome and introductions	Dr. David Smith
	- Discuss goals for this meeting	Dr. David Smith
	- Review supplemental packages	Dr. David Smith
II.	Community Comment Time	Dr. David Smith
III.	Fruit and Nut Final Sampling Results	Ms. Kyle Cunningham
IV.	Break	
V.	RAB Operating Guidelines update	Task Committee
VI.	Veterans Affairs Expert to Brief Agent Orange	TBD
VII.	Site S-7 Briefing	Mr. Scott Courtney
VIII.	Announcements	-
	- Community update on events and issues relevant to their constituencies	Community Members
	- BRAC Cleanup Team update	Ms. Norma Landez
	- Greater Kelly Development Authority update	Mr. Gary Martin
	- San Antonio Metropolitan Health District update - Air Force Real Property Agency update	Mr. Sam Sanchez Mr. Adam Antwine
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IX. Meeting Wrap-Up

- Address action items from previous meeting
- Review action items from current meeting
- Next RAB meeting proposed for Tuesday, July 20, 2004, at 6:30 p.m.
- Next TRS meeting proposed for Tuesday, June 8, 2004, at the Environmental Health and Wellness Center at 6:30 p.m.

### Restoration Advisory Board (RAB) Meeting Minutes Former Kelly Air Force Base, TX Greater Kelly Development Authority

#### May 11, 2004

#### Attendees:

Mr. Daniel Gonzales, RAB Community Representative

Ms. Esmeralda Galvan, RAB Community Representative

Ms. Sandra Converse, RAB Community Representative

Ms. Carol Vaquera, RAB Community Representative

Mr. Adrian Cortes, RAB Community Alternate

Mr. Mike DeNuccio, RAB Community Representative

Mr. Sam Murrah, RAB Community Representative

Mr. Michael Sheneman, RAB Community Representative

Mr. Pete Muzquiz, RAB Community Representative

Mr. Armando Quintanilla, RAB Community Alternate

Mr. Sam Sanchez, San Antonio Metropolitan Health District (Metro Health)

Ms. Kyle Cunningham, Metro Health

Ms. Linda Kaufman, Metro Health

Mr. Gary Miller, U.S. Environmental Protection Agency (EPA)

Mr. Mark Weegar, Texas Commission on Environmental Quality (TCEQ)

Ms. Abigail Power, TCEQ

Mr. Gary Martin, Greater Kelly Development Authority (GKDA)

Mr. Adam Antwine, RAB Government Co-Chair, Air Force Real Property Agency (AFRPA)

Mr. William Ryan, AFRPA

Ms. Norma Landez, AFRPA

Mr. Larisa Dawkins, AFRPA

Mr. Tim Sueltenfuss, Booz Allen Hamilton (Booz Allen)

Mr. Brendan Smith, Booz Allen

Mr. Scott Courtney, Booz Allen

Ms. Christine Best, Booz Allen

Ms. Susan Hook, Booz Allen

Ms. Stephanie Trevino, Booz Allen

Dr. David Smith, Smith and Associates (Facilitator)

Ms. Brittany Watts, Smith and Associates

Ms. LeAnn Herren, Smith and Associates

Dr. C.K. Tan, Southwest Research

Dr. K.C. Donnelly, Texas A&M University

Ms. Coriene Hannapel

Mr. Peter Hannapel

Mr. Alex Terrazas

Ms. Gloria Ramos-Cortes

Ms. Rose Ramos

Reverend Bee Dee Doublet

Mr. Ivan Boyer

Mr. Ben Galvan

Ms. Martha Cave

#### **Members Absent:**

Mr. Ruben Peña, RAB Community Co-Chair Mr. Sergio Rodriguez, RAB Community Member Mr. Rodrigo Garcia, RAB Community Member Mr. Nazirite Perez, RAB Community Member Mr. Robert Silvas, RAB Community Member

The meeting began at 6:40 p.m.

### Welcome and Introductions Dr. David Smith

Dr. David Smith welcomed everyone and stated that there was a quorum present to begin the meeting. Mr. Armando Quintanilla asked what constituted a quorum. Dr. Smith said 50 percent of the community members must be present to form a quorum. The RAB board members discussed the issue and came to the agreement that there was a quorum to conduct the meeting.

Mr. Adam Antwine called the meeting to order. He led the audience in the Pledge of Allegiance and a moment of silence. He thanked everyone for coming to the meeting and apologized for the change in meeting location. Mr. Michael Sheneman introduced Mr. Alex Tarrazas, a student of his at Palo Alto who is going to serve as his alternate.

Dr. Smith reviewed the agenda and the supplemental packets. He explained that the community comment time would fall at the beginning of the meeting and invited all who wished to speak to fill out a comment card. The Spanish translators announced their services were available if needed.

### Community Comment Time Dr. David Smith

Dr. Smith explained that he would be taking notes throughout the comment time to capture the questions the community asked. He said he would review the questions at the end of the meeting to make sure he had captured them correctly. He added that the Air Force would try to answer the questions towards the end of the meeting. The questions that were not answered at this meeting would be addressed at the next meeting in July.

Ms. Coriene Hannapel stated that this was her first time to attend a RAB meeting. She said she had contacted the Air Force Real Property Agency (AFRPA) earlier in the day and was told that the meeting location had changed from Kennedy High School Auditorium to the Greater Kelly Development Authority (GKDA) due to schedule conflicts. She said she was told that this issue would be discussed further at the meeting. She said the location change was not noted on the Web site, nor was the meeting agenda posted to the Web site. She added that the meeting agenda stated there was going to be a discussion on the fruit and nut sampling study, and had she known this, she would have brought her notes and questions about it. She said it would be helpful to have the agenda before the meeting and wanted to know how the public is usually notified of the meetings. She stated that she received a report from Mr. Doug Karas that said the permeable reactive barriers (PRBs) at Kelly are not working. She said she wonders if dichloroethene (DCE) and vinyl chloride (VC) are now being pumped into the groundwater. She said she wanted to

know what remediation has been planned for the water that has already gone through the PRB, and if it now contains DCE and VC that was not there before.

Dr. Smith explained that they would make notes of her concerns and hope to have a response to her within ten days.

Mr. Sheneman asked how Ms. Hannapel knows where the contamination is and why it is there. She reiterated that Mr. Karas gave her a report that stated this. She said the 2004 Semiannual Compliance Plan Report also states that the PRBs are not working or breaking down the chemicals properly. Mr. Sheneman said he does not understand why the community has not been told. He added that he attends every meeting and had not ever heard of this.

Mr. Quintanilla said that Mr. George Rice had brought it up at the April RAB meeting. Mr. Mark Weegar said that the only PRB that has been in the ground for any length of time is the one in Zone 5 on the eastern portion of Kelly. He said the one at Building 360 has been recently completed and there is probably not much data that can be gathered from it. The Zone 5 PRB is the only one that has been installed long enough to collect and analyze a substantial amount of data. Ms. Hannapel stated that she did not bring the reports with her, but that she would provide copies at the next meeting for those who are interested.

Ms. Rose Ramos said that she lives in the area near the railroad and heard that there was going to be a PRB installed near Commercial Street. She asked how many notification letters have been sent to the community to inform them of this and what the boundaries of the mailing area are.

Mr. Pete Muzquiz said he lives on Commercial Street and said he gets mailings about future Kelly projects all the time, not just because he is a RAB member. He added that he is confident that the Air Force spreads the word to notify the public.

Mr. Weegar said that the Air Force would get back to Ms. Hannapel about a specific contact number for the Commercial Street outreach.

Mr. Adrian Cortes asked what the information looks like. Mr. Muzquiz explained that he has received postcards, flyers, and other materials that invite the public to attend RAB meetings, go on tours of the base, and see construction project sites.

Mr. Antwine explained that the Air Force has been meeting with a mailing company to get a specific number of addresses for that area. The information will say what the PRBs are, what they are going to be doing, and where. He added that the products are still in the development stages, but once finalized, will be released to the public.

### Fruit and Nut Sampling Results

### Ms. Kyle Cunningham

Ms. Kyle Cunningham introduced herself as the Program Manager for the Public Center for Environmental Health (PCEH), which is part of the San Antonio Metropolitan Health District (Metro Health). She gave a quick overview of the contamination at Kelly and listed the main contaminants of concern: trichloroethylene (TCE), tetrachloroethene (PCE), and 1,2-DCE and VC. The Air Force began a survey of the fruits and nuts produced in the area in 2001 in response to the community concerns about the uptake of these chemicals into their homegrown fruits and vegetables. They analyzed a total of 47 samples, which included bananas, chili peppers, citrus, figs, pears, and pecans. Most of the samples collected were pecans. She said Dr. C.K. Tan with Southwest Research performed the testing.

Ms. Cunningham explained that the community was concerned that some of the other garden vegetables from the area were not tested. In January 2003, they collected more samples to include all the original samples, plus tomatoes and cacti. She stated that the goal was to collect and analyze a seasonal variety of fruits, vegetables, and nuts for a complete panel of chemicals. She explained the testing process and showed pictures of the scientists collecting the samples. She said that the conclusion drawn from the sampling was that there were no significant levels of contaminants in the fruit and nuts analyzed. She said the produce is safe to eat and, as always, it should be washed whether it is homegrown or purchased at the grocery store. She said the report will be available on the Web site. She said they would also have hard copies at the Environmental Health and Wellness Center (EHWC), AFRPA, and PCEH in case anyone wanted to review it.

Ms. Sandra Converse asked how the sample size was determined. Ms. Cunningham said the sampling size included a good sample, especially considering that they did not see any alarming trends.

Mr. Weegar stated that considering what was available in the area, it was a good sample size. Ms. Converse asked if they only chose healthy specimens. Ms. Cunningham said they sampled everything in variation. Dr. K.C. Donnelly, from Texas A&M University, said that they tested diseased as well as healthy-looking samples. He added that the most important thing is that all the samples showed nondetect for the contaminants of concern.

Ms. Esmeralda Galvan asked what other chemicals were tested besides those of concern. Ms. Cunningham said they ran the complete panel for volatile organic compounds (VOCs). She added that they did not test for any other chemicals than those of concern because those would not be from the former Kelly AFB.

Ms. Galvan voiced conflict of interest concerns about Southwest Research because they have connections to the government. Mr. Gary Martin explained that Southwest Research is not a government entity, but rather an independent contractor. Ms. Galvan then asked if the same test could be done from another independent laboratory to see if the same results come back. Ms. Cunningham said it was a patented method so another laboratory probably could not use it. She added that their goal was to find the very best method available to test. She concluded that PCEH was confident in the testing method and the results.

Ms. Galvan asked why they tested outside the plume area. Ms. Cunningham explained that the main reason was because the plume changed in size and location over the course of testing, but also so they could have a comparison.

Mr. Mike DeNuccio asked how Southwest Research was selected to do the job. Ms. Cunningham said they were a sole source contract because of the patented method, but they did review other bids. Mr. DeNuccio agreed that Southwest Research has an impeccable record. Ms. Gloria Ramos-Cortes said that her father gave her a pecan tree and told her it would produce pecans within five years. She said it has been ten years and the tree has hardly produced anything. She said she believed that this is because of the contamination. She asked if they are testing the roots and the tree itself, not just the fruits and nuts.

Mr. Weegar said that the process of phytoremediation pulls the VOCs through the roots and up into the leaves. They are released into the air and do not harm the plant. Ms. Cunningham said her main concern for doing the testing was to address the community concerns. She added that the study is about the chemicals getting into the food chain. She concluded that her funding is better spent focusing on things that impact the health of the surrounding community.

Ms. Galvan asked about the air sampling. Ms. Cunningham said that PCEH had a contractor on site during the 34th Street PRB construction that was conducting air monitoring the entire time for particulates and VOCs. She added that they are working on getting a particulate monitor for the area.

Mr. Quintanilla asked if the fruit and nut final sampling report is going to be sent to the Agency for Toxic Substances and Disease Registry (ATSDR) for comments and inclusion in the final public health assessment for the surrounding area. Ms. Cunningham replied that she had not thought about that because she was afraid that it would delay their already lagging process. Mr. Quintanilla said that ATSDR has to release the final health assessment and they may need more studies to add to it. He suggested that PCEH consider sending it and Ms. Cunningham said she would.

Ms. Cunningham said that PCEH ran into a Food and Drug Administration (FDA) five-year study during their research. She said it was released in 2003 and illustrated that FDA analyzed 70 foods between 1996 and 2000 for VOCs. She added that these foods were purchased from grocery stores and that VOCs were detected in every sample. The FDA concluded that much higher doses are inhaled through cigarette smoke, gasoline fumes, and industrial pollution than ingested through foods. She concluded that homegrown garden foods might prove better than grocery foods. She provided contact information and encouraged the community to visit the FDA's Web site.

#### Community Comments Revisited Dr. David Smith

Dr. Smith outlined the reason for the change of meeting location. He stated that Kennedy had planned a band concert in their auditorium for the evening, and due to this schedule conflict, the RAB had to be moved. He stated that Ms. Brittany Watts worked with Kennedy High School and the Edgewood Independent School District superintendent's office to find another auditorium; however, they had nothing available. Ms. Watts scheduled the new location at GKDA because other RAB meetings have been held there and most members were familiar with the location. He added that Ms. Watts advertised the change in local newspapers, sent out public service announcements, and sent e-mail and hard copy notices to RAB members (with directions) in their material packets. There was also a person at Kennedy who posted signs and handed out directions.

#### **Operating Guidelines Update Task Committee**

Dr. Smith invited Mr. Muzquiz to explain the progress with the operating guidelines task committee. Mr. Muzquiz explained that the RAB members were given the opportunity at the April meeting to make comments about the suggested changes to the operating guidelines. He said he had not received any response from anyone. He added that those people who make the most noise about the operating guidelines always fail to show up to the special meetings held to address them. He said changes do not have to be made, but cannot be made unless everyone votes and discusses what is going on with the operating guidelines. He pointed out that people who do not attend meetings have no grounds to complain.

Ms. Galvan asked why the operating guidelines were being changed to begin with. Mr. Muzquiz responded that there was language that needed to be updated to suit what the RAB wants to accomplish.

Mr. Antwine said he thought that it was the election process that prompted the need to look at the operating guidelines again. Mr. Quintanilla said he thought the language had been corrected. Mr. Antwine said it has been, but the board has not approved the revisions. Mr. Quintanilla said he understood that the operating guidelines will need to be corrected once the *Draft Revised Proposed RAB Rule, January 2004* was approved as final. He suggested that the RAB wait until the *RAB Rule* was final before making changes. Mr. DeNuccio stated that they are planning on waiting on the final *RAB Rule*, but could tackle the few key changes to move forward until it is final. He said they at least need to look at the Technical Review Subcommittee (TRS) elections to be prepared for the upcoming meeting in June. He added that then they could come back at a later date and do a comprehensive review of the charter once the *RAB Rule* is final.

Mr. Quintanilla said he does not agree with the purpose stated in the addendum. He said the RAB is not a decision-making body. Mr. Gonzales said the purpose has to come out of the *RAB Rule*. Mr. Weegar said that the RAB has always been and will continue to be a mechanism for the community to provide advice on the cleanup. The community does not a have decision making authority.

Mr. Cortes said he did not see anything in the operating guidelines that offered help to the sick people in the community. Mr. Weegar said it is not within the parameters of the RAB. Mr. Cortes said that there should be more interest in the health of the community.

Mr. Sam Sanchez agreed that there is illness in the community, but he cannot speak to that being added to the goals of the RAB operating guidelines. He said since 1988 to the present, there have been many studies and assessments to determine the relationship between the former Kelly AFB and the health of the community. He said he believes that ATSDR will continue to do assessments on health problems in the area. He said there are illnesses present, but finding a correlation is difficult. He invited people to come to the EHWC. He stated that he was thankful for the people that come in and take time out of their busy lives to contribute to the information being collecting.

Mr. Weegar stated that everyone present can recognize that there are ill people in the community. He added that it is difficult to talk about providing assistance and compensation to

ill people in the area when there is no direct linkage between the Kelly contamination and health impacts.

Mr. DeNuccio asked if the board could get back on schedule and discuss operating guidelines changes. He moved that the RAB approve to change the title from charter to operating guidelines and accept the new subcommittee meeting wording.

They board voted on a motion to accept the changes and it carried 5 to 3.

Dr. Smith stated that amendments to the operating guidelines must be accompanied by 2/3 majority vote. He said there is not a 2/3 majority present to accept the motion and it failed. Discussion followed about who can vote. Mr. Weegar stated that government representatives have never voted and will continue to abstain from voting. It is a matter of policy that TCEQ and EPA do not participate in any vote by the board. He stated that they are solely there to provide information to the RAB and try to answer questions from the community. The board discussed the voting procedures and decided that the operating guidelines discussion should wait until more members can be present for further discussion.

Mr. Quintanilla asked who was going to be the chairperson at the TRS meeting on June 8. Mr. Antwine said the community co-chair would fill the role until a TRS chair is established.

#### Site S7 Briefing

#### Mr. Scott Courtney

Mr. Scott Courtney introduced himself as a consultant to the Air Force through Booz Allen. He said he has been working at Kelly for six years and has focused on East Kelly and the off-site groundwater contamination. He said he put together this presentation to address community concerns that were brought up at the April RAB meeting regarding the Site S-7 herbicide storage area. He added that it is also referred to as the Installation Restoration Program (IRP) site SSOO9. He explained that the whole area of East Kelly was part of the investigation. However, it was only a two-acre site on the southwest corner of East Kelly where the herbicide was stored. He said in the 1960s and 70s during the Vietnam War, Kelly was a depot for herbicides like Agent Orange. The site was utilized for two years. The total number of drums stored there was not documented, but it is known they were stored there for general operations. The drums were stored on wooden pallets. When the mission was completed, they were shipped to Johnson Island and disposed of on an incinerator ship.

Ms. Galvan asked why the number of drums was not documented. Mr. Courtney replied that the information he has is from the restoration activities, and he does not have all the records of every drum, pallet, or piece of equipment that passed through Kelly.

Mr. Quintanilla asked how many drums would fit in two acres. Mr. Courtney said it all depended on how they stacked them. Mr. Courtney said they conducted environmental investigations long after the drums were gone. He added that it was not relevant to know the number of drums that came in and out of the base because it was not within the scope of their investigation.

Mr. Cortes asked what type of drums they were. Mr. Courtney replied that they were 55-gallon drums. He added that a number of investigations were done at the site. One of the findings was that the drums did leak due to the expansion and contraction caused by the heat in South Texas. Mr. Cortes said he is not familiar with the area and asked what type of facility they are referring to. Mr. Courtney replied that it is a recreational facility for base personnel.

Mr. Courtney reviewed a summary of investigations that were conducted at the site. He said in 1982, the Air Force was doing record searches during phase I of the investigation to determine what materials were sorted and how they were handled. It was at this time that there was some indication that these drums were stored at Site S-7. In 1991, there was an initial site investigation report. After samples were collected, it became apparent that some of the drums could have leaked. The site-specific Environmental Baseline Survey (EBS) was conducted in the region and there was an effort to transfer the property to Railcar America. The information was reviewed again in 1996 for property realignment. In 1997, the bulk of the investigation was conducted at the site. He said they identified the chemicals of concern, compared them to the regulatory standards, determined what type of cleanup was needed, and then conducted the cleanup, and submitted the closure report to the state and EPA for approval.

Mr. Cortes asked what chemicals of concern were located there. Mr. Courtney replied that the first investigation in 1991 reported that this was the only location where the herbicide drums were stored. He said there were elevated levels of inorganics like metals and arsenic, as well as low levels of dioxins. There was a preliminary risk assessment done at that time that evaluated the concentrations and resulted in a low level of health risk. They did find that there were potential existing and future migration pathways, as well as potential human receptors. It was recommended that they conduct additional sampling to fully characterize the nature and extent of the contamination.

Mr. Courtney explained that chemicals of concern are those chemicals that are detected at the site at concentrations that exceed regulations. He said they sampled for a wide range of chemicals. None of the dioxin contaminants found were above the risk reduction standard values that would require any remedial action. Arsenic was detected in 41 of the 48 samples in the area; 27 of the detections were above the cleanup standards. Kelly conducted a cleanup to meet residential standards. He said the Air Force excavated 3,000 cubic yards of soil that was properly disposed of and the Texas Natural Resource Conservation Commission (now the TCEQ) approved closure of the site in 1997.

#### Announcements

Mr. Sheneman said he wanted to thank the staff at AFRPA for the tours he has been on recently at Kelly. Mr. Martin could not be present for the GKDA update. Mr. Sanchez said he left some flyers on the sign-in desk that invite the community to attend the workshop with PCEH on June 26, 2004, at Our Lady of the Lake University. He said the workshop would focus on the environmental and economic issues affecting the south side of the city.

Mr. Antwine said there were posters in the entryway that show the plume comparisons from 1999 up to now. He said the Air Force is looking to illustrate the cleanup progress in a simple way and the posters help to do that. He said there is a large program in effect this year to install

cleanup remedies for the off-base part of the contaminant plume. He said the Air Force expects to have all the groundwater treatment systems in place this year.

Ms. Norma Landez gave the Base Realignment and Closure (BRAC) Cleanup Team (BCT) update. She said they discussed the basewide ecological assessment of Zones 1, 2, 3, and 5. They concluded that there is no risk to the aquatic and omnivorous birds along Leon Creek. She stated that they submitted the ecological risk assessment to the agencies at the end of April and it will be available at the PCEH office soon. She said they also discussed an update on the Building 361 radiation. They are waiting for Boeing and GKDA to provide them with the report to submit to the agencies. They were provided a review of the Zone 1 Corrective Measures Study by a contractor at Lackland AFB. This report was also reported to the community at their council meeting last month. That will be available in public libraries and will also be submitted to the regulators this month. They also discussed the Agent Orange issue that arose at the April RAB meeting. She explained that they reviewed all documentation and could not find any storage of Agent Orange in two warehouses. She said the Air Force installed monitoring wells along the Building 360 PRB and should get samples of groundwater in the next couple of weeks. Upon approval, the BCT minutes will be provided at the next RAB meeting.

Mr. DeNuccio stated that there is confusion on which RAB members can vote. He said the bigger question that needs to be raised is whether the government members want to be considered as voting members. He said that since they do not have that answer at this time, they will have to take it up at the next meeting. The operating guidelines need to be evaluated to determine who is a voting member before the RAB can proceed with any changes to them.

### Meeting Wrap-Up Action Items from May 2004 RAB Meeting

- Air Force will evaluate the EBS for references to storage of Agent Orange at Kelly
- The Air Force will invite a Veterans Affairs (VA) Administration expert to brief the community on Agent Orange at the next RAB meeting (*Deferred to July meeting*)
- The RAB Executive Committee will decide how spill report summaries should be reported to the RAB.

#### Action Items for July 2004 RAB Meeting

• The Air Force will invite a VA Administration expert to brief the community on Agent Orange at the next RAB meeting

Dr. Smith reminded all the RAB members and attendees of the upcoming RAB and TRS meetings.

The meeting was adjourned at 10:10 p.m.

### Zone 4. CMI - PRB Installation South of Malone Update

- PRB installed in two sections along UPRR South of Malone
- Purpose Contain plume from off Base source areas
- Goal Treat contaminants to MCLs
- 1000' and 500' in length, approximately 35 feet deep
- Inject Zero Valent Iron filings using Azimuth Controlled Vertical Hydrofracturing

## Zero Valent Iron PRBs

- Passive system for treating contaminated groundwater
- Proven in laboratory and field studies
- Abiotic degradation of contaminants.
- Design Elements contaminant concentrations, groundwater velocity residence times, barrier thickness

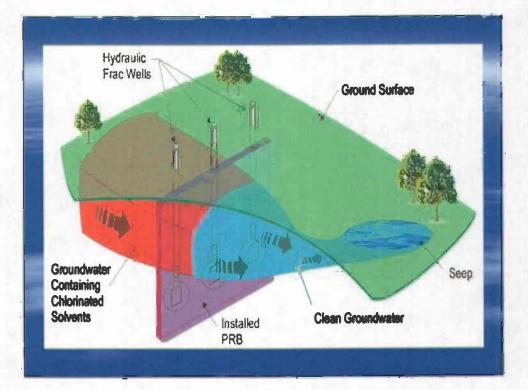
## Design Advantages

- No excavation, minimal-site disturbance
- Complete treatment undergigund
- 🔺 Proven technologÿ
- Little disruption to the community
- Reduced construction times

## Schedule

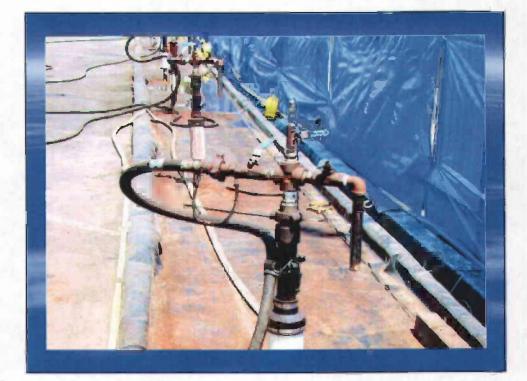
- Draft Design, under review
- Access agreement with UPRR in process
- Injection Permit with TCEQ in process.
- Construction begin in first quarter of 2004
- Construction complete end of summer 2004



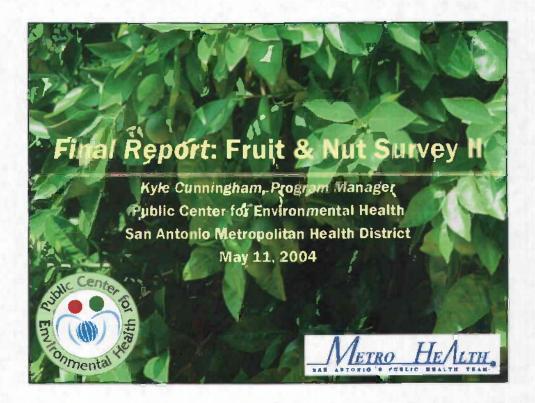












## History

- Off-base contamination detected in 1988 by Public Works at Quintana Rd.
- Contaminated groundwater plume
  - Lies 10–30 ft. under 20,000 homes

## **Contaminants of Concern**

### Identified by the Texas Commission on Environmental Quality (TCEQ)

- Tetrachloroethene (PCE)
- Trichloroethylene (TCE)
- 1,2-Dichloroethene (1,2-DCE)
- Vinyl chloride

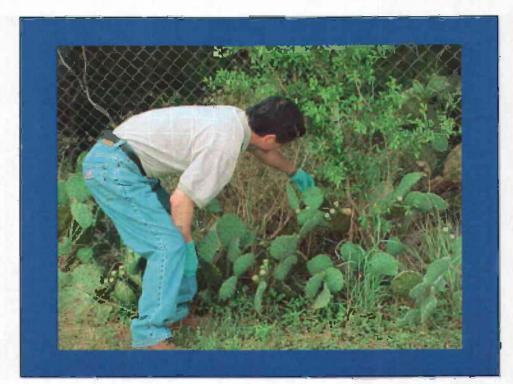
## Fruit & Nut Survey I (2001)

Sample Type	No. Collected
Bananas	3
Chili peppers	7
Citrus	6
Figs	2
Pears	1
Pecans	28
Total	47

## Fruit & Nut Survey I (2001)

Non-Detect	46
Detect ≥ 5 ppb	0
Detect < 5 ppb	1*
Total	47

\*Lime tree was re-sampled in January 2003 and results were non-detect for VOCs.

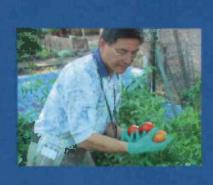




## Goal

 To collect and analyze a seasonal variety of fruits, vegetables, and nuts for PCE, TCE, 1,2-DCE, and vinyl chloride contamination

## **Sampling Procedure**

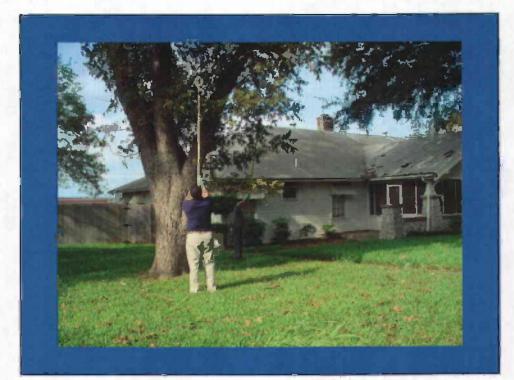


- Gloves
- Collect samples

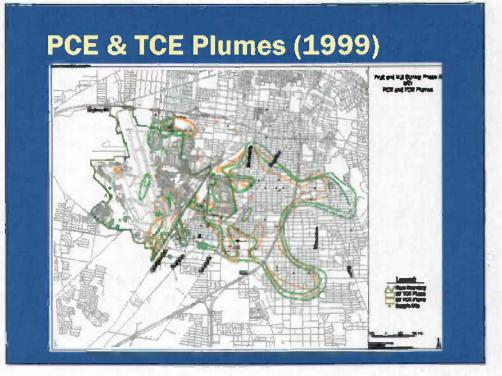
 Secure samples in containers

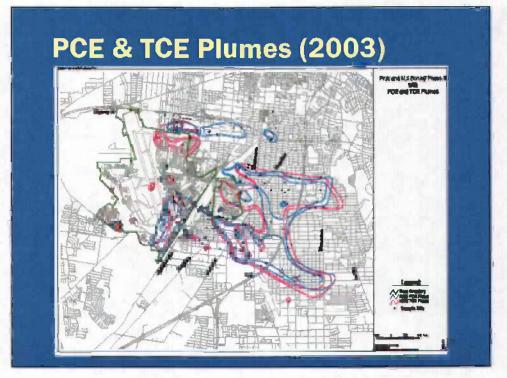
- Documentation
- Store samples on ice
- Transport to SwRI
- Analyze/samples











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## Samples Collected 2003

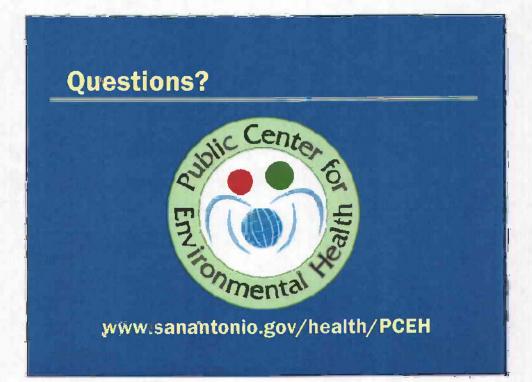
Sample Type	No. Collected
Bananas	9
Cacti	56
Citrus	32
Flgs	13
Peaches	9
Pears	9
Pecans	19
Tomatoes	12
Total	159

sults 200		
Non-Detect	159	
Detect $\geq$ 5 ppb	0	
Detect < 5 ppb	0	
Total	159	

## Conclusions

- PCE, TCE, 1,2-DCE, and vinyl chloride were not detected in any sample
- Produce is safe to eat
  - Good practice to wash all produce, both homegrown and store-bought
  - Fresh produce is best







## FDA 5 Year Food Study (2003)

- Analyzed 70 foods for VOCs from 1996 to 2000
- VOCs detected in every sample
  - Particularly benzene
- Much higher doses are inhaled from cigarette smoke, gasoline fumes, and industrial pollution than ingested through foods

Air Force Real Property Agency / Division Central — Kelly Environmental Site Cleanup

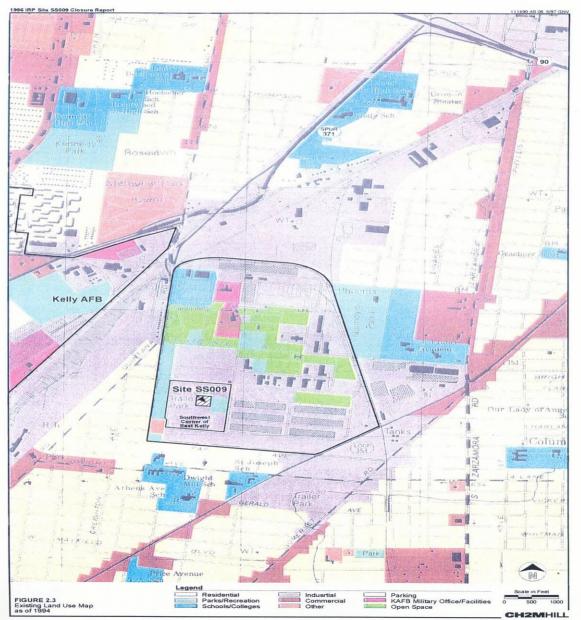


Site S-7 Herbicide Storage Area IRP Site SS009 Historical Review Kelly AFB Restoration Advisory Board May 12, 2004



Environmental Site Cleanup

## Site S-7 Location





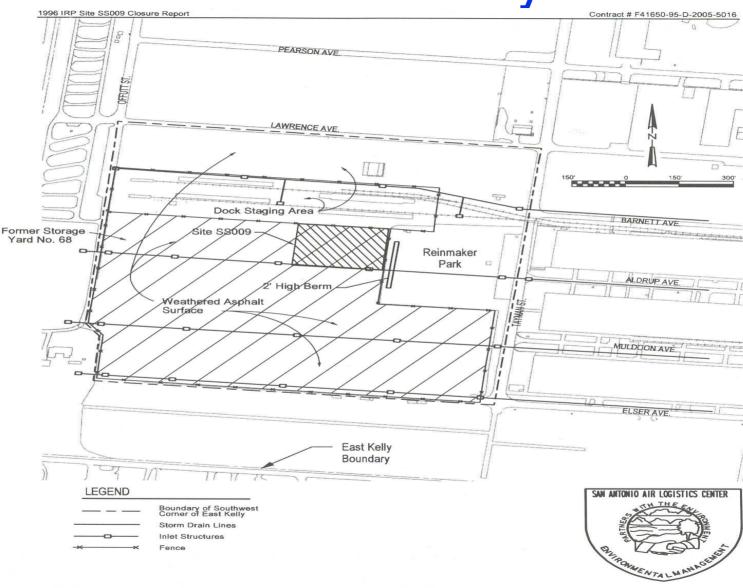
# **General Site Summary**

- Two acre site located in southwest corner of East Kelly
- Stored drums containing herbicides
- Utilized for 2 years in early 1970s
- Total number of drums stored not documented
- Stored on wooden pallets
- Herbicide shipped to Johnston Islands for incineration on Ship Vulcanus

## Site Boundary



Air Force Real Property Agency / Division Central — Kelly



Environmental Site Cleanup

> RDD//EBSEK06.DLV 24-SEPT-1997

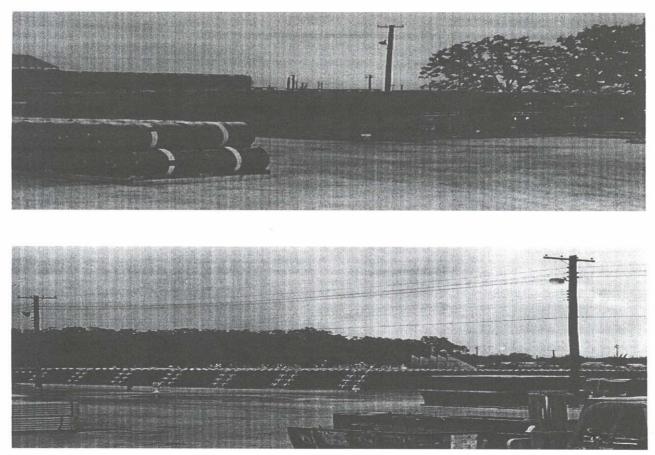
FIGURE 1.2 SS009 Site Layout

CH2MHILL



F41650-95-D-2005-5016

9/97 FINAL IRP CLOSURE REPORT SITE SS009





Air Force Real Property Agency / Division Central — Kelly



# Site Investigation Summary

- Phase I Records Search, February 1982
  - Draft Site Investigation Report, East Kelly: Site S-7, March 1991
- Final Site-Specific Environmental Baseline Survey, Southwest Corner of East Kelly, November 1996
- Final Realignment Environmental Baseline Survey, December 1996
- IRP Site SS009 Closure Report, Draft Final (Revised), July 1997
- Draft Final, East Kelly Site-Specific Environmental Baseline Surveys, August 2001
- Final Zone 4 RCRA Facility Investigation Report, Zone Overview OU-1 and OU-2, June 2003



# Draft Site Investigation Report, East Kelly: Site S-7, March 1991

- Only herbicide storage area noted in the report
- Drums leaked due to expansion and contraction
- Elevated levels of inorganics present in the surface soil
- Preliminary risk assessment
  - Low levels of dioxin/furan concentrations
  - Not significant health risks
- Elevated levels of arsenic and beryllium in soil
  - Potential existing and future migration pathways
  - human receptors present
- Recommended additional sampling
  - to fully characterize the nature and extent of inorganic contamination
  - quantitative risk assessment to characterize the potential risk to human health and the environment.

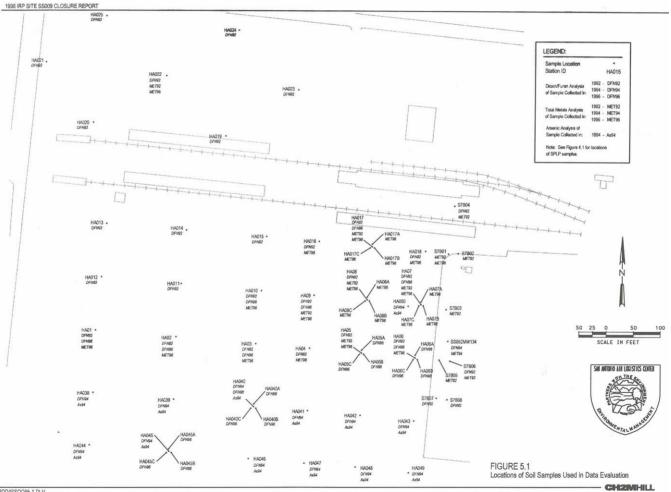


## IRP Site SS009 Closure Report, Draft Final (Revised), July 1997

- Additional surface and subsurface soil sampling conducted
- Evaluated all available site data
- Analyses for Dioxan/Furans, Arsenic, other metals
- Dioxin/Furans
  - impurities in herbicides
  - Slow to degrade
  - Good indicators of herbicides
  - Background 8 parts per trillion Toxicity Equivalent Quotient (TEQ)
  - 11 of 67 samples above background (8.1-117 ppt)
  - None above RRS 2 values
- Arsenic
  - Component of herbicide
  - Background 8.5 mg/kg
  - detected in 41 of 48
  - 27 of 48 samples above background (max. conc. = 226 mg/kg)
- Other Metals detected above background, less than RRS 2
  - Antimony, barium, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, silver, thallium, and vanadium







RDD//SSO095-1.DLV 25-JULY-1997

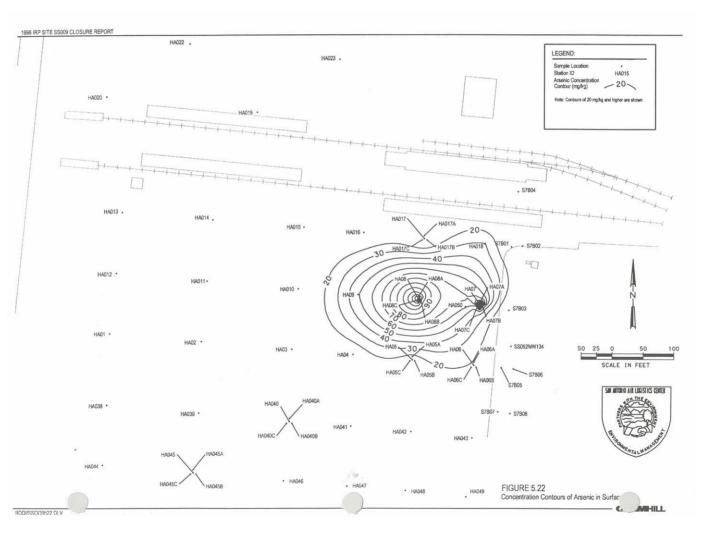


## IRP Site SS009 Closure Report, Draft Final (Revised), July 1997 Continued

- Arsenic distribution in surface soil in and around former storage area
- Removal action
  - 20 mg/kg RRS 2 value
  - 1.3 acres (200 x 250 feet)
  - Excavation to 1 foot
  - 3,000 cubic yards of soil disposed
  - TNRCC approved closure September 1997



**Arsenic Distribution** 





## Site S-7 Conclusions

- Only know major herbicide storage area on Kelly AFB
  - Arsenic
    - >1.2 acre area exceeding 20 mg/kg excavated to a depth of 1 foot
    - Site closed to RRS 2 Industrial
      - Meets residential criteria
- Dioxin/Furans
  - >background
  - <**RRS** 2
- Other Metals
  - > background
  - < RRS 2
- Rail Car America tenant since 1997

### The meeting location

#### 1. Why did the meeting location change?

- Due to schedule conflicts at Kennedy Auditorium, the meeting was moved to GKDA.
- We worked with Edgewood ISD to find another school in the area that we could use for the meeting, but nothing was available.
- We have held other RAB related events at GKDA so members are familiar with the location.

#### 2. How was the public notified?

- We advertised in the *San Antonio Express News* and in the *Primetime* papers regarding the meeting date, location, and time for the public to be aware.
- We sent out a Public Service Announcement.
- We sent the RAB members their materials packets with a notice and directions to the new location.
- We sent the RAB members e-mails regarding the location change.
- We had a person at Kennedy who posted signs and handed out maps and directions to the location.



## ADMINISTRATIVE RECORD

## FINAL PAGE