



KELLY AFB
TEXAS

ADMINISTRATIVE RECORD
COVER SHEET

AR File Number 3506

Kelly Restoration Advisory Board (RAB)

Meeting Agenda

8 April 2008

Port Authority of San Antonio
143 Billy Mitchell Blvd., Bldg. 43, Suite 6
San Antonio, TX 78226

6:30 - 6:35 Welcome and Overview

6:35 - 7:10 Aflatoxin Study

7:10 - 7:45 Building 360 Soil Remediation

7:45 - 8:00 EPA Soil Vapor Intrusion Study at North Kelly Gardens

8:00 - 8:15 Public Comment Period

8:15 - 8:25 Semi Annual Compliance Plan (June-Dec 2007)

8:25 - 8:30 Adjournment

Notes: Next RAB Meeting: 8 July 2008, 6:30 p.m. : Port Authority of San Antonio, 143 Billy Mitchell Blvd., Bldg. 43, Suite 6, San Antonio, TX 78226

April 8, 2008

**Kelly Restoration Advisory Board (RAB)
Port Authority of San Antonio
143 Billy Mitchell Blvd., Bldg. 43, Ste. 6
San Antonio, Texas 78226**

DRAFT Meeting Minutes

RAB Community Members:

Beverly Abbott
Rodrigo Garcia, Jr.
Daniel Gonzales
Nazirite Perez
Paul Person
Brian Skrobarcek

RAB Government Members:

Paul Carroll, AFRPA, BRAC Environmental Coordinator (BEC)
Sonja Coderre, Air Force Real Property Agency (AFRPA), Public Affairs Officer
Kyle Cunningham, San Antonio Metropolitan Health District (SAMHD)
Gary Miller, U.S. Environmental Protection Agency (USEPA)
Mark Weegar, Texas Commission on Environmental Quality (TCEQ)

AFRPA Staff:

Jose Martinez, Facilitator
Eddie Martinez, AFRPA, Contractor

Elected Officials/Representatives:

Stephanie Smith, Office of U.S. Rep. Charles A. Gonzalez

Other Organizations:

Cornell Long, Air Force Institute for Operational Health
Linda Kaufman and 24 students, University of Texas Health Science Center
Jerry Needham, San Antonio Express-News
Jorge Salazar, TCEQ

Public Participants:

Sam Murrah
Alfred Rocha

The meeting began at 6:30 p.m.

I. Welcome and Overview – Mr. Jose Martinez, Facilitator

Mr. Martinez began the meeting by welcoming everyone to the April 2008 Kelly Restoration Advisory Board meeting. Ms. Sonja Coderre then introduced newly appointed member, Mr.

Daniel Gonzales. Mr. Gonzalez introduced himself as a representative of Parent Child Inc., and stated his interest in the RAB was so he could maintain an awareness of the environmental cleanup activities at the former base and how they related to area children.

Mr. Martinez then explained the Public Comment Period on the agenda and its process, and introduced the first speaker, Dr. K.C. Donnelly.

II. Aflatoxin Study – Dr. K.C. Donnelly

Dr. Donnelly presented information on the ongoing Bexar County Environmental Health and Dietary study. He stated the study was being conducted due to elevated rates of liver cancer in three ZIP codes; 78207, 78228, and 78237. See *Bexar County Environmental Health and Dietary Survey* presentation for more information. Following the presentation, a question and answer session ensued. A discussion was then held regarding recruiting for the study. Representatives from the San Antonio Metropolitan Health District identified they are looking for those individuals who reside in one of the three ZIP codes who are at least 18 years of age to participate in the study. The study is seeking a minimum of 250 participants.

III. Building 360 Soil Remediation – Mr. Paul Carroll

Mr. Carroll discussed the Building 360 remediation activities. He explained that modeling done from soil samples during the Corrective Measures Study predicted soil vapor intrusion. A soil vapor extraction system was implemented to treat the soil, thereby reducing the possibility of soil vapor intrusion. He identified ambient air samples taken during the course of implementation of the system revealed elevated levels of VOCs. The levels, however, are well below the OSHA allowable limits. He concluded by stating further investigation will be conducted to locate and address the source of the elevated levels of VOCs. Following the presentation, a question and answer session ensued.

IV. EPA Soil Vapor Intrusion Study at North Kelly Gardens – Mr. Gary Miller

Mr. Miller presented information regarding the Environmental Protection Agency's planned soil vapor intrusion study. Miller said the study will take place in the North Kelly Gardens area due to elevated levels of PCE in the shallow groundwater. The EPA is currently trying to obtain access from homeowners identified for the study.

V. Public Comment Period

There were various public questions asked regarding the three presentations given.

VI. Adjournment

The following items were recommended for inclusion in the July RAB meeting agenda.

- Building 360 update
- Building 301 update
- EPA Soil Vapor Intrusion Study follow-up

- Semi-Annual Compliance Plan Report

The meeting adjourned at 8:20 p.m.

Upcoming Meetings:

Next RAB Meeting is scheduled for 8 July 2008 at 6:30 p.m.

Attachments:

- 1 Agenda - 8 April 2008 Kelly RAB Meeting
 - 2 *Bexar County Environmental Health and Dietary Survey* presentation
 - 3 *AFRPA/Kelly Building 360 Air Sampling Results* presentation
 - 4 *Vapor Intrusion Study* presentation
 - 5 Meeting Minutes – 8 January 2008 Kelly RAB Meeting
-

Kelly Restoration Advisory Board (RAB)

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January 8, 2008
Kelly Restoration Advisory Board (RAB)
Port Authority of San Antonio
143 Billy Mitchell Blvd., Bldg. 43, Ste. 6
San Antonio, Texas 78226

DRAFT Meeting Minutes

RAB Community Members:

Beverly Abbott
James Betus
Rodrigo Garcia, Jr.
Nazirite Perez
Paul Person
Brian Skrobarcek

RAB Government Members:

Rafael Aviles, Port San Antonio (Alternate)
Paul Carroll, AFRPA, BRAC Environmental Coordinator (BEC)
Sonja Coderre, Air Force Real Property Agency (AFRPA), Installation Cochair (Alternate)
Gary Miller, U.S. Environmental Protection Agency (USEPA)
Jorge Salazar, Texas Commission on Environmental Quality (TCEQ) (Alternate)
Dr. William Miller, San Antonio Metropolitan Health District (SAMHD)

AFRPA Staff:

Jose Martinez, Facilitator
Patricia Wilson, AFRPA, Contractor

Elected Officials:

Brad Mayhar, Office of Congressman Ciro D. Rodriguez
Stephanie Smith, Office of U.S. Rep. Charles A. Gonzalez

Public Participants:

Lara Cushing, Southwestern Workers Union
Adrian Davila, Univision News
Greg Harman, San Antonio Current
Doug Hayes
Micah Poirrier, WOAI News
Robert Silvas

The meeting began at 6:30 p.m.

I. Welcome and Overview – Mr. Jose Martinez

Mr. Martinez began the meeting by welcoming everyone to the January 2008 Kelly Restoration Advisory Board meeting. Mr. Martinez conducted a roll call of all RAB community members

and later acknowledged all others in attendance of the meeting.

Mr. Martinez indicated meeting minutes from the October 9, 2007 Kelly RAB meeting were previously provided for review in read-ahead packets, and asked if anyone had corrections. No corrections were provided.

II. Installation Cochair Comments

Ms. Coderre welcomed everyone to the RAB meeting. She informed all present of the former Kelly BRAC Environmental Coordinator (BEC), Ms. Norma Landez's departure from AFRPA to the Air Force Center for Engineering and the Environment. Ms. Coderre introduced the new BEC for the former Kelly AFB, Mr. Paul Carroll.

Mr. Carroll introduced himself and gave the group a summary of his professional background.

III. Nomination and Election of Community Cochair

Mr. Martinez acknowledged that based on meeting attendance, the process of appointing a community cochair could take place due to a quorum being met. Ms. Coderre verified the quorum: six community members: Ms. Abbott, Mr. Betus, Mr. Garcia, Mr. Perez, Mr. Person, and Mr. Skrobarcek; and three government members: Mr. Aviles for Port San Antonio, Mr. Miller for U.S. USEPA, Mr. Salazar for TCEQ, and Dr. Miller for SAMHD; in addition to Ms. Coderre for the installation cochair. The RAB agreed and the appointment of the community cochair proceeded. Mr. Skrobarcek asked Ms. Coderre to define what the position of community cochair would entail and asked if the board could take a recess to discuss their decision. Ms. Coderre read the position description from the RAB Charter.

The community RAB members adjourned for a 15 minute discussion and then resumed the meeting.

Mr. Perez nominated Mr. Garcia and Mr. Person nominated Ms. Abbott for the community cochair position. The community RAB members voted on the two nominees. Mr. Garcia received two votes. Ms. Abbott received four votes. Ms. Abbott was appointed as community cochair.

IV. BRAC Cleanup Team (BCT) Update – Mr. Paul Carroll

Mr. Carroll informed the RAB there was no BCT meeting held during the month of October.

Mr. Carroll announced the public notices for the Class 3 Modifications on Zones 2 and 3 would be placed in the *La Prensa* January 9, 2008 and in the *San Antonio Express News* January 10, 2008.

Mr. Carroll briefed the RAB on the letters exchanged between AFRPA and the TCEQ. He stated these documents would be placed in the library located at the Environmental Health and Wellness Center. Both a listing and description of documents were provided in the meeting packets.

V.RAB Refresher Training

Ms. Coderre and Mr. Carroll presented the RAB refresher training slides. These slides included the history of the former Kelly AFB; an overview of the cleanup systems used and dates installed; explanations of various technologies; budget review; property transfer process; health and safety initiatives; studies conducted; and ongoing cleanup efforts.

VI. Public Comment Period

Mr. Silvas asked Ms. Coderre why an article written by Roddy Stinson regarding the alleged sale of Agent Orange was not made part of the RAB meeting minutes. He also brought up other discussions regarding Agent Orange. Ms. Coderre explained that article did not concern the environmental restoration program being conducted at the former base – the purpose the RAB meeting. Ms. Coderre explained questions concerning this matter should be directed to the Defense Logistic Agency.

Mr. Hayes asked Mr. Carroll, what the level of contamination was at well sites on the former Kelly AFB, how was the contamination removed and by what process? Mr. Hayes was informed he would be provided information regarding how to access the Administrative Record to obtain the information he was seeking.

Ms. Abbott and Mr. Harman requested to be provided information regarding contact information for the Defense Logistic Agency. A reply to this request will be provided to each in writing.

Ms. Abbott asked if the legends on the slides at the next RAB meeting could be more visible.

VII. Upcoming Agenda

Ms. Coderre recommended the RAB review the Semi-Annual Compliance plans for the April and July RAB meetings. Mr. Skrobarcek requested the RAB members be presented tentative agenda items one month prior to meeting so they may discuss and review the proposed agenda.

VIII. Meet and Greet/Adjournment

The meeting adjourned at 8:30 p.m.

Upcoming Meetings:

Next RAB Meeting: 8 April 2008, 6:30 p.m. – Port Authority of San Antonio – Boardroom

Attachments:

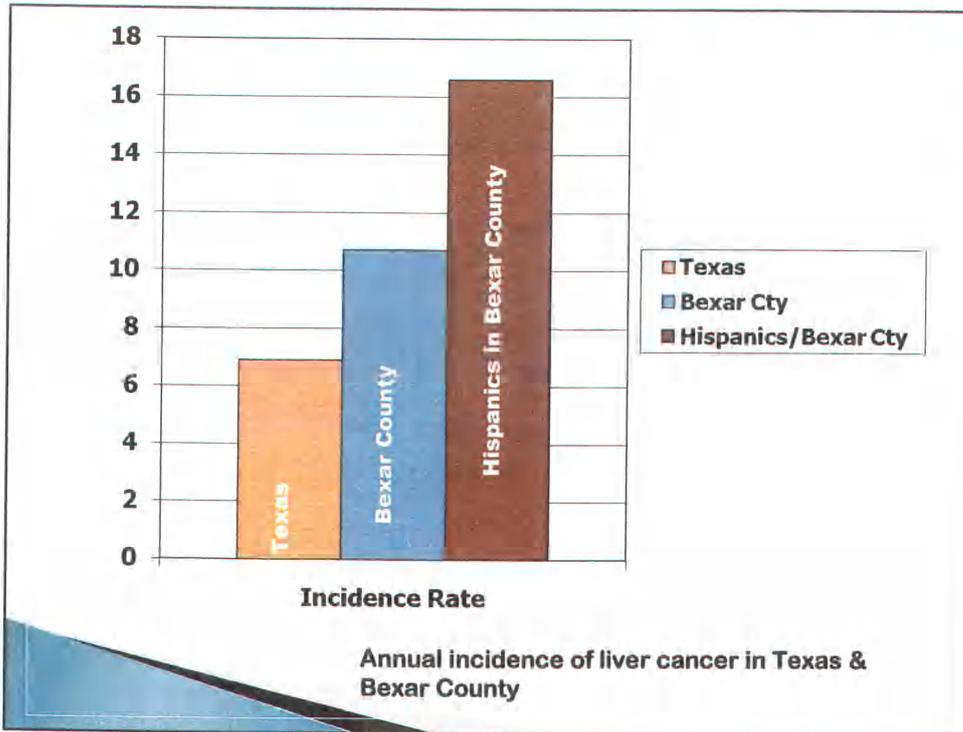
- 1 Agenda- 8 January 2008 Kelly RAB Meeting
 - 2 Presentation slides for 8 January 2008 Kelly RAB Meeting
 - 3 Meeting Minutes – 9 October 2007 Kelly RAB Meeting
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Bexar County Environmental Health & Dietary Survey



Concern:

- ▶ **Liver cancer incidence is elevated in Bexar County (and much of South Texas)**



The rate of liver cancer is significantly increased in three adjacent zip codes (78207, 78228 & 78237) in San Antonio.

Potential Causes of Liver Cancer:

- ▶ **Diet (mycotoxins)**
- ▶ **Disease (liver fluke, Hepatitis (2/3))**
- ▶ **Environment (chlorinated solvents)**
- ▶ **Lifestyle (alcohol)**
- ▶ **Genetic factors (more common in men)**

Purpose of Study:

To **prevent** liver cancer in the future in Bexar County.

Compounds monitored in the study:

- ▶ **Mycotoxins**
- ▶ **Hepatitis virus**
- ▶ **Markers of genetic damage (DNA adducts)**

Compounds NOT monitored in the study:

- ▶ **Chlorinated solvents**
- ▶ **Petroleum hydrocarbons**
- ▶ **Drugs**

(data will be gathered from questionnaires to estimate the contribution of each of these factors)

Current Status of Study:

- **Recruited more than 150 participants;**
- **Collected blood & urine for analysis;**
- **Each participant completed an environmental health survey (lifestyle, occupational, environmental exposures)**

Who is conducting study:

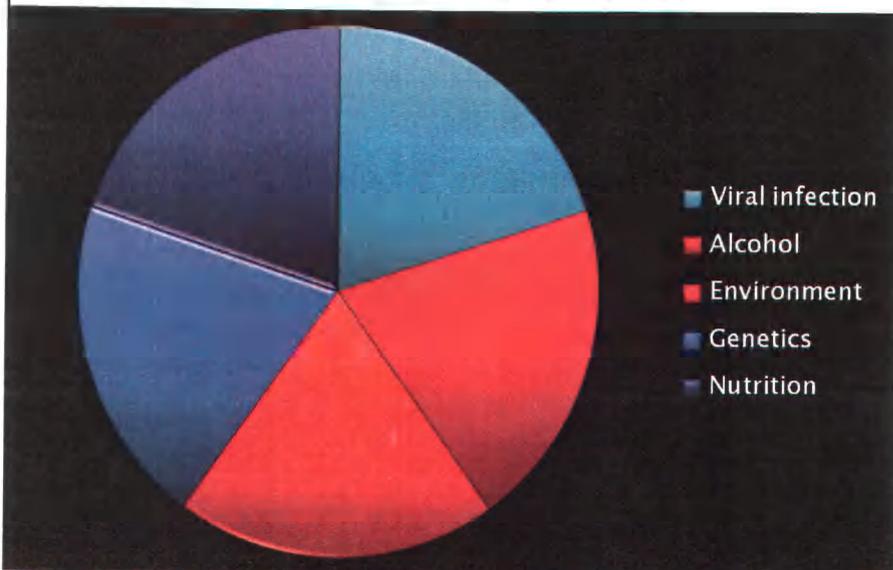
Prof. T. Phillips, Texas A&M
Prof. J. Wang, Texas Tech
Prof. K. Donnelly, Texas A&M
&
Dr. Fernando Guerra
Dr. J. Wittmer

and the staff of the San Antonio
Metropolitan Health District

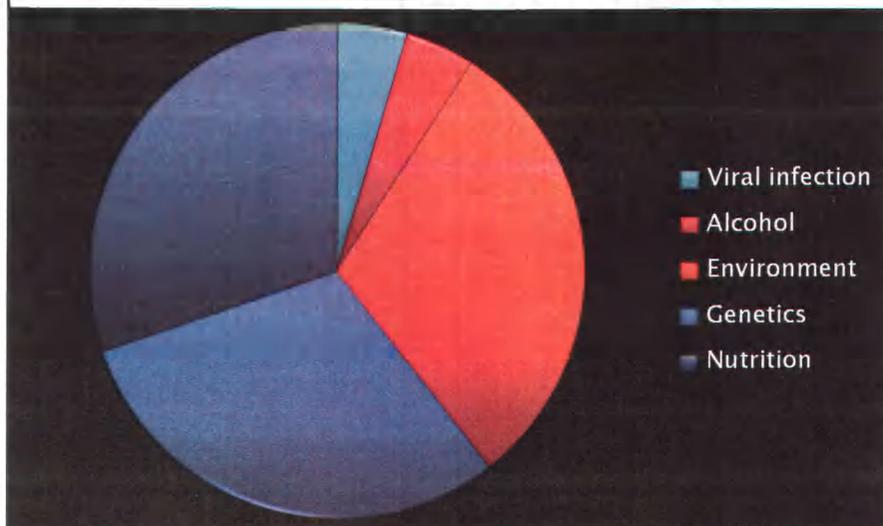
Risk Assessment
(why is liver cancer elevated?)

Hazard Identification
Dose-Response Assessment
Exposure Assessment
Risk Assessment

Contribution of various factors to overall rate of liver cancer:



Contribution of various factors to overall rate of liver cancer (based on preliminary information):



Risk Management (how can we prevent liver cancer in the future?)

- ▶ **Control of the source**
- ▶ **Control along the path**
- ▶ **Control at the level of the person**
- ▶ **Secondary prevention (i.e., detection, treatment)**

Thank You!

Acknowledgements

- **U.S. National Institute for Environmental Health Sciences**



Headquarters U.S. Air Force

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AFRPA / Kelly Building 360 Air Sampling Results 8 April 2008



**Paul Carroll
BRAC Environmental
Coordinator**

U.S. AIR FORCE



U.S. AIR FORCE

Background

- The soil under the slab at the northwest area of the building is contaminated with PCE. Contamination extends 6 to 8 feet under the slab.

- The Soil Vapor Extraction (SVE) system will remove the contamination by applying a vacuum to the area.

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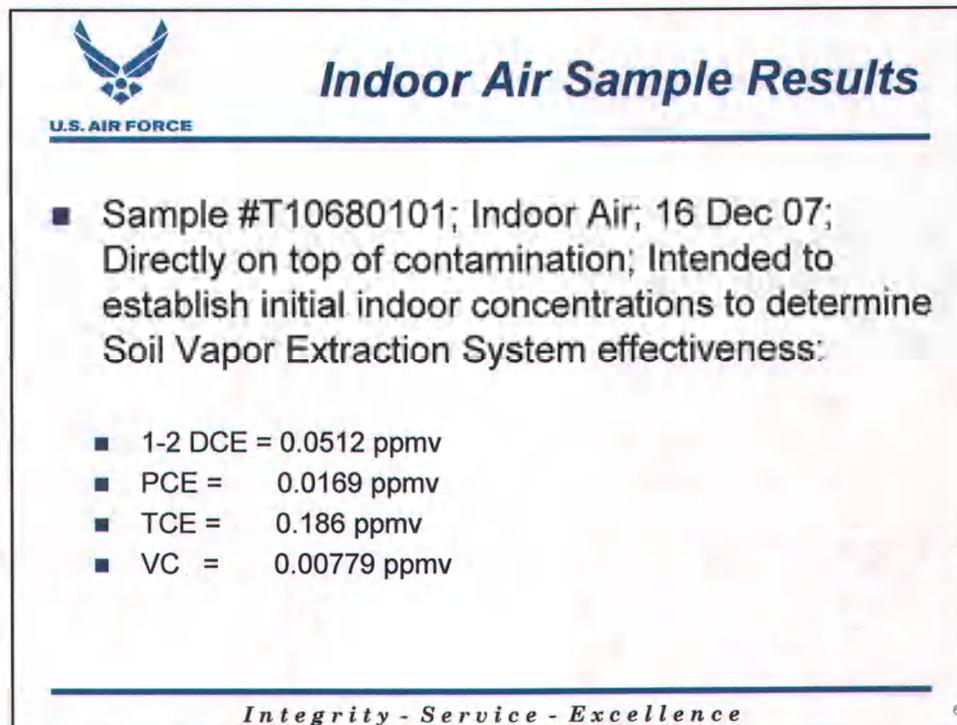
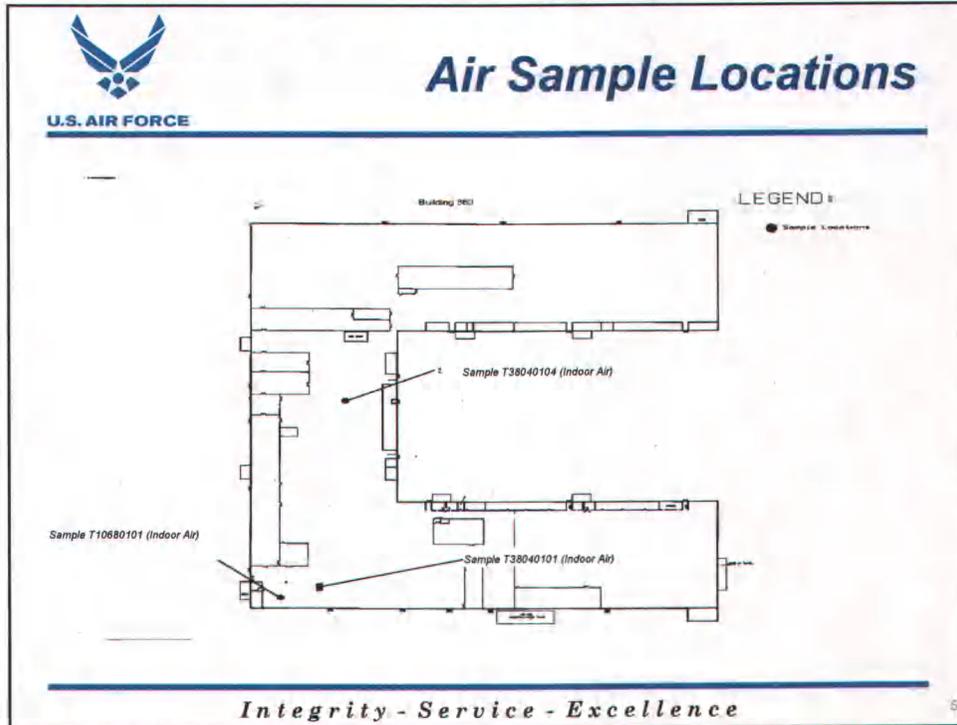
Background

U.S. AIR FORCE

- Johnson - Ettinger modeling predicted that Soil Vapor Intrusion (SVI) may be occurring within the northwest corner of the building.
- Prior to SVE system operation one indoor air baseline sample was taken to verify this. (Sample T10680101 – 16 Dec 07)
- Results indicated there was PCE, TCE, DCE, and VC.
- Two additional indoor air samples were taken 23 Feb 08 at the following locations:

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Indoor Air Sample Results

- Sample #T38040101; Indoor Air; 23 Feb 08;
Directly on top of contamination.

- 1-2 DCE = 0.0173 ppmv
- PCE = 1.24 ppmv
- TCE = 0.0515 ppmv
- VC = 0.00256 ppmv

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Indoor Air Sample Results

- Sample #T38040104; Indoor Air; 23 Feb 08;
Remote location away from contamination;
Intended as a background sample.

- 1-2 DCE = 0.470 ppmv
- PCE = 17.6 ppmv
- TCE = 1.18 ppmv
- VC = 0.197 ppmv

- This particular sample may indicate this
existence of a secondary source or some other
process that was not originally apparent.

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OSHA

- We are designing an investigation into the source of these remote concentrations.
- These are the OSHA Permissible Exposure Limits (Time Weighted Average)

1-2 DCE = 200 ppmv
PCE = 100 ppmv
TCE = 100 ppmv
VC = 1 ppmv

- The samples results encountered in the building are well under the Occupational Safety and Health Administration exposure limits. Therefore there is no immediate safety problem with exposure at current levels.

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U.S. AIR FORCE

Ongoing Actions

- Soil Vapor Extraction System
 - Removes soil contamination
 - Controls vapor intrusion
 - The system will be in operation until the soil meets regulatory standards. It is expected the system will be in operation for at least 2 years.
 - The system is not in operation due to noise concerns.
 - We are implementing recommendations to reduce the noise to get the SVE system running full time.
- Performance sampling will continue
 - Subslab
 - Indoor air
 - Extracted air

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Path Forward

Unknown additional source/sources of PCE in indoor air will be investigated by:

- Material/Process survey
- Indoor air sampling
- Subslab sampling
- Soil sampling

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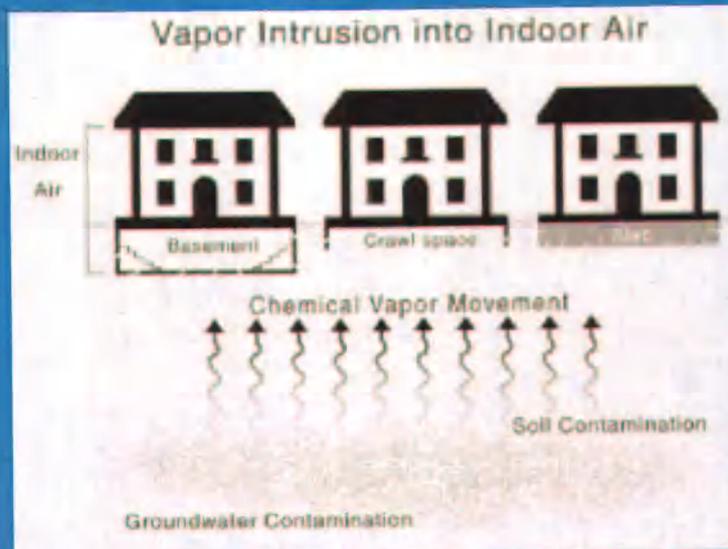
Vapor Intrusion Study

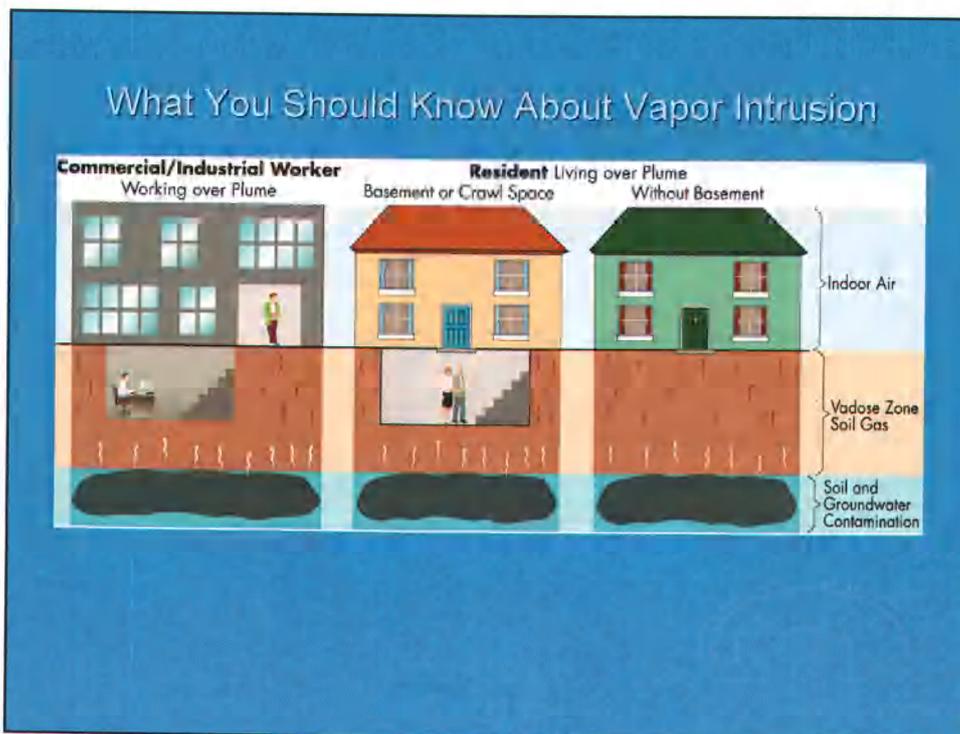
Presented at the April 8, 2008 Former Kelly AFB
Restoration Advisory Board

Gary W. Miller
EPA Region 6



What You Should Know About Vapor Intrusion





- ### What You Should Know About Vapor Intrusion
- What is vapor intrusion?
 - Can Vapors in my home come from household sources?
 - What are the health concerns related to vapor intrusion?
 - How is vapor intrusion discovered?

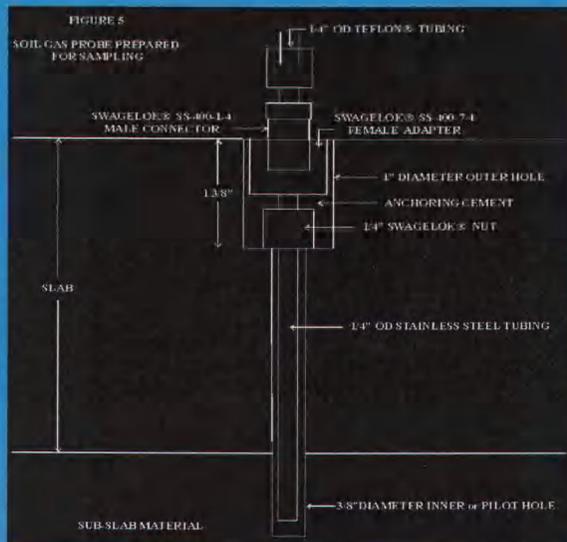
Trace Atmospheric Gas Analyzer (TAGA) Mobile Laboratory



Monitoring and Sampling Strategy

- Initial Sampling
 - Subslab location
- Initial TAGA monitoring
 - Ambient Air Investigation
 - Lifestyle Source Investigation
 - Subsurface Source Investigation
- Subsequent SUMMA Canister Investigation
 - Subslab location
 - First Floor location

Subslab Sampling Probe



Subslab Sampling Probe Installation



Subslab Sampling Probe Installation



SUMMA Canister



Questions for Vapor Intrusion Impacts

- If Subsurface Gas does exist, is it entering the residence?
- If Subsurface Gas contamination exists in the residence, is it from the Subsurface or elsewhere (i.e., Lifestyle or Ambient)?
- If Gas contamination exists in the residence and it is not from the Subsurface, have other sources been identified?

Plan for 34th Street Area Sampling

- Sampling is limited to an area with the highest off base groundwater concentration.
- Sampling is intended to determine if there is a completed pathway from subslab to indoor air.
- Sampling is not intended to delineate any contamination, if present.

Plan for 34th Street Area Sampling

- Subslab soil gas samples will be collected from 20 residential structures
- Based upon the results from the Subslab soil gas, indoor air will be measured at up to 5 residential structures
- We will provide results to residents during a meeting and a letter further explaining the results for each house will be sent out





Questions?

You can contact me at miller.gary@epa.gov or at 214-665-8306.

TAB A

TRANSCRIPTS

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KELLY RESTORATION ADVISORY BOARD (RAB)

April 8th, 2008, 6:30 p.m.
Port Authority of San Antonio
143 Billy Mitchell Blvd., Building 43, Suite 6
San Antonio, Texas 78226

APPEARANCES

RAB Community Members:

Beverly Abbott
Rodrigo Garcia, Jr.
Daniel Gonzalez
Nazirite Perez
Brian Skrobarcek

RAB Government Member Attendees:

Paul Carroll, AFRPA, BRAC Environmental Coordinator (BEC)
Sonja Coderre, Air Force Real Property Agency (AFRPA),
Public Affairs Officer
Kyle Cunningham, San Antonio Metropolitan Health District
(SAMHD)
Gary Miller, US Environmental Protection Agency (USEPA),
Mark Weegar, Texas Commission on Environmental Quality (TCEQ)

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Other organizations:

Cornell Long, Air Force Institute for Operational Health
Linda Kaurman and students, University of Texas Health Science
Center
Jerry Needham, San Antonio Express-News
Jorge Salazar, Texas Commission on Environmental Quality
(TCEQ)

Public Participants:

Sam Murrah
Alfred Rocha

COPY

1 (Proceedings began at 6:30 p.m.)

2 MR. MARTINEZ: Good evening, ladies and
3 gentlemen. Welcome to the April 8th, 2008 meeting of
4 the former Kelly Air Force Base Restoration Advisory
5 Board, the RAB as we call it for short. My name is Jose
6 Martinez. And what I do at these meetings is to help
7 facilitate the discussion. If I may, I'd like to ask
8 the members of the RAB to introduce themselves, starting
9 with Mr. Perez.

10 MR. PEREZ: My name is Nazirite Perez. I
11 work for the City of San Antonio. I'm a member -- a
12 community member, and I am a representative of the River
13 Authority.

14 MR. SKROBARCEK: My name is Brian
15 Skrobarcek. I'm also a community member. I work for a
16 company called Standard Aero, and I've been out at Kelly
17 for quite a while now.

18 MS. CUNNINGHAM: I'm Kyle Cunningham. I
19 work for the San Antonio Metropolitan Health district.
20 I'm representing them tonight.

21 MS. ABBOTT: I'm Beverly Abbott,
22 principal of St. John Berchman school down the street
23 and also a community member of the board.

24 MR. CARROLL: I'm Paul Carroll with the
25 Air Force Real Property Agency. I'm the environmental

1 coordinator for Kelly.

2 MS. CODERRE: Hi. I'm Sonja Coderre.
3 I'm public affairs officer for the Air Force Real
4 Property Agency, and I provide support to Paul and to
5 the RAB. And I'd also like to introduce a new RAB
6 member. This is Mr. Dan Gonzalez, newly appointed to
7 the RAB. So new we didn't get him a name tag. So Dan
8 used to be with us, and now he's back.

9 MR. GONZALEZ: Okay. I'm with a local
10 organization called Parent/Child, Incorporated, and my
11 focus is to see how the restoration is going and how we
12 might ensure that it improves the environment,
13 especially in the area for children that live in the
14 community and those that move in.

15 I'm a resident -- I'm a resident of the
16 affected area from sometime back. I moved out. But I
17 work in the area now, so I pretty much have been in and
18 around this area for the past 30 years. My parents
19 still live by Las Palmas Shopping Center, so I'm very
20 interested in what does take place here at Kelly or what
21 was the Kelly Air Force Base.

22 MR. MARTINEZ: Thank you. Thank you very
23 much. Very brief. The purpose of this meeting tonight,
24 the purpose of the RAB, is to provide comments --
25 commentaries or ask questions to the Air Force and for

1 the Air Force to provide information to the members of
2 the RAB, members of the RAB being both representation of
3 state and federal agencies and citizens. And, of
4 course, to give the citizens of the city, the area of
5 San Antonio to ask questions.

6 With respect to that about asking
7 question, there is a policy -- written policy of the
8 Restoration Advisory Board, the RAB, that the discussion
9 that happens during the presentations is a discussion, a
10 dialogue, between the staff, the presenters, and the
11 members of the RAB.

12 You'll notice on your agenda there's an
13 item indicated at about 8 o'clock. I say "about"
14 because don't hold us exactly to that amount, although
15 we're going to try it. That will be the opportunity for
16 members of the audience to then ask questions and make
17 comments.

18 When you came in, you saw two forms at
19 the sign-in table. A form, this copy right here, if you
20 would like to, say, make a presentation -- a brief
21 presentation, we ask you to limit yourself to three
22 minutes. Please fill this out so that we can have all
23 your information. If you'd like to request for
24 information from the staff, please fill out this comment
25 form so that they can provide you with the information

1 as soon as they are able to develop, gather, and provide
2 you that information.

3 So with that said, I think very quickly
4 we would like to get on with the presentations. You'll
5 notice that there are three different presentations, and
6 the first one is to be presented by Dr. Donnelly from
7 Texas A&M, and the topic of the presentation, if I can
8 pronounce it, Aflatoxin?

9 DR. DONNELLY: Bexar county Environmental
10 Health and Dietary Survey.

11 MR. MARTINEZ: Okay. You changed it.

12 DR. DONNELLY: Much easier to pronounce.

13 MR. MARTINEZ: Wonderful. Thank you.

14 DR. DONNELLY: Well, that's the title of
15 the study that we're conducting, it's the Bexar County
16 Environmental Health and Dietary Survey. And what I am
17 going to do tonight is just give you a brief background
18 about why we're doing the study and what we hope to
19 obtain when the study is completed.

20 A little more than a year ago I was
21 called by someone from the San Antonio Metropolitan
22 Health District who expressed concern about the fact
23 that the rate of liver cancer in Bexar County was
24 elevated. And they asked if we could support a study to
25 recruit participants to collect biological samples and

1 try to gather some additional information that would
2 help us really to look at all of the contributing
3 factors that could cause liver cancer in the area but
4 with a focus on dietary factors.

5 So when -- the reason people are
6 concerned is that, when we look at the instance rate in
7 the State of Texas, it's about seven per thousand.
8 Bexar County, it's about 11 per thousand. In Hispanics
9 in Bexar County, it's almost 17 per thousand.

10 So you can see obviously liver cancer
11 rates are elevated in Bexar County.

12 Perhaps more significantly, there are
13 three adjacent ZIP codes -- 78207, 78228, 78237 -- where
14 the rate of liver cancer based on a study that I believe
15 was conducted by ATSCR is significantly elevated. What
16 is important perhaps about these three ZIP codes is that
17 they are three adjacent ZIP codes directly north of
18 Kelly. And this was one of things that caused concern,
19 and this is one of the reasons why we initiated this
20 study.

21 MR. SKROBARCEK: So significantly? Can
22 you define "significantly"?

23 DR. DONNELLY: I don't know the specific
24 rates. But when the rate in three ZIP codes -- the rate
25 of liver cancer in these three ZIP codes is compared

1 with the rate of liver cancer in Texas in general, it is
2 significant -- numerically significantly higher.

3 Okay. There are many different
4 contributing factors to liver cancer. There are five
5 that we believe are the predominant factors. These
6 include diet, the presence of chemicals in your diet
7 that can cause liver cancer. Now, these include the
8 mycotoxins, which are naturally occurring chemicals.
9 They're common in peanut butter. They're common in most
10 corn products and other grain products. So they are
11 common in everyone's diet, not just the diet in
12 San Antonio. But, really, everyone's diet.

13 There are studies that have looked at
14 food products in South Texas and have found elevated
15 levels of mycotoxins in foods in South Texas. So that
16 was one of our concerns.

17 The second one is disease. Two out of
18 three individuals who have liver cancer also are
19 infected with hepatitis virus. So we assume that, if
20 there is an elevated rate of liver cancer, it is
21 possible that hepatitis is a large contributing factor.

22 Third on the list is lifestyle factors.
23 Studies have shown that people who consume large amounts
24 of alcohol who have cirrhosis of the liver are also
25 prone to liver cancer. So this was one of the other

1 contributing factors that we wanted to look at.

2 And then last on the list is genetic
3 factors. Many cancers we now know have a significant
4 genetic component. For example, there is a mutation.
5 If you carry that mutation, it greatly enhances your
6 risk of breast cancer. In addition, studies have shown
7 that men have a predominant risk for liver cancer.
8 There was a recent report that showed that if you have
9 estrogen, the impact of estrogen is to reduce
10 inflammation in your liver and it actually protects
11 against liver cancer. So men do not have a lot of
12 estrogen. So if you are concerned about liver cancer,
13 it's a good idea to eat a lot of soy products. But
14 there are genetic factors that also contribute to the
15 risk of liver cancer.

16 So the real purpose of this study, why
17 Texas A&M is involved, why Texas Tech is working on
18 this, why the San Antonio Metropolitan Health district
19 contacted us, is to try to identify factors that
20 contribute to the risk of liver cancer in the area so
21 that we can prevent cancer in children or prevent cancer
22 in the people in San Antonio.

23 The chemicals that we are specifically
24 monitoring, we're collecting blood and serum -- or serum
25 and urine. The chemicals that we are specifically

1 monitoring include the mycotoxins aflatoxin and
2 fumonisin. We are also -- well, the health district is
3 doing analysis for the hepatitis virus, and we will also
4 do some analyses for the markers of genetic damage. So
5 we will look at blood samples to see if there are
6 different types of adducts, which is a measurement of
7 genetic damage.

8 The things that we are not looking for --
9 it's not that we're not looking for these. It's just
10 that we don't have tools that allow us to look at
11 these -- include the chlorinated solvents, petroleum
12 hydrocarbons, and drugs. We will gather information
13 through questionnaires that we think will help us
14 understand if the people who fill out the questionnaires
15 have been exposed to these chemicals, and those might be
16 contributing factors to their risk for liver cancer.

17 So where are we now? We started this
18 study back, I believe, in October of last year. Just
19 seems like yesterday. We have thus far recruited more
20 than 150 participants. I think the last count we were
21 over 160. From each of those participants we have
22 collected blood and urine. These are transported to
23 Texas A&M. They're split. The urine samples are
24 analyzed at Texas A&M. The blood samples are analyzed
25 at Texas Tech University.

1 Each participant also completed an
2 environmental health survey. This survey will provide
3 us with information on contributing factors due to
4 lifestyle, occupation, and environmental exposures.

5 So who is doing the study? I like to
6 tell people I'm just the bus driver. I get the samples
7 back and forth between San Antonio. I have worked with
8 the staff of the Metropolitan Health District to kind of
9 organize the study and collect the samples.

10 Dr. Timothy Phillips of A&M will do the
11 analysis of the urine samples or the fumonisins and the
12 aflatoxins. Dr. Jia-Sheng (phonetic) Wang -- we'll just
13 say J. Wang. Dr. Wang, who is at Texas Tech up in
14 Lubbock, will do the analysis of the serum samples.
15 Dr. Guerra, who is with the San Antonio Metropolitan
16 Health District and Dr. Wittmer are also kind of
17 providing oversight for the study. And the bulk of the
18 work on this project, the recruitment and the collection
19 of samples, is being done by the staff of the
20 San Antonio Metropolitan Health District?

21 So what questions are we trying to
22 answer? Well, the first question that we want to
23 answer: Why is liver cancer elevated?

24 You know, the -- the figures from the
25 Agency For Toxic Substance and Disease Registry show

1 that in those three ZIP codes, rates of liver cancer are
2 significantly elevated. So what we would like to be
3 able to do is to gather information to help us answer
4 that question is determine what is the hazard. What
5 chemicals are in the environment or in lifestyle or in
6 other exposures that the individuals who live in those
7 three ZIP codes may be exposed to.

8 Once we have that information, we can
9 look at that list of chemicals, whether it is
10 nutritional chemicals, occupational chemicals, lifestyle
11 chemicals, environmental chemicals. We can look at that
12 list of chemicals and determine how much exposure would
13 be necessary to produce cancer or produce some other bad
14 health effect.

15 With that information, we can look at our
16 data from biological monitoring, from the serum samples
17 and the urine samples, and determine if we are seeing
18 those levels of exposure in the people who live in those
19 three ZIP codes. So that's the exposure assessment
20 component. Once we have all that information, we can
21 then evaluate the risk and identify what factors in
22 those three ZIP codes contribute to the risk of liver
23 cancer.

24 Now, this slide didn't come out very good
25 because of the lights, but the idea of this slide is to

1 show you a pie chart. And in this pie chart there's
2 five contributing factors: Diet, environment,
3 occupation, hepatitis, virus, and genetics. And each of
4 those is given equal opportunity -- equal contribution
5 to the overall rate of liver cancer. That's what the
6 pie chart would look like if everything were equal.

7 In the next slide, based on our
8 preliminary results -- and I emphasize these are
9 preliminary results. If we had all of the data, I could
10 be a little bit more definitive. But, thus far, we are
11 not seeing a lot of alcoholism. We are not seeing high
12 frequencies of hepatitis. So from the preliminary
13 results -- and, again, I'm emphasizing how preliminary
14 these are. We haven't looked at all the surveys. We
15 haven't looked at all the data -- it would appear that
16 viral infections and alcohol are not significant
17 contributing factors.

18 If we take those two out, you see what
19 happens to the pie chart hopefully. It leaves the
20 environment, genetics, and nutrition as three very large
21 contributing factors to the risk of liver cancer. So,
22 obviously, if one or more of those other two are then
23 knocked out, we think we have a much better picture of
24 why in these three ZIP codes we're seeing this elevated
25 frequency of liver cancer.

1 Ultimately, what we would like to do in
2 collaboration with the health department is to answer
3 the question: How can we prevent cancer in the future?
4 As tragic as this disease is, there's very little that
5 anybody can do from the Air Force, from the San Antonio
6 Health Department, from A&M, from Texas Tech to take
7 away cancer that's already happened. That's not going
8 to occur.

9 What we can do is, if we can identify
10 what portion each of these factors contributes, we can
11 then begin to take steps to reduce exposure. We can
12 reduce exposure by controlling the source of exposure,
13 by trying to look at where it's coming from. Is it
14 coming from the environment? Is it coming from the?
15 Occupation. Is it coming from food? If we can reduce
16 those exposures, obviously we will reduce the risk of
17 liver cancer.

18 If we can't reduce the exposure, we may
19 be able to look at some type of secondary prevention.
20 For example, one of the studies that Dr. Phillips is
21 doing in Africa where exposure to toxic chemicals in
22 nutrition is very, very high, they're investigating
23 administration of a capsule of clay which binds to the
24 toxins and takes them out of your body.

25 So this is a method of secondary

1 prevention. Once we, again, can identify the source, we
2 remove those chemicals from the body, it reduces their
3 toxicity, and in the long term reduces the incidents of
4 cancer.

5 And with, that I'm done. Again, our
6 results are very preliminary. We hope to collect
7 approximately 100 more samples and get some additional
8 analyses and have all of the data gathered at some point
9 in the relatively near future we can present to you at
10 that point in time.

11 MR. MARTINEZ: Any comments from members
12 of the RAB? Questions?

13 MS. ABBOTT: How many deaths are there in
14 Bexar County related to liver cancer?

15 DR. DONNELLY: I don't know.

16 MS. ABBOTT: Is it significant compared
17 to something else?

18 DR. DONNELLY: I don't have that
19 information. The data that I showed that I believe is
20 incident rate, not mortalities. So I don't know what
21 the rate of deaths are in Bexar County.

22 MS. ABBOTT: Have you ever gotten any
23 data from hospitals, you know, with ZIP codes -- just
24 pulling ZIP codes out of --

25 DR. DONNELLY: Well, we haven't gotten

1 that information. It hasn't been a focus of what we're
2 trying to do. We're really kind of way beyond that.
3 We're in an area where we're more interested in trying
4 to understand what the exposures are. We have talked to
5 some of the physicians at the hospitals. Certainly that
6 would be useful, interesting information.

7 One of our last meetings that we had with
8 the health department, one of the discussion we had, the
9 data that are currently available on incidence rate for
10 liver cancer I believe are at least two, maybe four
11 years old. It would really be valuable to have that
12 updated and have something that's a bit more recent. So
13 that was one of the things that we talked about doing.
14 So I think that would be very important.

15 MR. CARROLL: What is the duration of
16 your study? How much time?

17 DR. DONNELLY: When we began the study
18 our goal was to collect 500 samples. We felt that if we
19 had 500, we would have a reasonable good statistical
20 representation of the three ZIP codes. At this point in
21 time, we have a little over 160. We're targeting trying
22 to get 100 more so that we can at least hit the 250
23 mark. If we had a flood of participants over the next
24 few weeks, we might actually get there.

25 But one of the issues that we've run into

1 is it's just become very difficult to recruit. We're
2 working with some of the high schools locally. In fact,
3 we have a team of students from Kennedy High School and
4 a Student Water Action Team who are working to recruit
5 people at shopping malls and other places.

6 The appointments have picked up. I don't
7 know that the people who have shown up for the
8 appointments has picked up very much. But they seem to
9 be doing a pretty good job, and our agreement with them
10 is the group that recruits the most people is going to
11 get a pizza party when it's all said and done.

12 MS. ABBOTT: With no mycotoxins.

13 DR. DONNELLY: Well, I can't guarantee
14 that.

15 MR. PEREZ: This study concerning Africa
16 caught my attention right off the bat that I was reading
17 awhile ago. Do you happen to know -- I know it's kind
18 of hard to know how far into the studies they've been
19 doing?

20 DR. DONNELLY: The one in Africa?
21 Dr. Phillips' study in Africa -- and Dr. Wang and
22 Dr. Phillips are both collaborating on it. That
23 particular study I believe is five years old. In fact,
24 this spring they just got a renewal. So they're
25 actually going to continue it for five additional

1 years.

2 In that particular study, although they
3 have monitored mycotoxins in the diet very carefully.
4 The goal is to actually test the intervention. And this
5 second phase, which they will be doing over the next
6 five years, is actually going to be focused on providing
7 the families with clay capsules and looking at how well
8 that eliminates the aflatoxins from their diet.

9 The data from the last three years would
10 indicate that it is remarkably effective if it even
11 reduces the acute effects of aflatoxin, which would
12 certainly give you the indication that it's going to
13 have a very positive effect in the long term.

14 MR. PEREZ: Because they did make
15 connections to the liver cancer, the contamination.

16 DR. DONNELLY: Yes.

17 MR. PEREZ: I'm going to check more on
18 this. Thank you.

19 MR. GARCIA: Have you tried talking to
20 the people that lead the school districts, South San and
21 Edgewood primarily, and get them and gone to some of the
22 community groups like the Community Workers council and
23 some of the other neighborhood groups to seek their
24 participation?

25 DR. DONNELLY: Yes. We have had, I

1 believe, three community meetings; is that correct.

2 MS. CUNNINGHAM: I believe so.

3 DR. DONNELLY: June of last year -- I
4 think actually the first one was May of last year. Then
5 we had another one in June or July. And then most
6 recently I think in February. We've had them at
7 different community centers. I have met with the
8 students at Kennedy High School. I've actually talked
9 with a number of people from the Southwest Workers
10 Union.

11 The gentleman I spoke to from the
12 Southwest Workers Union said they had in their group
13 well over 500 people who lived in those three ZIP
14 codes. And my response was, is if they would all go
15 sign up for the study, we would have the information we
16 needed, which would be extremely valuable to
17 understanding how much each of those factors
18 contributes.

19 We've tried. If you have suggestions for
20 specific community groups that we might want to meet
21 with, I'm happy to -- in fact, I'll be back next week
22 and we'll be happy to come back and meet with anybody
23 that you think would be useful.

24 MR. GARCIA: The reason I bring up the
25 school districts is you might want to talk to the

1 superintendents and school boards about participation
2 also.

3 MS. CUNNINGHAM: Just to answer your
4 question a lit bit further, we have gone I know to
5 Edgewood and met with their group and left fliers. I
6 think we've done that at least two times, maybe three
7 times. Then we've gone around to the neighborhood
8 associations, the ones that have offices for sure, and
9 we've left fliers there. And, you know, then just
10 visiting with the schools.

11 So if you've got any suggestions, our
12 ears are open.

13 MR. GONZALEZ: What is the method of
14 recruitment as far -- or what is the person that wants
15 to participate in the study, what are they required to
16 do?

17 MS. CUNNINGHAM: If they'll just call the
18 Environmental Health and Wellness Center, that's
19 434-0077, and make an appointment, that's really about
20 it, I believe, isn't it? They need to live in those
21 ZIP codes. There isn't -- were we still doing the
22 incentives? There is an incentive, which is an HEB gift
23 card that can just be used for purchasing groceries --
24 not alcohol, not tobacco. I believe that's \$20.

25 MS. CODERRE: So the recruitment is for

1 people who live within just those three ZIP codes and
2 not Bexar County?

3 DR. DONNELLY: That's correct.

4 MS. CODERRE: And those ZIP codes, where
5 are they in relationship to the base? The map is behind
6 you there.

7 DR. DONNELLY: Kyle, I don't know. Do
8 you know.

9 MS. KAUFMAN: There's two just north and
10 one's ...

11 MS. CODERRE: They're north of 90.

12 MR. GARCIA: 78237, and what's the other
13 one?

14 MR. SKROBARCEK: 228 and 78237.

15 MR. GONZALEZ: Is it for adults or all
16 ages?

17 MS. CUNNINGHAM: I's all ages 18 and
18 over.

19 DR. DONNELLY: I think we're trying to go
20 18 and over just to avoid any problems with children.

21 MR. GONZALEZ: And the other -- I guess
22 I'll have to take some fliers so we can also try to help
23 with this. But the other thing is, once they sign up,
24 then they have to go somewhere else to do this or do you
25 come to them or ...

1 DR. DONNELLY: They make an appointment
2 at the wellness center in the Las Palmas Shopping
3 Center. The appointment takes about an hour, I think.
4 Blood is drawn there. They provide a urine sample and
5 fill out the questionnaire. The whole process doesn't
6 take more than an hour.

7 MS. CUNNINGHAM: It's close.

8 MS. CODERRE: And then they're done? No
9 follow-up?

10 DR. DONNELLY: At this point there's no
11 follow-up. There's not to say that we wouldn't try and
12 do a follow-up at some point in time. But at this
13 point, one hour and you're -- and if there's a family,
14 if everybody lives -- if there's five people over 18
15 that live in a house and they all live in that ZIP code,
16 they can all participate. So there's no limit on
17 members of household either.

18 MR. WEEGAR: Is there some evaluation of
19 the time that they've lived in these ZIP codes to make
20 them, you know, a statistically valid part of the study,
21 especially if you're looking at environmental factors
22 that -- you know, if you've got kind of a transient
23 population moving through, people living in an area for
24 a few years that you wouldn't really get much results
25 out of since there's such a short exposure duration

1 there.

2 DR. DONNELLY: We have tried several
3 different ways to go about addressing that. That was
4 raised as we began to set up the design of the study.
5 And what we found was that we were going to have great
6 difficulty recruiting people almost regardless of what
7 restrictions we put on it.

8 And it worked to be most straightforward
9 for everybody involved whether it was the participants
10 at the staff or the wellness center if we put a 12
11 month -- was it a 12-month restriction?

12 MS. CUNNINGHAM: So far with the IRB
13 stuff.

14 DR. DONNELLY: Yeah. And we've changed
15 it. So as long as they've lived there for the last year
16 or had lived there within the last 12 months, that's
17 what we're looking for.

18 Now, granted, there could have been
19 exposure that took place a long time ago, but the issue
20 oftentimes is if someone moves out, we can't find them.
21 And so just to simplify the study to facilitate
22 recruiting and because our focus really was on the
23 dietary component -- our initial focus was on dietary
24 because we felt like that was the part of the study that
25 we actually have good biomarkers for. And in the

1 biomarker component, it was just easiest to put that
2 restriction on there.

3 MR. CARROLL: Are the biomarkers
4 accumulative or accumulative --

5 DR. DONNELLY: The biomarkers -- the
6 urinary biomarker has about a 48- to 72-hour window. So
7 if there has been no exposure in the preceding 48 to 72
8 hours, our results will be zero. The serum biomarker,
9 so the biomarker that we have the blood, has a window
10 that's I believe 12 to 14 months.

11 So the real advantage of getting the
12 blood is we open up a much larger window. We can
13 actually look back and see exposures that have taken
14 place over the year. And our preliminary results would
15 indicate that the serum is being a much more effective
16 indicator.

17 MR. CARROLL: So your study, 12 months is
18 a reasonable time frame for them to have lived in that
19 area, then, for you to get the information that you
20 need?

21 DR. DONNELLY: Correct.

22 MR. GONZALEZ: One other question and
23 maybe you can help me. If an organization were to have
24 a couple of employees that live in those ZIP codes and
25 were willing to set up some type of a wellness type

1 session, do the protocols prohibit for y'all to come and
2 do the assessment place other than the wellness center?

3 MR. SKROBARCEK: Do you have a mobile lab
4 you can send or a mobile vehicle?

5 MS. KAUFMAN: Probably staff. I only
6 have a couple of people who can actually do the
7 questionnaire.

8 MS. CUNNINGHAM: So it's staffing. But,
9 you know, then to draw the blood, getting things to the
10 lab on time, all of those things enter into it. But the
11 wellness center really isn't that far from those ZIP
12 codes. They're very close. So if they live in that
13 area, it really should be pretty convenient for them.

14 MS. KAUFMAN: And I would say if it's an
15 issue, if they want to come at lunchtime, if somebody
16 could call and ask for me, we can make arrangements so
17 that, you know, if it's better to have it from 12:00 to
18 1:00, we'll make arrangements to do that.

19 MR. MARTINEZ: Yes. Any more comments or
20 questions from the RAB?

21 MR. GARCIA: I was going to tell you, try
22 La Benita Community Center on 41st and Eldridge. You
23 probably can get some people there. And call
24 Sam Williams. He's an ex-Edgewood school board member
25 at 5022 Pharis. His phone number is in the phone book.

1 See if can get people with the Community Workers council
2 also to help you.

3 MS. CUNNINGHAM: And that's Williams?

4 MR. GARCIA: Sam Williams on Pharis,
5 P-H-A-R-I-S. His number is in the phone book. 5022
6 Pharis. See if he can get people from the Community
7 Workers Council to go out there and do the questionnaire
8 and blood and urine samples. And I'll try and get you
9 some more contacts.

10 MS. CUNNINGHAM: Okay. Great.

11 DR. DONNELLY: Thank you.

12 MR. WEEGAR: I assume you've done fliers
13 or some ads in the newspaper, maybe, or, you know,
14 Access Cable TV, La Prensa or something like that?

15 MS. CUNNINGHAM: We've done some fliers
16 advertising. Sometimes it's a little hard to advertise
17 because of funding restrictions, you know, with some of
18 that stuff. At least with my funding. So ...

19 MR. WEEGAR: Do you -- I just wonder if
20 you've approached, like, Express News or maybe La
21 Prensa. You know, it's a community outreach thing, and
22 maybe would do the advertising gratis or something like
23 that.

24 DR. DONNELLY: We've had a couple of
25 articles in the paper. I'm not sure whether those

1 helped or hindered. We've had a couple of news -- the
2 first committee meeting that we had, I think, or one of
3 the committee meetings that we had, two or three of the
4 news stations were there.

5 MS. CUNNINGHAM: Right.

6 DR. DONNELLY: And I came back January,
7 February somewhere in that window and sat down with
8 someone from Channel 4, I think it was. And I'm not
9 real sure we got a lot of benefit out of that either,
10 but we did get publicity for what it was worth.

11 MR. GONZALEZ: I think it's going to take
12 some prodding of the community members. We should
13 really take it upon ourselves to try to press this --

14 MS. CUNNINGHAM: That's really what --

15 MR. GONZALEZ: -- so you can have the
16 effect.

17 MS. CUNNINGHAM: That's our best, word of
18 mouth.

19 DR. DONNELLY: And I'm happy to come back
20 meet with anybody anywhere almost anytime and talk about
21 the study and the goals and what we need to do. I'll be
22 back next week Tuesday evening.

23 MR. GONZALEZ: People that live at work
24 and visit home, they're ineligible?

25 DR. DONNELLY: I think we're restricted

1 to you have to live in those three ZIP codes.

2 MR. GONZALEZ: Okay.

3 DR. DONNELLY: It just got too confusing
4 because we had people calling and saying, Well, I work
5 there and I -- you know, we limited it to people who
6 live there.

7 MS. ABBOTT: Can you either fax or E-mail
8 us a copy of the flyer?

9 MS. CUNNINGHAM: Yes. And I think I
10 really messed up. I needed to bring some with me. If
11 you'll leave me a name and address where I can bring
12 fliers to you, if you've got a number of people, we'll
13 certainly do that.

14 MS. ABBOTT: I could put it in my
15 newsletter.

16 DR. DONNELLY: Great. Thank you.

17 MR. GARCIA: Maybe one more thing, Kyle.
18 Maybe you can talk to the members of the school board
19 like at Edgewood and South San and tell them to put it
20 in their district newspaper and then see if any board
21 members want to volunteer. They can get, you know, some
22 of the supports to volunteer to take part in the study.
23 We're going to have to -- like I've been
24 telling Sonja, we're going to have to start doing more
25 networking with the community at her level and at our

1 level and at your level, you know. I can -- I can start
2 working and give you a list of contacts at the -- at the
3 clinic when I get a chance and we can do it that route,
4 too.

5 But like I told Sonja in the past, we
6 need to get her to get on the planning -- the city
7 planning department a list of all the neighborhood
8 associations --

9 MS. CUNNINGHAM: We've done that.

10 MR. GARCIA: -- and all the cities and
11 find the ones on these three ZIP codes and work with
12 those also.

13 MS. CUNNINGHAM: We've done that.

14 MR. GARCIA: La Benita is one. The
15 Community Workers' Comp is another one. And there's
16 about four or five in 237. And a lot of them, you know,
17 school board members belong to them. So we can network
18 with the school board members at Edgewood and South San
19 and gather more people that way and see if we can do
20 that, too.

21 MS. CUNNINGHAM: This is going to
22 continue 'til the end of May, and then I think at that
23 point we're going to see what we've got, finish up the
24 analysis, and then see where we go from there. So, you
25 know, if there's anything y'all can do, suggestions, you

1 know, ideas, let us know.

2 MR. GONZALEZ: I don't know if the
3 community members or maybe you and the office might want
4 to join or coordinate this. The Port Authority is
5 having their Fiesta de los Ninos coming up on the 19th,
6 and I wouldn't have any problems in volunteering to
7 staff a table at the activity to see what we can do to
8 try to generate interest. Maybe some of the community
9 members can go talk to the people at the port authority
10 to see how we can go about doing so.

11 MS. CUNNINGHAM: Okay.

12 MR. GONZALEZ: I would anticipate that
13 there's going to be a number of people in the general
14 area coming to that activity.

15 MS. CUNNINGHAM: That would be good.

16 MR. GONZALEZ: Any Fiesta activity, Cinco
17 de Mayo.

18 MR. MARTINEZ: Thank you very much,
19 Dr. Donnelly. Before we go into the next presentation,
20 I've noticed many, many new faces have come in. The
21 presentation -- two presentations that will follow
22 immediately, we ask that if you have comments -- members
23 of the audience, if you have comments, you have
24 packets. You have the materials that are being
25 discussed that each member of the RAB actually has. Jot

1 down your questions in the margins of those papers. And
2 at 8 o'clock we'll have an opportunity for you to ask
3 any questions, make any comments.

4 So the next presentation is by Paul
5 Carroll. The presentation is Building 360 soil
6 Remediation.

7 MR. CARROLL: Hello. I'm Paul Carroll.
8 I'm going to bring my water up here in case I have a
9 problem. I've had a cold. I want to talk about
10 Building 360 indoor air sampling results that we've
11 recently done. Building 360 is over here in this Zone 3
12 area in the industrial part of Kelly. So go ahead,
13 Sonja.

14 The soil under the slab at the northwest
15 area of the building is contaminated with
16 tetrachloroethylene. It's commonly called PCE. And
17 that contamination is in the soil. It extends about six
18 to eight feet below the surface of the slab of the
19 building.

20 What we did in that area is installed
21 a -- what was called a soil vapor extraction system.
22 That system has some horizontal trenches that were put
23 underneath the building that are intended to target that
24 contamination in that soil and create a vacuum in that
25 area and vacuum the vapors out from underneath the

1 building.

2 Luis, I want to show kind of
3 cross-section of one of those wells. That's what we put
4 in there. And that's where the vapors are vacuumed into
5 to treat underneath the building. And you can't see the
6 area too well. But, yeah, that crosshatched area on the
7 upper-left corner of the building is where the soil
8 contamination is.

9 And these -- these are the wells, and
10 they go underneath the building horizontally all the way
11 underneath the building for, oh, what, a couple of 100
12 yards distance, I believe. And darker hatched areas are
13 the areas where the perforations are in the pipe and
14 these -- this type of pipe is. So that's where that
15 system is working.

16 We just installed the system, as we
17 discussed at the last RAB meeting. The system was just
18 completed at that time. We've been -- we've operated
19 the system for a little while, and we've had noise
20 problems with the system, so we're working on addressing
21 noise problems, too.

22 But as part of the system installation
23 and to understand baseline conditions before we kick the
24 system off to understand what the vapors are in the
25 building, we've taken some vapor samples, air samples

1 within the building. Some of the background is the
2 Johnson -- we did modeling during our investigation.
3 And that predicted that soil vapor intrusion may be
4 occurring within the building. That's why we installed
5 the system to begin with.

6 And then prior to the system operation,
7 one indoor air baseline sample is taken to verify this.
8 And the results indicated there was what we expected
9 from soil samples, that there was PCE, TCE,
10 trichloroethylene, CIS-1-2, dichloroethylene, and vinyl
11 chloride.

12 Two additional indoor samples were taken
13 in February at the following locations: That would be
14 the first two right down here where contamination is,
15 and then we took a sample in a different part of the
16 building so that we could understand what the levels
17 were in that different part of the building.

18 The first sample we took in December was
19 directly on top of the contamination to establish the
20 initial indoor air concentrations, as I said, to
21 understand what the effectiveness of the soil vapor
22 extraction system is going to be. There are the
23 results, so go on to the next one.

24 And then we did the samples in February
25 that indicated that the results were somewhat consistent

1 with the first sample that was taken directly on top of
2 the contamination, although the more concentrated
3 contaminant was PCE this time instead of TCE.

4 Another sample we took in another part of
5 the building that we understood was away from the
6 contamination that we know is there that was intended as
7 a background sample, that had concentrations of PCE at
8 higher levels than some of other samples that we saw.
9 So those -- those levels are at -- so they're not what
10 we would consider a low background sample.

11 So what we've deducted from that is that
12 there might be a secondary source or some other process
13 that we didn't know was there before we sampled. So
14 what we're going to do about that is we're designing an
15 investigation to look into the source of that remote
16 concentration.

17 The air within the building is within
18 permissible OSHA levels. And so they're well under
19 those limits, so there's no immediate safety problem
20 within the building.

21 The soil vapor extraction system is
22 intended to remove the soil contamination. It controls
23 vapor intrusion. It will be in operation until the
24 system -- until the soil meets regulatory standards.
25 TCEQ sets regulatory standards, and we follow those. It

1 will probably take about two years for that system to
2 clean up the soil contamination there.

3 We have noise concerns with the system
4 that we've got to address. We've got to put some
5 baffles on the system to lower noise levels to
6 acceptable levels, and then we'll kick the system off
7 full-time.

8 And then we'll keep performance sampling
9 inside the building and underneath the slab to
10 understand what reductions we're getting in the
11 contamination and the extracted air that we treat so
12 we'll be sure that we meet effluent guidelines from the
13 treatment system.

14 The other thing we're going to do to
15 investigate that additional source of PCE in the indoor
16 air is to do a material and process survey within the
17 building to rule out other sources that we can't -- that
18 we don't know are there inside the building. We'll do
19 more indoor air sampling, we'll do subslab sampling.
20 And if that subslab sampling tells us there's additional
21 soil contamination somewhere else, we'll do soil
22 sampling, too.

23 MR. MARTINEZ: Comments, questions from
24 the members of the RAB?

25 MR. GARCIA: When will you finish

1 addressing the noise control, and when will it be
2 started up?

3 MR. CARROLL: We think it will be about
4 four to six weeks before we get the system started up
5 full-time.

6 MR. GARCIA: And how often would -- would
7 you evaluate the results from the system -- daily?
8 hourly

9 MR. CARROLL: No. It's not daily. It's
10 on a probably a monthly. Is it monthly? Where's Ron?

11 MR. DAVIS: It's quarterly. It's a
12 quarterly sample.

13 MR. WEEGAR: The indoor air sample that
14 had the elevated PCE and the TCE results, that was just
15 indoor -- that was an indoor air sample? There was no
16 subslab sampling that was done concurrent with that?

17 MR. CARROLL: Yeah. We did subslab
18 sampling to understand what the vapors were below the
19 slab of the building, too.

20 MR. WEEGAR: Did you have elevated vapors
21 at that location below that location or ...

22 MR. CARROLL: At the -- are you talking
23 about the one we did for the background sample?

24 MR. WEEGAR: The one that had the 17.6
25 parts per million per volume of air and the 1.18 parts

1 per million.

2 MR. CARROLL: No. We haven't done a
3 subslab sample

4 MR. WEEGAR: So this is strictly indoor
5 air. You don't know if there's any source underlying
6 the slab that is that or whether it's processes or
7 something inside the building?

8 MR. CARROLL: That's correct.

9 MR. SKROBARCEK: There shouldn't be
10 processes in that area.

11 MR. WEEGAR: Not currently.

12 MR. SKROBARCEK: Not currently.

13 MR. WEEGAR: One of the concerns is a
14 building like 360 that used for years and years, the
15 solvents being very readily very used in there, that
16 stuff may be off-gassing out of materials that are still
17 inside the building -- floor coverings, roofing
18 material, insulation. Who knows?

19 MR. CARROLL: Yeah. Our next sampling is
20 intended to pinpoint where that contamination is coming
21 from, including those possible sources and subslab
22 sources.

23 MR. GARCIA: How often will you gather
24 data on the performance sampling, and how would you
25 evaluate it?

1 MR. CARROLL: That would be quarterly.
2 Is that different from what you meant the first
3 question?

4 MR. GARCIA: No. The first one I asked
5 was about the noise, and then on a monthly basis you
6 were going to monitor the system.

7 MR. CARROLL: Okay.

8 MR. GARCIA: Now, this is something
9 different. The performance sampling is different from
10 the system.

11 MR. CARROLL: Okay. I probably
12 misunderstood your first question because I thought that
13 meant performance sampling. The noise, once we get the
14 baffles on there, we'll do noise survey to understand
15 what it is then. The noise levels shouldn't change
16 after that.

17 MR. WEEGAR: Have you got a target
18 decibel range that you want to achieve?

19 MR. CARROLL: Ron, do you know the answer
20 to that?

21 MR. DAVIS: We need to get it below 50
22 decibels. That's kind of our target.

23 MR. WEEGAR: I mean, that area is by the
24 flat line. What's the ambient noise over by Judson.

25 MR. DAVIS: It's currently at 85, so it's

1 currently very loud.

2 MR. WEEGAR: I just don't want it to be
3 86.

4 MR. GARCIA: I'm still concerned about
5 performance sampling of indoor air. And when you do
6 that sampling, how often and what will the results say
7 and how often would you monitor that?

8 MR. CARROLL: Okay. Again, Ron you want
9 to?

10 MR. DAVIS: For the performance sampling,
11 we'll sample the vapors that are being extracted from
12 each well and we'll sample the vapors as they go through
13 the treatment system and ensure that those -- the
14 constituents are being treated.

15 And inside the building we'll also be
16 taking samples below the slab, so we'll be trying to
17 estimate the amount of contamination as being removed
18 over time. And then at some point, a year, maybe two
19 years down the road, when we've estimated that
20 significant portion of the contaminants have been
21 removed, we'll actually go back into the building and
22 take samples in the soil and try to confirm if the
23 system has reached the clean-up levels that it was
24 designed for.

25 MR. GARCIA: Will you give us quarterly

1 reports on how the clean-up is going on this or submit a
2 letter every time we have a meeting telling us how it's
3 going on this because I'm concerned about this 360.

4 MR. CARROLL: I'm sure periodic updates
5 should be no problem

6 MR. SKROBARCEK: I would second that
7 request.

8 MR. GONZALEZ: Building 360 is currently
9 in use?

10 MR. CARROLL: Yes.

11 MR. GONZALEZ: I believe Brian here works
12 there.

13 MR. SKROBARCEK: Yeah. We have
14 Lockheed Martin or Kelly Aviation Center and Standard
15 Aero as well as Government, and those types of
16 organizations there.

17 MS. ABBOTT: Are they aware of the
18 sampling process that is taking place?

19 MR. SKROBARCEK: Kelly Aviation Center I
20 believe is aware. I don't know about the other
21 organizations.

22 MR. GONZALEZ: This is a building that I
23 guess is something that Port Authority wants to keep.

24 MR. SKROBARCEK: Correct. And the Port
25 Authority would be notifying those tenants in that

1 building.

2 MR. CARROLL: Two weeks ago we sent the
3 Port Authority a letter notifying them of these results
4 and asking them to notify their tenants, and we ended up
5 calling Brian probably on Monday, I believe, yesterday.

6 MR. GARCIA: Will this be a health danger
7 to the people that work in there?

8 MR. CARROLL: Long-term health risk from
9 the contamination is unacceptable. EPA levels are
10 unacceptable. That's why we put the SVE system in
11 there, and that's why we're going to go after that other
12 concentration that we found to make sure we understand
13 where it's coming from and address that.

14 MR. GARCIA: But now at the current
15 levels, is it a health risk?

16 MR. CARROLL: It is not above OSHA
17 standards for workers -- workers' safety, no.

18 MR. WEEGAR: Well, you said the
19 concentrations are above acceptable risk. Are those --
20 that risk is for a commercial industrial setting
21 exposure or that's for residential exposure?

22 MR. CARROLL: Well, if you purely compare
23 results to what a commercial industrial setting would
24 be, yes, that's -- it would be above EPA's threshold for
25 that. I'm going back to the Corrective Measures Study

1 that indicated that that would be an unacceptable
2 level. These samples were taken as baseline samples for
3 effectiveness of the SVE system. So that -- this is not
4 a risk assessment that we did on these samples.

5 MR. MILLER: I think what I understand
6 him to be saying is that the levels are not high
7 enough -- if you're in there eight hours a day and
8 working in there, and you're only in there for a
9 short -- you know, until they get this thing up and
10 running, it's not an issue. But if you were going to be
11 there for 20, 30 years working in that same space eight
12 hours a day, it would be above what we consider
13 industrial commercial clean-up standards for indoor air
14 under EPA.

15 But the problem comes to be, if you use
16 similar chemicals in the building, our numbers kind of
17 get pushed aside and you end up using the OSHA numbers
18 and it becomes an OSHA issue. So then there's other
19 OSHA numbers they have to look at. So that's why they
20 were comparing to time-weighted averages for eight
21 hours -- I think those were eight-hour numbers, right?

22 MR. WEEGAR: I guess I'm a little
23 confused in that the numbers that you guys have gotten
24 from your sampling, you've calculated unacceptable
25 risk. Yet OSHA, who regulates worker exposure

1 contaminants in the workplace, the concentrations you
2 have identified are, you know, an order of magnitude
3 lower than what OSHA says is okay. So I'm just ...

4 MR. CARROLL: Different regulatory regime
5 there that is meant to address workers' safety. EPA
6 risk levels are calculated on a very conservative basis,
7 and that's what we -- that's how we base our clean-ups
8 in the environment.

9 MR. WEEGAR: And I guess I'm really
10 playing devil's advocate here I'm wanting everybody here
11 to understand there are numbers EPA use for exposure,
12 what's appropriate for remediation from a clean-up
13 standpoint, which are far-away different and much lower
14 than what another federal agency says that a worker can
15 be exposed to eight hours a day and that's okay.
16 There's some very great differences in the exposure that
17 the two agencies have established.

18 MR. CARROLL: Yeah. That's correct. And
19 we don't use -- we don't use OSHA levels to look at what
20 risk is -- clean-up risk is to base our clean-ups on.
21 We use the EPA risk levels, which are much more
22 conservative.

23 MR. MARTINEZ: Any more comments or
24 questions from the members of the RAB? Thank you. The
25 next presentation is by Mr. Gary Miller. All of you

1 should have copies of that. The title is vapor
2 intrusion study.

3 MR. MILLER: I just want to give you a
4 brief update on what EPA is planning to do in a small
5 area of -- let me just show you where it's at. It's in
6 this general area. It's north of Kelly. This is 34th
7 street that I'm -- she's pointing to right now. That's
8 34th street. There is a remediation system installed
9 along 34th street, permeable reactive barrier wall that
10 Kelly installed. And in that area there's some elevated
11 areas of PCE, tetrachloroethylene in the groundwater.

12 And those concentrations are considerably
13 higher right by 34th Street. They're much higher than
14 anywhere else we find off base. And through some
15 concerns that were expressed by some community members
16 and some congressional staff, we decided to go back and
17 maybe do an indoor air study in that neighborhood, and
18 that's where we're at with this study.

19 And what we're looking at, these -- I've
20 just have a few little cartoons, whatever you want to
21 call them, just to kind of give you an idea of what
22 we're looking at. You have different types of exposures
23 whether you have a basement or just a crawl space, which
24 there are few homes in the area that have pier and beam
25 foundations. That would be considered a crawl space.

1 Then if you have a slab on grade, it's the far right
2 side.

3 MR. SKROBARCEK: Can we get the lights
4 turned down in that area so it's easier?

5 MR. MILLER: Again, this is just another
6 cartoon kind of showing you the exposure scenarios that
7 we would be looking at. We're not going to find --
8 generally we only look at residential, so we don't have
9 commercial type exposures like this. And we don't have
10 basements in this neighborhood. We don't have basements
11 down in Texas generally, so we're not going to be
12 looking at that.

13 So generally what we're looking at is the
14 third exposure route, which would be a slab on grade or
15 a pier and beam foundation where you have vapors coming
16 off a groundwater contamination or -- and again, we can
17 kind of show you the differences. What we're looking at
18 here is different than what Paul just discussed with
19 you. Under Building 360, you generally have a
20 contaminated soil that's still off-gassing. In this
21 area we have a groundwater plume that's in the shallow
22 aquifer, which is not used for drinking.

23 And that is off-gassing a little bit, and
24 that's where we're getting the potential for an indoor
25 air exposure route. So what I want to talk to you about

1 here -- and at the end, I've got some other handouts
2 that I'll lay on the table that, actually, they're a
3 fact sheet that EPA puts out that kind of describes what
4 you should know about vapor intrusion. And that's where
5 these questions come through.

6 I mean, basically, vapor intrusion --
7 what is vapor intrusion is what I just described to
8 you. It's coming up from the groundwater through the
9 soil, and it has potential to get into a house either
10 through cracks in the foundation or through openings
11 such as your plumbing fixtures or whatever. Or if you
12 have a pier and beam foundation, it just comes up
13 everywhere. Generally, those are a house that has
14 openings all along the floor.

15 The second question is -- is very
16 important. I mean, this is from household sources.
17 This is something that we're trying -- in our study,
18 we're going to rule this out by doing some surveys and
19 all as we're doing the houses. But basically you can
20 have a lot of household sources which could come from
21 your cleaning, your dry-cleaning, whether you're storing
22 a lawn mower in your garage, even, you've got guns,
23 you've got gun cleaning fluid in your house. All those
24 things off-gas a little bit.

25 And because of the sensitive nature of

1 the indoor air sampling, you'll get measurable results
2 from those. You could get some very high readings from
3 just a can that you think you got the lid screwed down
4 on of some kind of cleaner in your house, that would
5 show up in these samples.

6 Health concerns similar to what we've
7 talked about already with Paul's study, you could just
8 have maybe irritation of eyes, breathing, whatever. But
9 you could have long-term effects, which could be cancers
10 and different types of concerns along those lines. But,
11 again, we're talking about a long-term affect, which we
12 would look at -- EPA generally looks at like 30 years or
13 more in the same residential setting.

14 How vapor intrusion is discovered? Our
15 study, and I'll describe it a little bit more later, is
16 basically we're going to do a multi-tiered approach
17 where -- we have in the past. The Air Force has already
18 done groundwater sampling. We're going to do additional
19 subslab sampling in this area. Based on those results,
20 we're going to do an indoor air sampling, and we'll
21 basically be able to determine if the concentrations
22 we're going in the indoor air are related to the
23 groundwater plume.

24 This is what we're going to use
25 partially. This is a trace atmospheric gas analyzer

1 mobile laboratory. It's basically a Bluebird bus loaded
2 with a lot of very sensitive laboratory equipment. This
3 is coming out of New Jersey. We're going to bring it
4 down here in May. I'll tell you more about that later.

5 They have the ability to -- to use an
6 on-board mobile lab where they can do some analysis for
7 us as we're taking samples basically. They can tell
8 us -- and that way we can determine if we want to go
9 ahead and do indoor air sampling in that house.

10 Because we can't sample every house in
11 the neighborhood. Our study, which I'll describe more
12 later, is narrowed down to probably 20 houses. And
13 based on those 20 houses, what we'll get out of these
14 subslab results, we're going to go back and do indoor
15 air sampling in five homes. What we can do with this
16 lab is -- is take some of the subslab samples, analyze
17 them immediately, and determine if we have high enough
18 levels that we think we could have an indoor air
19 problem. And that's how we'll base our samples for the
20 indoor air. And then I'll tell you a little bit more
21 about it in a minute.

22 This is basically what our strategy is.
23 We're going to do sub-slabs in all 20 homes, unless they
24 are pier and beam, which there are a few homes over
25 there that are pier and beam construction. Under the

1 pier and beam houses, we'll just put a SUMMA canister,
2 which I'll show you a SUMMA canister later on. But a
3 SUMMA canister will just go under the slab. We won't
4 have a subslab in that house, obviously.

5 The TAGA will also do ambient air. It
6 will do lifestyle source investigation, which lifestyle
7 is basically they'll go through the home and look for
8 these other sources, whether you've got your
9 dry-cleaning hanging in there just brought from the
10 cleaners, whether you've got the can of gun cleaner in
11 there or if you've got gasoline in the garage, you've
12 got a car parked in the garage or whatever.

13 That will help narrow down the sources
14 that we're getting -- the constituents that we're
15 picking up in our indoor air. So they'll go through and
16 look at that first.

17 The subsurface source investigation is
18 basically part of what's been done in the past by the
19 Air Force when they did the groundwater monitoring and
20 they've done additional subslab samplings in other areas
21 of the base. What will happen after all that, if we go
22 back and we determine that the house is one we want to
23 do indoor air sampling, then we'll do another subslab
24 location, plus then we'll go back and take an indoor air
25 on the first floor. I think there's only one home in

1 the neighborhood that has a second floor. If there's a
2 second floor, we will do the second floor also. But
3 it's only for one house.

4 This is a -- I wish I had a better
5 picture of this. It's not a real good picture. I
6 apologize for that. Basically this is what a subslab
7 port looks like. It's basically the length of the
8 slab. It barely penetrates through the slab into the
9 subslab material. The port is through a drilled opening
10 in the slab. They'll seal it into place and have -- it
11 has screw caps onto it where they can attach sampling
12 ports on the very top of it and cap it back off, come
13 back later on, and sample it again.

14 I've got a couple of pictures here. I
15 just want to show you that it's not a real intrusive
16 process. It looks really bad. Here he's drilling the
17 hole in your slab, but it's a very small hole. This is
18 the port in place, and he's pouring a sealant around the
19 port to seal it into place.

20 And this is what I was telling you
21 about. This is a SUMMA canister. This is basically
22 what we use. It's a laboratory certified canister that
23 we can collect indoor air samples and our subslab
24 samples in this canister.

25 Our study, what we wanted to do is we

1 want to determine if there is subslab vapors that are
2 coming up from the groundwater contamination. And if it
3 is, is it entering the residence. Basically all our
4 study is intended to do is to be a -- to determine if
5 there's a complete pathway from the groundwater vapors
6 that are off-gassing, through the soil, and into the
7 house.

8 The second one, again, like I was talking
9 about, is it the lifestyle or is it from ambient
10 conditions? I mean, is it just because -- there are TCE
11 vapors. There are other types of vapors in the air that
12 are generally there. They are just there because of the
13 lifestyle we all enjoy in the country.

14 But there's also, as I mentioned earlier,
15 the ones that are unique to your house. And that could
16 be whether or not you have, like I said, dry-cleaning is
17 a big thing because what we're looking at is basically
18 the same thing, solvents that they'll use in a lot of
19 dry-cleaning. And it will still be on your
20 dry-cleaning.

21 It can be -- I mean, I'll give you a
22 quick example. They did a study recently in the house.
23 They went through did a sample, had some real high
24 readings of PCE, which is tetrachloroethylene. They
25 went back later on, asked the homeowner to go through

1 the closet. They went through the closet, they found a
2 box. The box had a wedding dress in it. The wedding
3 dress had belonged to the resident's mother. It had
4 been dry-cleaned and put in a box several years before,
5 been sealed up in the closet.

6 It was apparently off-gassing all this
7 time and it was raising the levels. When they took a
8 sample in that closet, it had raised the levels so
9 significantly that it showed up in the results and it
10 made it appear there was an indoor air issue, which
11 really all it was was this wedding dress which had been
12 dry-cleaned.

13 They took the wedding dress and left it
14 out -- airing out for several days and kept taking
15 samples. They had a unique way to take samples of the
16 air off-gassing from the wedding dress, and it took over
17 a week to get that down to where it was nondetect. So
18 just give you an example what you can come up with from
19 indoor air issues.

20 And, basically, the last one is again
21 back to what other sources we could identify that could
22 be causing indoor air contamination.

23 All right. This is back more to the
24 study that we're talking about down here at the Kelly
25 area. We're only looking at the 34th Street area

1 because that's the highest off-base groundwater
2 contamination we could find.

3 What we're looking at is doing
4 approximately 20 homes, and the -- again, the areas
5 only -- I think I've got the street name here. It's off
6 of 34th Street. One of the other streets is Barney
7 Avenue and Valencia and Bay Street and also Carnation.
8 There's homes on each of those streets that we're going
9 to ask the homeowner if they'd be willing to participate
10 in this study.

11 Again, the sampling is only intended to
12 determine if we've had a completed pathway. We're not
13 trying to delineate a problem. If we find a complete
14 pathway, we will go back to the Air Force and say --
15 basically give it to them and say, Look. We think
16 there's a problem. There's a potential increase in risk
17 to these homeowners. You need to do more extensive
18 study and determine where it's coming from and how many
19 homes could be impacted and maybe some kind of remedy,
20 which again would go back to some type of remedy like
21 they're doing in Building 360 where they might put some
22 type of a subslab depressurization system or something
23 else like that.

24 The last one I just basically told you
25 about. And we've already talked about the 20

1 structures. And as I said earlier, based on the results
2 from subslab soil's gas, we're going to do an indoor air
3 sampling at up to five residential structures. That's
4 basically all we're going to have time for and all we're
5 going to basically have the money to do. Basically
6 we'll also -- we will provide the results, obviously, to
7 the residents. We'll provide them during another
8 community meeting for RAB or a separate meeting we'll
9 have on this study once we're finished with it.

10 This is just a Google map basically of
11 the area. Obviously, this is 34th Street. The PRB runs
12 up along this street. Bay Street as you can tell.
13 Carnation is the other horizontal. And this street here
14 is Valencia, and this is Barney avenue.

15 The homes we're looking at, there's three
16 homes along this street here. This is a two-story, and
17 then there's two homes up here. For some reason there's
18 a big splash in the middle of the photo. Those three
19 homes are the main ones we would like to get. On the
20 next street, over we'd like to get all four of those.
21 And then this is all one compound right here, I
22 believe. Well, there's two homes in this area we'd like
23 to get. And then there's a few homes scattered down
24 here we're going to do just to kind of get us 20 total
25 homes. So, anyway, go ahead with the next one.

1 MR. SKROBARCEK: I've got a question. On
2 the previous slide, what -- what partner defense
3 operations were -- what historically was there?

4 MR. MILLER: Well, this area has -- there
5 is a plume that is commingled with a plume that most
6 likely is left from the northern part of Kelly. This
7 plume up in here. There was a plume I guess from IS1.
8 Is that the site, Mark? Do you remember offhand.

9 The plume has actually shrunk
10 considerably over the years, but there was a plume that
11 apparently left the northern part of Kelly. I'll just
12 say it, I mean, because of the Air Force. The Air Force
13 feels there is a commingled plume.

14 MR. WEEGAR: We feel there is a
15 contributing off-base source. But if you look at the
16 groundwater contours from groundwater monitoring, there
17 is flow off of the north end of Kelly off there as well
18 that contributes to -- to what may potentially be from
19 an off-base source. We have not identified what that
20 potential off-site source may be.

21 I mean, there's some -- there are some
22 industrial operations up there, but you know, a number
23 of years of ago when we were first looking at this area
24 out there, if you go back and look at the historical
25 aerial photographs when there were no homes out there,

1 there are actually some -- you know, the photographs are
2 not -- are not that good of detail, but looks like there
3 maybe potentially somebody had, you know, a barrow pit
4 out there for maybe digging out gravel or something like
5 that. But you never know in the '40s and '30s and or
6 whatnot, if you've got a pit out there, who drives the
7 truck over there versus going somewhere else to dispose
8 the stuff. We don't know.

9 But it appears to be a commingled plume,
10 and there's some TCE source areas, chlorobenzene. I
11 mean, there's -- there's not obvious proof to TCEQ that
12 this is totally non-Air Force related source, and that's
13 why the permeable reactive barrier was installed up
14 there, was to cut off that contamination.

15 MR. MILLER: And our basis for this whole
16 study is based on one or two wells. There's -- in this
17 area along 34th Street on the side of the road -- I mean
18 we're talking about the width of residential street
19 which is, what, 20 or 30 feet wide. The PRB, the
20 permeable reactive barrier, runs down the middle of the
21 road. On the curb, on the downgrading side, is a well
22 that has a higher elevated concentration of PCE. That
23 well is -- I mean, basically this rest of the plume
24 should be shut off if the PRB wall is working as we
25 think it is.

1 This one well is there, and it's got a
2 very elevated concentration. We don't have another well
3 except for farther downgrade where it basically falls
4 off to -- which basically on this street is where that
5 far right-hand pin is. As you can see, it's like three
6 blocks. There's a well that drops off to below NCL.
7 Basically clean-up level PCE.

8 So we only have a small distance here.
9 That's why we're doing a limited number of homes. And
10 we're basing this on basically one or two wells.
11 There's a well about where that pin is and another well
12 down here that have the elevated concentrations of PCE.

13 MR. WEEGAR: And they fluctuate wildly
14 over time. I mean, they've been down to, I think --

15 MR. MILLER: They were almost --

16 MR. WEEGAR: -- below 10 parts per
17 billion and 20 parts per billion. And now they're back
18 up to 700. And it looks like what it is, is they
19 fluctuate with seasonal changes in rainfall. We went
20 through several years of drought conditions, the water
21 table dropped and the concentrations went down.

22 MR. MILLER: The concentrations were down
23 considerably.

24 MR. WEEGAR: The water table goes back up
25 after we had floods or rain of biblical proportions last

1 year. And as the water table rises, it picks up
2 contamination that's been stranded in the unsaturated
3 zone and concentrations go back up again.

4 MR. CARROLL: We do intend to go back and
5 try to locate that source in the future. Because if
6 it's never located and there's a continuing source
7 there, we'll never be able to clean it all up. You
8 know, that PRB wall will give out before that source is
9 gone.

10 MR. MILLER: Let me do this one last
11 slide real quick, and then I'll answer any other
12 questions. I just want to show you this real quick.
13 This is basically --

14 MR. WEEGAR: This is your garage, right?

15 MR. MILLER: This is my garage. No. It
16 could be except for the snow blower. Most of the work
17 is done -- they do a lot of work northeast. That's why
18 there's a snow blower here. But basically this is what
19 they encounter very regularly.

20 This is a SUMMA canister. They've got a
21 port installed in this garage and they're taking a
22 subslab sample in a garage full of stuff, which I'm not
23 sure why he's doing that because normally the guy
24 wouldn't ever do that, but he uses this as an example of
25 what they typically find in houses. And there's just

1 tons of sources in that garage that could be
2 contributing to the indoor air problems in that house if
3 it's just attached.

4 It doesn't have to be the living space.
5 It's just the garage because stuff is going to leak into
6 your house from your garage. And with that, I mean,
7 that's really it. That's all my presentation. From the
8 board I'll answer questions.

9 MR. GARCIA: Yeah. Let me tell you that
10 other source that he's been talking about. It's been a
11 thorn in the side for us that have lived in that
12 neighborhood all of our lives, and that's Alamo
13 Aircraft. Part of the reason I see it goes up when it
14 rains is that if any of those junk -- all that junk has
15 in there, if they didn't clean all the fuel out of it,
16 they don't clean all the junk out of it, when it rains
17 all that soaks through and what's exposed is all that
18 stuff goes into the groundwater and eventually seeps
19 down that way.

20 We've been trying to get that thing
21 declared a super zone site or something to clean up all
22 that mess and see if that makes a difference. So, in my
23 opinion, it's not all Kelly that did all this. A lot of
24 it, it was from the old fuel tanks. But I think a lot
25 of it -- or a part of it comes from all that junk there

1 at Alamo Aircraft.

2 And I've been yelling 'til I'm blue in
3 the face at EPA or the TCEQ or something to go in there
4 with a search warrant and investigate and take samples
5 and do everything they can to make sure that all that
6 weed and all that mess, they're not maintaining all
7 that, make sure they're not part of the problem.
8 Because we've been attacking this problem scientifically
9 the way you guys are doing it, but some of that
10 contamination is from the mess. And we haven't gotten
11 into really dealing with Alamo aircraft.

12 We can't blame all this on those old fuel
13 tanks and that Kelly problem because they're part of the
14 problem over there, too. And I'm waiting to see a
15 solution how we're going to go after them.

16 MR. WEEGAR: Well, Rodrigo, Alamo
17 Aircraft is inspected by the regional office. And while
18 they may look like the most obvious source out there --
19 and I'm not going to say they can't possibly be the
20 source or a contributing source -- according to the
21 inspections that have been done out there, the region
22 can't find any evidence to confirm that that facility --
23 and this is tetrachloroethylene, specific compound --
24 we're not able to identify that that facility has ever
25 used, managed, disposed of that chemical.

1 So, I mean, I understand that you drive
2 by the place and it obviously appears to be an eyesore
3 and nobody would really want to have them as their
4 next-door neighbor. But having said that and without
5 some additional concrete evidence, you're innocent until
6 proven guilty.

7 MR. GARCIA: I say that, but I also say
8 that how can they go and inspect that when 90 percent of
9 it the yard outside is so overgrown with trees, you
10 can't possibly go and inspect every square inch of all
11 the chemicals and drums and something they might have in
12 there because it's so overgrown with weeds and junk.
13 You know, trees and weeds and junk, you can't possibly
14 cover every square inch of that place to make sure not
15 one of those pieces of junk has that stuff in it.

16 MS. CUNNINGHAM: I'd like to get back to
17 Kelly. Just in looking at this, I'm wondering about I
18 guess the third slide from the end, the aerial, there's
19 a well number. Could you go back to that one? It would
20 be great. There's a well number, but the end two digits
21 are cut off of it. I'm thinking it's 13. Just in
22 trying to count the streets and figuring out where it
23 is. SS003MW013. The one to the far right.

24 MR. MILLER: I've got another slide. I
25 can look that number up for you later.

1 MS. CUNNINGHAM: What we've got -- and I
2 guess it came from the last semiannual compliance
3 plan -- that that well did start out more than 100. And
4 last reading, PCE was 14 and TCE was 6.6.

5 MR. MILLER: Now, that particular well,
6 no. That one's not been over 100. I think the last
7 reading on that well was 14.7 for PCE, parts per
8 billion.

9 MS. CUNNINGHAM: Okay. I've got 14. And
10 I may have the wrong well.

11 MR. MILLER: There's another well you're
12 talking about. There's a well down in this area, which
13 I don't remember the number. It would be south of --
14 it's along 34th Street, but it would be closer to Kelly,
15 which was around 200, I believe.

16 MS. CUNNINGHAM: 220 PCE?

17 MR. MILLER: Yeah. I think that's
18 right. About where the pin is, there's a well that's
19 700 parts per billion. The 200 isn't even really
20 driving it.

21 MS. CUNNINGHAM: I have to go back and
22 see what year that 100 was in. We can talk about that,
23 and it looks like that was in 2001.

24 MR. MILLER: As Mark was saying, the
25 concentrations in that area have gone up and down

1 considerably. And it's mainly because this particular
2 area was pointed out to us as one we -- you know, the
3 Air Force had done a study in the past. They have done
4 a subslab sampling study in the past which we thought
5 was very good. But the concentrations were not as high
6 as what we find right here. So that is why we agreed --
7 my management agreed that we would go back and do a
8 subslab in this area to make -- you know, give the
9 residents a little comfort, that they're not being
10 exposed to something.

11 MS. CUNNINGHAM: And this goes back to a
12 conversation I had with our last administrator. Just in
13 looking at -- this is from the 2007, looking at one of
14 the maps from the Air Force which came from semiannual
15 compliance plan. It's a pretty small area in comparison
16 to some of these others and I can see that it's higher.
17 But just in looking at the houses that have been
18 selected, one of the things that we were told back from
19 that conversation was that the health department had
20 agreed, basically -- Bill volunteered us -- to at least
21 look in the selection of the house, to actually look at
22 that. And we would like to look at how those houses are
23 selected in comparison to the well numbers.

24 MR. MILLER: Okay.

25 MS. CUNNINGHAM: If that's possible.

1 MR. MILLER: I'll talk with you more
2 about it over the next week.

3 MS. CUNNINGHAM: Okay.

4 MR. MILLER: I mean, basically, what I
5 have done right now is -- and I haven't told you.
6 Basically right now this study is scheduled to start the
7 12th of May. I have zero access agreements at this
8 point. I have a very short window to get access
9 agreements. So if anybody in this room knows anybody
10 that lives within those few streets, please --

11 MS. ABBOTT: A lot of staff, a large
12 number, and my parents live right in that little area
13 right there.

14 MR. MILLER: If they do, and you have the
15 information, my contact information. What I have to
16 do --

17 MR. WEEGAR: He wants the house that
18 don't have big dogs.

19 MS. ABBOTT: I got a lot of students that
20 live in that area.

21 MR. MILLER: I've got to send letters to
22 the owners of the property. I will deal with tenants.
23 I'll have to get the tenants' information, too, but need
24 to send stuff to the owners of the property to get their
25 permission first. So I don't know. I really don't know

1 if the neighborhood is heavily rental. I know there's
2 some people that live there that own the property.

3 MS. ABBOTT: There's a lot of owners of
4 properties there.

5 MR. MILLER: So I have to do both, and I
6 have a very short time to do it. I was kind of given
7 this window of opportunity to do this study quickly
8 within the last few weeks. And if I don't do it in May,
9 we're going to slip to late July. And then the problem
10 I have is my money that I have to use for this expires.
11 It expires at the end of the year.

12 The way our management works, if I don't
13 use the money before July, they snap it up and send it
14 off to another big pot and it's redistributed. So if I
15 don't get it done in May, I may not get it done this
16 year at all. It may be next year before I can get money
17 to do it again. I would like to do it this year. It's
18 on the schedule with the TAGA, the people who have the
19 bus, to come down and we could possibly do some
20 different kind of studying.

21 But we had promised the people who asked
22 for this, which was Congressman Gonzalez's office
23 originally asked us about this, that we would use the
24 TAGA vans and we could kind of do some indoor air and
25 kind of rule out some lifestyle interferences and things

1 of that nature. So to do that, if anybody has any help,
2 that's my big plea. I know you do, Beverly. If anybody
3 does --

4 MS. ABBOTT: I promise you.

5 MR. MILLER: -- please talk to people
6 there, give them my name, have them call me. I will be
7 happy to take an access agreement to them. So that's
8 all I've got. I know we've got other stuff to do. If
9 there's any other questions, you can catch me during a
10 break or after the meeting or whatever.

11 MR. MARTINEZ: He does have his name and
12 phone number and E-mail on the back of his
13 presentation. Any comments, questions by the members of
14 the RAB for Mr. Miller?

15 MR. GONZALEZ: I have just one question.
16 I know -- and I think it was answered. I just want to
17 be clear. You go in there, you determine there might be
18 some vapors or what have you in the homes. And then
19 you're done. Does anybody follow up with those people
20 to tell them you might want to consider doing these
21 things because you have a garage that looks like mine,
22 kind of similar to the one in the photo?

23 MR. MILLER: Basically what -- we
24 probably would not do that. We would probably not go
25 back and say, Your garage is a mess. You should

1 probably do something. But if we find constituents in
2 the few homes that we actually do sample indoor air, we
3 will give them the results. You know, we will basically
4 hopefully, if the study works as is intended to work, we
5 will be able to rule out that there's no other, you
6 know, indoor air issues that are causing the
7 constituents that we found in any of the indoor air
8 samples to be there.

9 And that is our intent, to rule out the
10 ambient conditions, lifestyle interferences, and things
11 like that. So if we find something in the indoor air,
12 we know it came from the subslab, which then we assume
13 it came from the groundwater contamination. So that's
14 our intent of this study. As far as if we find
15 something we think is risk, like I said, we'd go back to
16 the Air Force and present the data to them, and it would
17 be up to the Air Force to implement any kind of
18 follow-up investigation.

19 MR. GONZALEZ: I guess maybe the health
20 department maybe can come up with health sheet or
21 something later.

22 MS. CUNNINGHAM: On this?

23 MR. GONZALEZ: That would tell the
24 residents, you know, there's nothing that's being
25 emitted from the ground. But, nonetheless, you have all

1 of this stuff that's creating problems for you. You
2 might want to consider doing this.

3 MR. MILLER: And these are some of the
4 fact sheets that I was telling you that we have. And on
5 the back there is some of the work that I do to improve.
6 Basically it says, Don't buy more chemicals than what
7 you need. Don't store stuff in the house. You know,
8 it's hard to do. I mean, everybody has it. If you have
9 an attached garage, your car is in the garage. Unless
10 your garage looks like mine, your car is in garage.

11 And your car has 20 gallons of fuel. All
12 night long that fuel is slowly seeping out. Even in
13 modern cars, you're getting benzine in the air, and that
14 seeps in the house. That's an obvious source. They
15 found those concentrations in people's house many times
16 when they go in to do sampling for benzine. When
17 they're looking at petroleum type constituents, they've
18 found benzine in people's homes.

19 And then, Oh, yeah. I left my car in the
20 garage last night. Well, I thought we agreed you would
21 leave it out last night. And the people that pulled it
22 into garage and left it in the garage all night. So the
23 next morning when they came to take their samples, they
24 found elevated benzine levels in the house.

25 There's a lot of things like that that

1 you can -- it's not the concentrations are such it's
2 going to hurt you over the long term. Anyway, I'll
3 leave these on the table.

4 MR. MARTINEZ: We are now at the point
5 where we would like to offer the members in the audience
6 the opportunity to address the RAB, ask questions, make
7 comments. I would ask that if there are people that
8 would like to do that, you stand up and you identify
9 yourselves. Anybody interested in making comments,
10 asking questions?

11 All these bright minds, teacher, please?
12 At least one.

13 MS. KATIE: Okay. We have a question.
14 My name's Katie, and I'm a student from UT. Our
15 question is: How big is the Building 360, and are
16 people still in it or do people work there or is it like
17 an empty building?

18 MR. SKROBARCEK: 50,000 square feet.
19 There's probably -- I'm just guessing -- probably 900 or
20 so people, 1000 people in the building.

21 MS. KATIE: So is it just that corner
22 that they found a problem with, or is like the whole
23 building? Or are we assuming it's the whole building?

24 MR. CARROLL: The corner is where we
25 found the soil contamination, and that's where we

1 targeted the remediation -- the soil vapor extraction
2 system to do its work. When we went a away from that
3 corner to take that other air sample, it's higher than
4 we expected. So we'll have to do some more looking in
5 that area to see if there's another source that may be
6 under the slab in that area.

7 MR. WEEGAR: That's the building when
8 you're driving up coming in here, you can see the big --
9 it says "Kelly" on it, right? That's the building when
10 you're driving up, you look straight ahead up there and
11 it says "Kelly," that's Building 360.

12 MS. KATIE: Okay.

13 MR. SKROBARCEK: It's the only
14 horseshoe-shaped building on the installation.

15 MR. MARTINEZ: Identify yourself.

16 MS. GONZALEZ: Hi. My name is Steffi
17 Gonzalez. I'm a student at UT. What kind of work is
18 done in that building was my question.

19 MR. SKROBARCEK: It's a turbine -- gas
20 turbine engine repair and overhaul. So there's a
21 variety of different activities in there that support
22 that.

23 MS. GONZALEZ: Like airplane stuff?

24 MR. SKROBARCEK: Airplane engines
25 specifically. Airplane stuff. So engine work is being

1 done.

2 MR. MEDINA: My name is Mario Medina from
3 the UT Health Science Center. What's the cost of the
4 soil vapor extraction system, and who's footing the bill
5 for that?

6 MR. CARROLL: The United States
7 Government is footing the bill, which means the
8 taxpayers. The cost -- do we have an estimated cost of
9 that system?

10 MR. DAVIS: It was a little over a
11 million dollars to install that.

12 MR. MARTINEZ: Anybody else?

13 MR. LONG: Question for Gary: Are you
14 targeting slab on grade construction, or it sounds like
15 you're maybe just homes of opportunity right now.

16 MR. MILLER: Mainly homes of opportunity
17 we're not targeting slab on grade particularly because,
18 basically, if you have a pier and beam -- our feeling
19 initially was that if you had a pier and beam in the
20 south, generally those are benzene. And you shouldn't
21 have the same amount of vapors going into the house as
22 you do a slab on grade potentially.

23 What we have determined is a lot of
24 people have blocked those piers over the years, and the
25 slab is basically a chimney. So whatever you find in

1 the pier and beam is going directly to the house.
2 There's no attenuation, which with a slab on grade you
3 have an attenuation factor. What you find under the
4 slab is attenuated because, unless you have a crack or
5 an opening in the slab, it's not going to get into the
6 house, where a pier and beam is just the opposite.

7 MR. LONG: I didn't see anywhere -- I
8 know on slab on grade you're going to collect some slab
9 samples obviously. But if you do pier and beam, if you
10 have a pier and beam, are you going to be collecting
11 soil gas samples? I didn't see that in the
12 presentation.

13 MR. MILLER: A pier and beam we'll do a
14 crawl space sample. On a slab on grade we'll do a
15 subslab sample where we will drill through the slab and
16 clay. We're not going to do soil gas where you
17 generally go down five feet or ten feet or whatever and
18 collect a sample. We're not doing that in this study.

19 MR. LONG: So the crawl space, that will
20 just be your surrogate and you'll just assume that's
21 being emitted from the subsurface?

22 MR. MILLER: The basic assumption is the
23 crawl space -- whatever you find in the crawl space is
24 immediately into the indoor air. It's just an
25 assumption that's made across the country by the study

1 indoor air issues.

2 MR. LONG. Thank you.

3 MR. MILLER: And just one note on the
4 cost. You mentioned the cost a while ago. Around the
5 country, what they have found with residential
6 structures, it's cheaper to install the remediation
7 system in the structure than it is to do the sampling.
8 The sampling is so expensive and time consuming, they
9 have generally found it's sometimes cheaper just to go
10 in install the systems in a residential neighborhood and
11 not worry about it. Just a note.

12 MR. MARTINEZ: Anybody else, please?
13 Comments? Questions. Yes, ma'am? Identify yourself.

14 MS. SERRERO: Hi. I'm Michelle, and I'm
15 a student at UT. In regards to the contamination
16 building of 360, I know we talked about it kind of at
17 long length about EPA versus OSHA. Why were you -- why
18 were you -- why did you have the EPA guidelines and then
19 switch over to OSHA?

20 MR. CARROLL: We looked at the OSHA
21 guidelines not to focus our clean-up on but to
22 understand whether there was an immediate danger to the
23 workers there in the building.

24 MS. SERRERO: So it was dangerous
25 according to the EPA standards but not to OSHA. And

1 somehow you guys decided OSHA was the way to go and,
2 therefore, the workers weren't in danger anymore?

3 MR. CARROLL: No. We wanted to
4 understand there that if there was immediate danger,
5 that we needed to alert Brian and his crew and the other
6 workers in there that something needed to be done to
7 lower those levels in that building. So we compared
8 that to the OSHA level. That's kind of a trigger level
9 which we would say, Yeah, we've got to do something
10 right away here.

11 The EPA level we looked at as a long-term
12 health concern that we target for a period of, you know,
13 30 years or so. And those calculations are made based
14 on long-term exposure, working every day for, you know,
15 half a lifetime.

16 So there's a difference between the OSHA
17 levels -- OSHA is meant for workers' protection, and
18 that's for, you know, employers to comply with and to
19 make sure that workers aren't, you know, exposed to
20 dangerous chemicals in the workplace. The EPA levels
21 are meant for us to establish clean-up levels to protect
22 long-term risks to human health.

23 MR. MARTINEZ: Michelle, your last name?

24 MS. SERRERO: Serrero (phonetic).

25 MR. MARTINEZ: Thank you. Anybody else,

1 please?

2 MR. SKROBARCEK: Well, really to follow
3 onto that, it's in the interest of the -- I don't mean
4 to put words in your mouth. But it's in the interest of
5 the government and also in the interest of any
6 commercial companies to protect human health and
7 environment, and that's what we worked together to
8 protect in the area.

9 So we look at it from an operational
10 standpoint. The systems that we put in place are to
11 ensure health and safety of the people that work for us
12 because we care about them and to make sure that we're
13 doing things as efficiently as we can. And then from a
14 restoration standpoint, there's different parameters
15 that they look at and different threshold -- or
16 thresholds that are -- that are used for clean-up
17 standards and those types of things. So it's kind of a
18 combination approach but ultimately with the same goal.

19 MR. MARTINEZ: Thank you. Anybody else?
20 Yes, ma'am?

21 MS. AMBER: My name is Amber. I'm a
22 student at UT. I was wondering, did Kelly know
23 beforehand -- before Kelly closed, did they know about
24 all these pollutants going into the ground, and when did
25 they decide to start doing something about it?

1 MR. CARROLL: Well, generally speaking,
2 we started what's called the installation restoration
3 program in the early '80s. We started looking for
4 environmental contaminants about that time. That kind
5 of -- that level of investigation increased as the years
6 went by.

7 When Kelly went on the closure list, a
8 different Air Force agency took over. Focus became a
9 lot more on adding -- doing as much investigation as --
10 and clean up as quickly as possible 'cause you had a
11 goal of transferring the property. So that ramped up.
12 We've done a lot of investigations since 1995 when Kelly
13 went on the closure list.

14 So, you know, between then and now, all
15 the investigations have been done and completed, and a
16 lot of the -- the remediation, all the remedies, have
17 been emplaced basically to clean up the contamination of
18 the base and off the base. The plumes that have gone
19 off the base, too.

20 MS. CODERRE: And if I could just point
21 out, the maps along the wall there, those charts
22 delineate all the sites that were identified at Kelly
23 that needed to be cleaned. Everything in blue has been
24 closed. It's taken care of. So that's kind of just a
25 visual demonstration throughout the base of how much

1 work has been done through the remediation program here
2 at Kelly. So it's defined and well underway.

3 MR. MARTINEZ: We have a few more minutes
4 in the public comment period. Anybody else?

5 (No response)

6 MR. MARTINEZ: Sensing none. There is
7 one last item on the agenda.

8 MR. CARROLL: This is something I
9 understand we've been doing here for a couple of years
10 now. One thing that we do in the semiannual compliance
11 plan is to monitor groundwater and to ensure that the
12 groundwater is being contained by whatever systems have
13 been put in place to treat that groundwater, and
14 groundwater is diminishing or decreasing in
15 concentrations.

16 So I don't know if you could see very
17 well, but these blue lines show the original outlines of
18 the plumes in 1998. This is PCE, tetrachloroethylene.
19 This is TCE, trichloroethylene, and what we want to show
20 here is basically the results of the semiannual
21 compliance plan dated, you know, early 2008, taken from
22 2007 sampling data that shows that concentrations of PCE
23 have gone down or the plume sizes has gone -- have gone
24 down from a 1998 area of 6.93 square miles to a 2008
25 area of 3.51 square miles. So we've got about a

1 50 percent decrease here.

2 In TCE, the area has gone down from, if I
3 can read it, 7.91 square miles in 1998 to 4.31 in 2008,
4 late 2007. So, you know, not quite a 50 percent
5 decrease in TCE and about a 50 percent decrease in this
6 plume here. So it's been about 10 years, and these
7 plumes through a combination of the systems that we've
8 put in, the reactive walls that we've put in, and
9 natural attenuation, which is the remedy for these
10 plumes, they've decreased by this much.

11 MR. MARTINEZ: Any comments.

12 MR. WEEGAR: Not necessarily a comment.
13 But I guess since there's a lot of new faces here.
14 Paul's talking about the semiannual monitoring report
15 that's submitted to the State of Texas. And on the
16 question, Did Kelly know whether this contamination was
17 here before base closure? Yes. Kelly and the State of
18 Texas basically have -- in laymen's terms, it's a
19 clean-up contract that was initially issued back in, I
20 believe, 1998, maybe, which predated the closure of the
21 base. And it addresses the environmental remediation of
22 soil and groundwater contamination on-site and off-site
23 that is associated with past Air Force activities.

24 And one of the obligations that the Air
25 Force or the federal government has is to submit a

1 report every six months to the State of Texas that
2 identifies how they're doing. Looks at the groundwater
3 monitoring, you know, demonstrates whether their --
4 their remedies that they have installed are working to
5 clean up the groundwater.

6 They monitor surface water, sediment,
7 fish tissue, things like that in Leon Creek to
8 demonstrate that the -- that the systems that they've
9 installed are abating any kind of impacts to Leon Creek.
10 So it's basically on -- that's what he's talking about
11 when he talked about the semiannual report. It's
12 their -- their every-six-month performance review to the
13 State of Texas to show that they're complying and doing
14 the things that their clean-up agreement requires them
15 to do.

16 MR. CARROLL: Here's a copy of that
17 report. This and this.

18 MR. WEEGAR: Why do I have eight volumes
19 in my office then? I don't think that's all of it.
20 That's the CliffsNotes version there.

21 MR. CARROLL: This is the executive
22 summary. Has a lot of big, large format maps in it that
23 show all the data, the data gathering that we do
24 throughout the year, and all the different constituents
25 that we look for and those concentrations and things

1 like that.

2 MS. CODERRE: And those documents are
3 also available online. We have thousands of documents
4 that are available online in a searchable database
5 called the administrative record. And on the bottom of
6 the fact sheet, it's got the horrible government web
7 address of www.safie.hq.af.mil/afropa.

8 Anyway, if you go in there, there's a
9 link that takes you to closed bases, Legacy BRAC bases,
10 and you select Kelly from the list, you can get RAB
11 materials from previous RAB meetings. You'll also find
12 an administrative record link, and that's got the
13 searchable database for all of the documents, and the
14 semiannual compliance plan report is available then
15 Online for light evening reading.

16 MR. GONZALEZ: Mr. Carroll, would you say
17 that the scientific approach that we've taken or the
18 approach we've taken with this clean-up, the decisions
19 being back in '98, would we place those decisions made
20 for this clean-up as being positive steps that we're, I
21 guess for a lack of a better word, pleased with the
22 results up to now and are they meeting expectations or
23 they're not meeting expectations?

24 MR. CARROLL: Yes. I believe they're
25 meeting expectations. Overall, you know, this is a good

1 graphic to show that we've made some progress in these
2 plumes. We've made some progress on all the sites on
3 Kelly. So, you know, this is a very good indication
4 that we're making some progress.

5 You know, like I said, the plumes took
6 about 50 years to get in the ground and to travel the
7 distance they did. We've worked on them for 10 years
8 and decreased them maybe, you know, close to 50
9 percent. So, you know, we still have a lot of work to
10 go to get to complete remediation.

11 A lot of times these plumes, you know,
12 when you get closer to the MCL or your clean-up goal,
13 it's harder to get to that goal. So, yeah, our work is
14 still cut out for us to get that. But I believe we've
15 made some good progress.

16 MR. MARTINEZ: Any more questions from
17 the -- from the RAB, please? Members of the RAB.

18 MR. GARCIA: I'd just like to add to what
19 he says. We are making progress, but we've had a lot of
20 help from Senator Hutchinson and our two congressmen,
21 Rodriguez and Gonzalez, in getting into a lot of issues
22 and health issues and specialized issues because a lot
23 of citizens that live in the area that serve on the
24 board since its onset when I started when the board
25 first got formed, we've taken a lot of issues and we've

1 gotten into a lot of different things, including health
2 studies, because we feel there is a tremendous need to
3 expand our scope of work as well as meeting the
4 scientific things that we are meeting.

5 We have a lot of work to do from the
6 scientific part and from the human and community parts,
7 so we seem to be making progress on more than one
8 front. And that is something very good because the
9 congressmen -- the two congressmen and our senator are
10 very interested in all of this and they have helped
11 people like me that have gone to them and brought things
12 to their attention and have been very, very helpful.

13 And they're continuing to be very, very
14 helpful as we give -- continue to include our --
15 increase our realm of work and bring in more projects
16 and deal with a lot more issues than just the
17 contamination.

18 MR. MARTINEZ: Thank you. Since this
19 item was after the public comment period and there was
20 one hand, I'd like to go ahead and allow you to ask a
21 question or make a comment.

22 MS. L. SERRERO: I was just curious if
23 there's any concern at all about this type of
24 contamination entering the aquifer.

25 MR. MARTINEZ: Identify yourself, please.

1 MS. L. SERRERO: Letti Serrero, mother of
2 student.

3 MR. CARROLL: I assume you're talking
4 about Edwards Aquifer that we get our drinking water
5 from. That, you know, could be a concern, but we've
6 ruled that out because we've sampled lots of wells in
7 the area. We know that there is a clay layer that keeps
8 the contaminant from going down to the Edwards.

9 MR. WEEGAR: There's about 1,000 feet of
10 impermeable material between the shallow contaminated
11 zone and the Edwards Aquifer. There has been sampling
12 done of the Edwards and there's no impact.

13 MR. PEREZ: Can I add something? I'm I
14 guess the oldest out of the members since when I
15 started. I remember we covered quite a bit of that
16 part. Let me give you an example. Where I live right
17 now, we had a tank. We used to buy water from them in
18 my area, and then SAWS picked it up. Okay. They went
19 ahead and took that drum off and capped it. And there
20 was worries and it has always been in my mind that the
21 pipes that go down -- downstream, they go down to the
22 acquirer, that they rot and so on and we get leaks in
23 there. But we have passed through that so-called
24 problem that wasn't really covered that well.

25 But there is danger. There's a lot of

1 danger from those pipes. In Kelly we've got some there,
2 too, and over here that's been capped. There's a lot of
3 area where they've been capped and those tanks have
4 being taken off and so on. In fact, it's a problem.
5 Let me put it like that. I don't want to get too deep
6 into it.

7 I want to mention, too, that I want to
8 give thanks to our congressmen and senators. Sunday I
9 will be leaving to Washington D.C. and I'll be talking
10 to them about our concerns.

11 MR. MARTINEZ: Thank you. Any more
12 comments questions of Mr. Carroll.

13 (No response)

14 Not on the agenda; but, actually, a
15 policy has been that staff asks the members of the RAB
16 for suggested items for the agenda for the next RAB
17 meeting, which will be in July -- second Tuesday in
18 July.

19 MS. CODERRE: The 8th of July. So topics
20 for the 8th of July, RAB members?

21 MR. WEEGAR: Any additional sampling at
22 360? Will you have something to report on? I'm just
23 hoping maybe you'll have the baffling for the system in
24 place and have it up and running so you can report on
25 how that's working.

1 MS. CODERRE: Update on 360. Okay. And
2 then, you know, as we did this time, originally the
3 agenda for this meeting contained only the semiannual
4 compliance plan report and, generally, we made that a
5 more robust report than just covering the maps. These
6 other issues were issues that we felt important that
7 y'all would want to have discussed in-depth more
8 important than a routine report. So we pushed that to a
9 much smaller section of the agenda.

10 So if you want, we can do more on the
11 semiannual compliance plan report. If there's time to
12 do that, we can certainly put it back on the agenda.

13 MR. SKROBARCEK: What about former
14 Building 301, the status of that evaluation and
15 remediation?

16 MR. CARROLL: Yeah. That would probably
17 be a pretty good time to have a briefing on that. That
18 system should be close to being ready to kick off by
19 then.

20 MR. GONZALEZ: I was going to ask if
21 Mr. Miller's study, would it be anywhere close to
22 bringing back any results?

23 MR. MILLER: We may have some preliminary
24 results. We could do a brief update.

25 MR. WEEGAR: Dog bites I received on my

1 summer vacation.

2 MS. CODERRE: Mr. Garcia?

3 MR. GARCIA: I would like to see maybe
4 a -- if Mr. Carroll would read all those books and give
5 us a 20- to 25-page executive summary on the 12 most
6 critical issues that we need to deal with that is in
7 that semiannual compliance report.

8 MR. CARROLL: We will have a presentation
9 on the report, which will -- we'll give you a 12-page
10 summary.

11 MR. GARCIA: Make sure you read all
12 12 volumes.

13 MS. CODERRE: I assure you he's
14 responsible for everything in that report.

15 MR. GARCIA: So he will do a good job of
16 giving us a nice executive summary of everything in
17 there. Also, one of the staff members that I have been
18 talking to at Senator Hutchins's office -- I got the
19 card at home -- told me that we're going to get some air
20 monitoring stations at Kelly and around the
21 neighborhood. I wanted to find out more and if there
22 is -- verify or do I have to bring it up with them, what
23 the status of it is.

24 MR. SKROBARCEK: Did they say what
25 agency?

1 MR. GARCIA: We're supposed to get some
2 monitoring stations.

3 MR. SKROBARCEK: Did they say what agency
4 that was coming from?

5 MR. GARCIA: I've got to call him back
6 and ask him. I've got his number in Washington. I'll
7 call him back and ask him.

8 MS. CODERRE: That wouldn't be the
9 Air Force real property agency. So yeah. If you.

10 MR. GARCIA: They told me it was through
11 the Air Force. I forgot the name of the agency, but
12 they told me it was through the Air Force.

13 MS. CODERRE: Well, we'll need to know
14 more, so if you can find out more for us on that, then
15 we'll be happy to look into that. Anything else?

16 MR. GARCIA: Yeah. How is your project
17 going on seeking more members from the local minority
18 community?

19 MS. CODERRE: Yeah we're glad to have
20 Mr. Gonzalez back with us.

21 MR. GARCIA: How many more do you need to
22 get?

23 MS. CODERRE. Well, I mean, there are 16
24 positions for community members on this RAB, I believe.

25 MR. GARCIA: And how many do you have so

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COURT REPORTER CERTIFICATE

COUNTY OF BEXAR

STATE OF TEXAS

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

And further certify that I am not a relative or employee or attorney of counsel of any of the parties; nor a relative or employee of such attorney or counsel for any of the parties hereto, nor interested directly or indirectly in the outcome of this action.

In witness whereof, I do hereunto set my hand on this 21st day of April 2008.



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Air Force Real Property Agency

Public Service Announcement

KELLY RESTORATION ADVISORY BOARD TO MEET April 8, 2008

San Antonio, Texas. – Request you air/print the following public service announcement:

The Kelly Restoration Advisory Board will meet Tuesday, April 8, 2008, at the Port Authority of San Antonio, 143 Billy Mitchell Blvd., Bldg. 43, Suite 6. The meeting will begin at 6:30 p.m. in the Main Boardroom, and at 8:00 p.m. a Public Comment Period will take place. The Kelly RAB generally meets quarterly on the 2nd Tuesday of January, April, July and October.

The RAB is a group of community, government and Air Force personnel who meet quarterly to discuss the progress of the cleanup at the former Kelly Air Force Base and advise the Air Force on community concerns related to cleanup. The public is invited to attend.

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TAB B

**NO
ACTION ITEMS
AVAILABLE**

TAB C

ADS

Former Kelly Air Force Base Restoration Advisory Board (RAB)

The Air Force-Real Property
Agency invites you to attend the
next Kelly RAB meeting.

**Tuesday
April 8, 2008
6:30 p.m.-Meeting Begins
8:00 p.m. - Public Comment Period
Main Boardroom
143 Billy Mitchell Blvd., Suite #6,
San Antonio, TX 78226**

A variety of issues concerning
the cleanup at the former
Kelly Air Force Base
will be discussed.

**Call the
Kelly Public Information Line
at (210) 925-0956
for more information.**

If a Spanish translation or sign language interpretation is needed, call (210) 925-0956 at least two days in advance. (Si usted necesitará un traductor de español, por favor llame al (210) 925-0956 con no menos de dos días de antelación.)



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SOUTHSIDE REPORTER - SOUTHSIDE REPORTER

Kelly board seeks nominees



Thursday, 10 January 2008

Special to the Southside Reporter

Are you curious about the environmental remediation program at the former Kelly AFB? Are you interested in serving your community? Volunteering just eight hours of your time, you can make a difference for your community.

The Air Force is seeking nominees to fill vacancies on the Kelly Restoration Advisory Board. If you currently live, work or own property near the former Kelly AFB and have an interest in learning more about the environmental remediation program, then you may be eligible to join.

The RAB is a group of community, government and Air Force personnel who meet quarterly to discuss the progress of environmental cleanup at the former Kelly Air Force Base. If you are Interested, please contact the Air Force Real Property Agency at 925-0956.

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Southside Reporter Poll

Investigation: Could Corn Tortillas Be Causing Cancer?

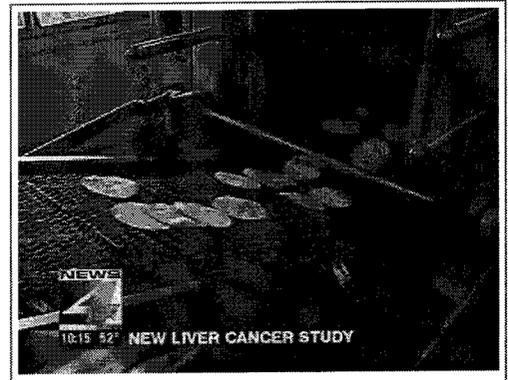


Reported by: Jaie Avila
Email: JaieAvila@woai.com

Last Update: 2/28 6:04 am

For nearly two years now, the News 4 Trouble Shooters have been investigating why people living near the former Kelly Air Force Base are dying of liver cancer at a rate twice as high as other parts of Texas. Trouble Shooter Jaie Avila tells us why health officials are now studying whether a very popular food here in South Texas could be responsible.

It's something most of us eat all the time. Corn tortillas. Your tax dollars are being spent to study whether they are causing cancer on the south side of town, even though a known cancer-causing chemical has already been found in the groundwater.



The News 4 Trouble Shooters introduced you to Mary Lou Ornelas nearly two years ago. She worked at the former Kelly Air Force Base for about 20 years, and even lived nearby. She worked with dangerous chemicals, including something called TCE, or Trichloroethylene, a known cancer-causing agent.

Sadly, Mary Lou died less than a week after our interview. She was part of a large group of liver cancer patients living around the old base. For years, county officials have been trying to determine what's causing the increased cancer levels.

Dr. Fernando Guerra, the Director of the Health Department described the group as, "People who are, who are fairly young still, you know. Their mid to late 40's and 50's, etc."

Many people living in the area are convinced their health problems are the result of the TCE, which was found to have seeped into groundwater. The plume of contaminated water was first mapped out in 1999 and stretched underneath 22,000 homes across the south and southwest sides of town. The area was even dubbed the "Toxic Triangle."

In the last few years, the plume has shrunk because the air force is slowly cleaning it up.

However, a number of studies have failed to connect TCE exposure, to the cancer cases. Dr. Guerra told us, "For the most part, we did not find an association in the study that we did, which is reassuring."

So now, the health department is going in a different direction.

Texas A&M and Texas Tech researchers are now studying whether corn, like you'd find in corn tortillas, could be causing the liver cancer.

Dr. Kirby Donnelly, who is heading up the study from A&M's end, said it's not as silly as it sounds, when he sat down with Jaie Avila recently.

Avila asked, "You've got this TCE underground in the ground water, and yet you guys are studying corn tortillas."

Dr. Donnelly answered, "Yes, and I'm sympathetic to that frustration. I know on the surface it sounds like, 'Oh, you're coming here and we've got this environmental problem. We know the trichloroethylene's in the ground water. We know that these chlorinated solvents are getting into our households and you're looking at tortillas, and everybody eats tortillas, but not every

doesn't get liver cancer.' Well, the issue, the more important issue is, the people who get liver cancer are likely getting liver cancer because of a number of things. Not just their environment. Not just their nutrition. Not just their genes."

Donnelly says a study in Africa found that a toxic mold sometimes found naturally in corn and grains is believed to be a contributing factor to liver cancer cases among some local residents there, but those people also suffered from hepatitis, or had other liver problems.

"There was a study that was specifically done in South Texas that showed that there are certain corn products that do have relatively high levels of these chemicals in them," explained Dr. Donnelly, "So, yes, we are suspicious of corn products."

So researchers are asking residents of the toxic triangle to take a blood and urine test, and fill out a questionnaire in order to examine their diet and medical background for a missing cancer link.

The study is costing taxpayers \$90,000, partly through a grant, and partly through the air force, which again, is in charge of the TCE cleanup.

Avila told Dr. Donnelly, "It seems like a conflict to have the military paying for part of this study, when it is in their interest to find something else responsible, other than TCE."

Dr. Donnelly responded that the air force was not paying for his part of the study, but added, "I think that is true...what that does for me, is, drastically reduces the costs that I have to do the study."

We asked Dr. Donnelly if he thought we're going to know what's causing the liver cancer rates to go up in these zip codes when the study concludes.

"It is a long shot...having said that, I think it's best shot we've got."

You are probably wondering, if corn tortillas are to blame, why don't more of us who eat them get liver cancer? Not just people living near Kelly? Well, researchers tell us they think there may be a combination of factors, unique to that area, contributing to the cancer rate, such as the pollution, genetics, and perhaps, corn tortillas. For the study to have any chance at success, researchers say they need 500 people from three zip codes to participate. Those are 78207, 78228 and 78237. They only have about 150 people participating so far. If you live in zip codes, call 434-0077 for more information.

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE