KELLY AFB
TEXAS

ADMINISTRATIVE RECORD
COVER SHEET

AR File Number 3339

KELLY AIR FORCE BASE
RESTORATION ADVISORY BOARD
Agenda

October 5, 1999
Dwight Middle School
2454 W. Southcross

Pre-Meeting Poster Display		**5:30 - 6:30 p.m.**	**Kelly AFB Staff**
	S-4 Corrective Measure Study		
	Zone 1 Corrective Measure Study		
I.	**Welcome**	**6:30 - 7:00 p.m.**	**Co-Chairs - Dr. Lené BGen Murdock**
	A. Introductions		
	B. Administrative Topics		
	1. RAB Member Packets		
	2. RAB Action Items/Responses		
	3. Term Expiration Discussion		
	C. Vote on July 20, 1999 Minutes		
II.	**Community Statements**	**7:00 - 7:10 p.m.**	**Dr. Lené**
	A. Four minutes per speaker		(Anyone may speak)
III.	**Redevelopment Update**		
	A. GKDC Update	**7:10 - 7:25 p.m.**	**Mr. Roberson**
	B. AFBCA Update	**7:25 - 7:40 p.m.**	**Mr. Antwine**
IV.	**Environmental Priorities**	**7:40 - 7:50 p.m.**	**Dr. Lené**
V.	**Responsibility Determination Process**	**7:50 – 8:00 p.m.**	**EPA/TNRCC**
VI.	**Break**	**8:00 - 8:10 p.m.**	
VII.	**Subcommittee Reports**	**8:10 - 8:20 p.m.**	**Dr. Lené**
	A. Technical Subcommittee Meeting Report		
VIII.	**TAPP Contractor Presentation**	**8:20 – 8:40 p.m.**	**Mr. Neathery**
IX.	**Off-Base Cleanup Workshop**	**8:40 – 8:55 p.m.**	**BGen Murdock**
X.	**Community Comments**	**8:55 –9:15 p.m.**	**All Attendees**
XI.	**Summary and Closing**	**9:15 - 9:25 p.m.**	**BGen Murdock**
	A. Collect Agenda Items for Next RAB Meeting		
	B. Review Action Items For Next RAB Meeting		
	C. Announce Date, Location for Next RAB Meeting		
	1. Date –11 January 2000		
	2. South San High School		

F

Kelly Air Force Base Restoration Advisory Board Meeting
5 October 1999 6:30 p.m.
Dwight Middle School

Members/Alternates Present:

Public Members:

Brig. Gen. Robert M. Murdock
RAB Installation Co-Chair
Mr. Gordon Banner
TNRCC
Ms Laura Stankosky
EPA
Mr. John A Jacobi
TDH
Mr. Sam Sanchez
Metropolitan Health District
Mr. Pat McCullough
AFBCA
Mr. Edward Weinstein
SAWS

Community Members:

Dr. Gene Lené
RAB Community Co-Chair
Mr. Sam Murrah
Mrs. Dominga Adames
Mr. Philip Farrell
Greater Kelly Development Corp.
Mr. Armando Quintanilla
Mr. Kent Iglesias & Alt Mr John Herndon
Ms. Tanya Huerta
Mrs. Yolanda Johnson
Mr. George Rice
Mr. Roy Huff, Alt. for Mr. Mixon
Mr. Paul Person
Mr. Mark Puffer

Members Absent Without Alternate:

Mr. Juan Solis, Sr.
Ms. Annalisa Peace
Mr. Roy Botello
Mr. Nicolas Rodriguez, Jr.

I. Call to Order

A. Brig. Gen Robert M. Murdock, called the meeting to order at 6:34 p.m.
B Gen. Murdock asked the RAB members to introduce themselves.

II. Administrative Topics

A. General Murdock presented responses to the Action Items noted from the last meeting of the RAB, as follows:

1. The environmental restoration update presentation requested by Ms. Tanya Huerta is included with the previous meeting's minutes. Ms. Huerta stated it was satisfactory.
2. As requested, a fact sheet on drinking water standards is included in the information packet.
3 Copies of the presentation slides for this meeting were included in the information packages, as requested, with the exception of the copies for the presentation to be given by the TAPP contractor. Those slides will be sent out with the minutes.
4. Ms. Huerta has accepted the Air Force's invitation to come to the base to discuss cleanup issues. This meeting will occur at a later date.
5. At Ms. Yolanda Johnson's request, information on the cleanup at Site S-1 was provided to her.
6. A letter was sent to RAB members inviting their participation in the workshop planning session. Gen. Murdock thanked those who took part and invited everyone to attend the 7 October workshop.

7. The slides of the Greater Kelly Development Corp (GKDC) and the Air Force Base Conversion Agency (AFBCA) presentations were included with the minutes of the last meeting.
8 A chronology of the cleanup program is under development by the Kelly staff and should be completed for distribution in November.
9. General Murdock and Mr. Armando Quintanilla met and discussed Mr. Quintanilla's questions about Kelly's relative risk priorities. Kelly will make a presentation on those priorities. The meeting was the result of a letter from Mr. Armando Quintanilla, a copy of which is included in the information packet along with the Air Force's response

B. Mr. George Rice requested an answer to a question he posed at the April RAB meeting. The question concerned Base Closure Team (BCT) meeting items withheld from the RAB and the reasons for withholding them.
1 Ms. Mary Kelly, attorney for Kelly AFB, replied that the question has been answered before and restated the answer. All BCT materials that are releasable to the public under the Freedom of Information Act (FOIA) have been and will continue to be provided to the RAB without any special request. All other items not subject to FOIA, such as internal draft documents, will not be provided to the RAB.

C. Term Expirations
1. Dr. Gene Lené, Community Co-chair, explained that several RAB members' terms will expire at the end of the year. He said the RAB will offer applications to these members to be considered for continuation on the board. He also said he would like to extend those members' terms one month so that they remain on the board through the January 2000 meeting. It was so moved, seconded, and approved.

D. July Meeting Minutes
1 The minutes for the July 1999 RAB meeting were approved without change.

III. Community Statements

A public meeting was held prior to the RAB meeting concerning cleanup plans at Zone 1 and Site S-4. Many of the statements made by community members concerned those plans. The full text of their statements is included as Attachment 2 to the minutes.

IV. Redevelopment Updates

A. Mr. Paul Roberson, GKDC representative, was unable to attend the meeting and make the planned presentation. Copies of his prepared slides were provided in the information packets.

B. Mr. Adam Antwine, AFBCA, gave a presentation on the status of the closure and transfer of property of Kelly (See Attachment 3 for copies of slides.) Mr. Antwine emphasized the Air Force's environmental stewardship at Kelly AFB will not end with the transfer of property outside the Federal Government.

C. Discussion
1. Mr Sam Sanchez, San Antonio Metropolitan Health District (MHD), asked if AFBCA will have ownership and responsibility for off-base cleanup systems after Kelly closes He also asked if AFBCA will have access to the same contractor resources as Kelly currently has.
a) Mr Antwine said AFBCA will take over all cleanup responsibilities, including the maintenance of off-base treatment systems. He said some of the Kelly environmental staff has already transferred to AFBCA and more will follow. In addition, he said AFBCA is acquiring contracts with many of the same contractors currently doing the

cleanup work at Kelly.

2. Mr. Rice asked if the RAB will have access to environmental data collected by tenants
   a) Mr. Antwine stated the tenants usually share the data they collect, because it is in their best interest to do so to avoid any unnecessary liability. He said he did not know if tenants were required to provide that data to the public.
3. Mr. Quintanilla asked if AFBCA plans to prioritize the properties to be cleaned up, and if so, can those priorities be presented at the next RAB meeting. He said he was concerned that some on-base properties are being cleaned up before the neighborhoods.
   a) Mr. Antwine stated there will be priorities set and could be presented at the January meeting.
4. Ms Johnson stated her opinion that in the five years she has sat on the RAB, no real progress has been made with the community's concerns. She said she hopes that will change in the future.
   a) Ms. Huerta asked who makes decisions on deed restrictions in the cleanup plans. Mr. Gordon Banner, Texas Natural Resource Conservation Commission (TNRCC), responded TNRCC approves cleanup plans.
   b) Ms. Huerta was concerned about the amount of land that would never be fit for human use. She asked where she might find out how much land would be classified as unsuitable for human use. She was directed to the Environmental Baseline Survey and the Environmental Impact Study as possible sources of that information.

V. Environmental Priorities

A. The list of environmental priorities was provided to RAB members. A motion was made to accept the list as the RAB's recommended priorities
   1. Mr. Quintanilla asked to amend the list to include the cleanup of vinyl chloride in the neighborhoods as a priority. After some discussion, the RAB decided that it was best to make no specific mention of any single contaminant, and to leave the list as it was written with a general reference to "all" contamination The motion passed, with Mr Quintanilla's dissent.

VI. Responsibility Determination Process

A Gen. Murdock addressed the issue raised by Ms Huerta concerning the process of determining if groundwater is contaminated. Mr. Banner referred the RAB to the process description contained in the information packets. Ms. Huerta said the information answered her concerns.

B. Mr. Rice asked if TNRCC had determined who was responsible for the off-base contamination Mr. Banner said the Air Force was responsible for the S-4 plume. Mr. Rice requested the statement in writing. Mr. Banner asked Mr Rice to submit a written request and it would be considered.

C. Mr. Mark Puffer asked for a flow chart of the TNRCC's permitting process to help the RAB understand the steps involved.

A short break was taken.

VII. Technical Review Subcommittee (TRS) Report

A Dr. Lené presented the reports of the last three TRS meetings. (See Attachment 4) He also presented a Technical Assistance for Public Participation (TAPP) Update. (See Attachment 5)

B. Mr. Quintanilla asked how much Mr. Lynch (TAPP contractor) was paid for his review of the Semiannual Compliance Plan Report. The answer provided was just under $7,000. Some discussion followed debating Mr. Lynch's report validity or accuracy. It was concluded that the RAB's acceptance of the report indicated the RAB agreed the contractor had accomplished what he was tasked to do, but not that each RAB member necessarily agrees with the substance of the report.
   1. Ms. Huerta observed that the government representatives on the RAB seem to be worried about liability, while the community members seemed to be worried about health effects, and property values. She said the RAB needs to bridge that gap. She also observed that RAB members tend to get defensive when someone disagrees with them.
   2. Citing personal agendas and biases among some RAB members, Mr. Paul Person moved to select an "unbiased" selection panel for future TAPP contractors. After some discussion, the motion failed to receive a second and was allowed to die.

VIII. TAPP Contractor Presentation

A. Mr. Jeffery Neathery, presented his report on the Phase II Remedial Facility Investigation, IRP Zone 4, OU 2 Work Plan. (See Attachment 6.)
   1. Mr. Neathery's summarized his concerns about the report as follows:
      a) The report was somewhat vague on what work would be performed.
      b) The report was confusing on what methods would be used
      c) The report needed further review to remove non technical errors
      d) A discussion of paleochannels was needed.

He recommended the report be revised to address those concerns

B. Following the presentation by Mr. Neathery, Mr. Rice asked if the Air Force would respond to this report as it had to the previous report. A motion was made to ask the Air Force, EPA, and TNRCC to respond to Mr. Neathery's report. The motion passed unanimously.

C. Mr. Quintanilla expressed concern that a large sum of money was paid to the contractor to produce a Work Plan that was characterized as "vague." He said the Air Force needs to do a better job.

D. It was suggested that a presentation be made to the RAB, at the next meeting, about the "paleochannels" discussed by Mr. Neathery.

E A general discussion on the role of TAPP contractors occurred. RAB members commented that the contractors' reports were similar to a book review. The TAPP contractor's job is to review the environmental document, and give the RAB his opinion of the document just as a book reviewer reads a book and writes his opinion of the book.

IX. Off-base Cleanup Workshop

A. General Murdock thanked those for attending the September steering committee meeting and encouraged all to attend the meeting October 7 at the base Chapel. The purposes of this meeting will be to clarify the extent of off-base contamination and to learn more about the people the RAB members represent, how to reach them, and how to engage them in the cleanup process.

X. Community Comments

A. The comments ranged from questions on Mr. Neathery's report to the Public meeting held prior to the RAB meeting. The full text of these statements are included as Attachment 7.

#15
Junta Asesora de Restauración de la Base la Fuerza Aérea Kelly
Sesión Ejecutiva
5 de octubre 1999, 6:30 p.m.
Dwight Middle School

Integrantes / Suplentes presentes:

Integrantes de la Comunidad:

Dr. Gene Lené, Copresidente representando la comunidad	**Integrantes representando al gobierno:**
Sr. Sam Murrah	General de Brigada Roberto M. Murdock, Copresidente de instalación del RAB (según sus siglas en inglés)
Sra. Dominga Adames	Sr.Gordon Banner, TNRCC (según sus siglas en inglés)
Sr. Phillip Farrell, GKDA (según sus siglas en inglés)	Srita. Laura Stankosky, EPA (según sus siglas en inglés)
Sr. Armando Quintanilla	Sr. John A. Jacobi, TDH (según sus siglas en inglés)
Sr. Kent Iglesias y suplemente del Sr. John Herndon	Sr. Sam Sánchez, SAMHD, (según sus siglas en inglés)
Srta. Tanya Huerta	Sr. Pat McCullough, AFBCA (según sus siglas en inglés)
Srta. Yolanda Johnson	Sr. Edward Weinstein, SAWS (según sus siglas en inglés)
Sr. Geoge Rice	
Sr. Roy Huff, (suplente del Sr. Mixon)	
Sr. Paul Person	
Sr. Mark Puffer	
Integrantes ausentes sin suplente:	
Sr. Juan Solís, Sr.	Sr. Nicolás Rodríguez, Jr.
Srta. Annalisa Peace	Sr. Roy Botello

I. Se abre la sesión

A. El General de Brigada Robert M. Murdock, abrió la sesión a las 6:34 p.m
B. El General Murdock le pidió a los miembros del RAB (según sus siglas en inglés) que se presentarán.

II. Temas Administrativos

A. El General Murdock dio respuesta a los puntos de acción de la reunión anterior, de la siguiente manera:
   1. La presentación de actualización de la restauración ambiental solicitada por Tanya Huerta, se incluye con las minutas de la reunión anterior. La Srta. Huerta dijo que era satifactoria.
   2. Como se solicitó, en el paquete de información se incluye una hoja de hechos con los niveles aceptables de agua potable.
   3. Se incluyeron en el paquete de información, como se solicitó, copias de las transparencias de la presentación para esta reunión, con excepción de la presentación que realizará el contratista TAPP (según sus siglas en inglés). Esas transparencias se inviarán con las minutas.
   4. La Srta. Huerta ha aceptado la invitación hecha por la Fuerza Aérea de venir a la Base a hablar sobre los problemas de limpieza. La reunión se llevará a cabo en una fecha posterior.
   5. A solicitud de la Srta. Yolanda Johnson, se proporcionó información sobre la limpieza del Sitio S-1.
   6. Se envió una carta a los miembros del RAB (según sus siglas en inglés) para invitarlos a que participaran en la mesa de trabajo como sesión de planeación. El General Murdock agradeció a los que participaron e invitó a todos los presentes a que asistieran a la mesa de trabajo del 7 de octubre.
   7. Se incluyeron las transparencias de las presentaciones de la corporación para el desarrollo del Gran Kelly (GKDC, según sus siglas en inglés) y de la Agencia de Conversión de la Fuerza Aérea (AFBCA según sus siglas en inglés) en las minutas de la última reunión.
   8. La cronología del programa de limpieza la está desarrollando el personal de Kelly y la terminarán para distribuirla en noviembre.
   9. El General Murdock se reunión con el Sr. Armando Quintanilla para hablar de las preguntas que tenía el Sr. Quintanilla sobre las prioridades del riezgo relativo de Kelly. Kelly hará una presentación sobre esas prioridades. La reunión fue el resultado de una carta del Sr. Quintanilla, se incluye una copia en el paquete de información junto con la respuesta de la Fuerza Aérea.

B. El Sr. Rice solicitó una respuesta a la pregunta que había hecho en la reunión de abril. La pregunta tenía que ver con los puntos de la reunión del Equipo de Cierre de la Base (BCT, según sus siglas en inglés) que no se le habían entregado al RAB (según sus siglas en inglés) y la razón por la cual no se le entregaban.
   1. La Srta. Mary Kelly, abogada de la AFB Kelly (según sus siglas en inglés), respondió que ya se había contestado la pregunta antes y repitió la respuesta: Todos los materiales de la BCT (según sus siglas en inglés) que se pueden proporcionar al público bajo la Ley de Libertad de Información (FOIA, según sus siglas en inglés) ya se ha entregado y se continuará integrando al RAB (según sus siglas en

inglés) sin que se haga ninguna solicitad especial. El resto de los puntos que no son parte de FOIA, (según sus siglas en inglés) como los documentos borrador internos, no se proporcionarán al RAB (según sus siglas en inglés).

C. Terminación del periódo de vigencia.
    1. El Dr. Gene Lené, Copresidente representando a la comunidad, explicó que el periodo de vigencia de algunos miembros del RAB (según sus siglas en inglés) estaba por expirar al final del año. Dijo que el RAB (según sus siglas en inglés) les ofrecería solicitudes a esos miembros para que consideran continuar siendo parte del Consejo. También dijo que le gustaría que el período de vigencia de esos miembros se extendiera un mes más para que parmanecieran en el Consejo durante la reunión de enero del 2000. Se hizo una mocion para lo anterior, fue secundada y aprobada.

D. Minutas de la reunión de julio.
    1. Se aprobaron las minutas de la reunión del RAB (según sus siglas en inglés) de julio 1999 sin cambio alguno.

III. Comentarios de la comunidad

Se llevó a cabo una sesión pública antes de la sesión del RAB (según sus siglas en inglés) que tuvo que ver con los planes de limpieza de la Zona 1 y del Sitio-4. Muchos de los comentarios realizados por los integrantes de la comunidad tenían que ver con esos planes. Se incluye el texto completo de sus comentarios como el documento adjunto No. 2 de las minutas.

IV. Informe de avances de la reurbanización

A. El Sr. Paul Robertson, representante del GKDC (según sus siglas en inglés), no pudo asistir a la reunión ni hacer la presentación programada. Se incluyeron copias de sus transparencias preparadas en los paquetes de información.

B. El Sr. Adam Antwine AFBCA (según sus siglas en inglés), hizo una presentación sobre el estado en que se encuentra el cierre y transferencia del terreno de Kelly (ver documento adjunto No. 3, copias de las transparencias). El Sr. Antwine enfatizó el compromiso ambiental de la Fuerza Aérea en Kelly no terminará cuando se haga la transferencia de la propiedad fuera del gobierno federal.

C. Discusión:
    1. El Sr. Sam Sánchez Distrito Metropolitano de Salud de San Antonio (MHD) (según sus siglas en inglés), preguntó si la AFBCA (según sus siglas en inglés) sería dueño y tenía la responsabilidad de los sistema de limpieza fuera de la Base después de que cerrara Kelly. también preguntó si la AFBCA (según sus siglas en inglés) tendría acceso a los mismos recursos de contratistas que tiene Kelly actualmente.
        a) El Sr. Antwine dijo que la AFBCA (según sus siglas en inglés) tendrá todas las responsabilidades de limpieza, incluyendo el mantenimiento de los sistemas fuera de la Base. Dijo que algunas

persona del personal ambiental de Kelly ya se habían transferido a la AFBCA (según sus siglas en inglés) y otros lo harán posteriormente. Adicionalmente dijo que la AFBCA (según sus siglas en inglés) está adquiriendo contratos con mucho de los mismos contratistas que actualmente están haciendo el trabajo de limpieza en Kelly.

2. El Sr. Rice preguntó si el RAB (según sus siglas en inglés) tendría acceso a la información ambiental recolectada por los arrendatarios.
    a) El Sr. Antwine expresó que los arrendatarios generalmente compartían la información que recolectaban, ya que les beneficia hacerlo para evitar cualquier problema innecesario de responsabilidades. Dijo que no sabía si se requería que los arrendatarios proporcionaran esa información al público.
3. El Sr. Quintanilla preguntó si los planes de la AFBCA (según sus siglas en inglés) era el gerarquizar las prioridades de limpieza, y de ser así, se podían presentar esas prioridades en la siguiente reunión del RAB (según sus siglas en inglés) expresó que le preocupaba que alguna de las propiedades en la Base se estaban limpiando antes que las de los vecindarios.
    a) El Sr. Antwine expresó que habrá prioridades establecidas y que se presentarán en la reunión de enero.
4. La Srta. Johnson expresó su opinión que en los 5 años que ella ha participado en el RAB (según sus siglas en inglés), no se ha hecho un avance real en cuanto a las participaciones de la comunidad. Dijo que esto cambiara en el futuro.
    a) La Srta. Huerta preguntó que quién tomaba las decisiones sobre las restricciones en los títulos de propiedad en los planes de limpieza. El Sr. Gordon Banner, de la Comisión para la Revisión de Recursos Naturales de Tejas, (TNRCC, según sus siglas en inglés) respondió que la TNRCC (según sus siglas en inglés) tenía que aprobar los planes de limpieza.
    b) A la Srta. Huerta le preocupaba la cantidad de terrreno que nunca estará apto para uso de los humanos. Preguntó que donde podía encontrar información sobre la cantidad de terreno que estaba clasificada como no apta para uso humanol. Se le dirigió a la encuesta ambiental y al estudio del impacto ambiental como posible fuentes de información.

V. Prioridades ambientales

A. Se proporcionó la lista de prioridades ambientales a los miembros del RAB (según sus siglas en inglés). Se hizo una moción para aceptar la ista como las prioridades recomendadas por el RAB (según sus siglas en inglés).

1. El Sr. Quintanilla pidió que se hiciera una enmienda a al lista para incluir la limpieza de cloruro de vinilo en los vecindarios. Después de una discusión, el

RAB (según sus siglas en inglés) decidió que era mejor no hacer mención específica de ningún contaminante por sí solo, y que se dejara la lista como estaba escrita con referencia en general a ”toda” la contaminación. Se aprobó la moción con el desacuerdo del Sr. Quintanilla.

VI. Proceso para la determinación de responsabilidades

A. El General Murdock habló del problema presentado por la Srta. Huerta referente al proceso para determinar si el agua subterránea está contaminada. El Sr. Banner pidió al RAB (según sus siglas en inglés) que hiciera referencia a la descripción del proceso que se encuentra en sus paquetes de información. La Srta. Huerta expresó que es información contestaba sus dudas.
B. El Sr. Rice preguntó si la TNRCC (según sus siglas en inglés) había determinado quién era el responsable de la contaminación fuera de la Base. El Sr. Banner dijo que la Fuerza Aérea era responsable de la pluma S-4. El Sr. Rice solicitó que su declaración se hiciese por escrito. El Sr. Banner le pidió al Sr. Rice que hiciera una solicitud por escrito y que con gusto se consideraría.
C. El Sr. Mark Puffer solicitó una gráfica de flujo del proceso de permisos de la TNRCC (según sus siglas en inglés) para ayudar al RAB (según sus siglas en inglés) a entender los pasos involucrados.

Hubo un corto receso.

VII. Reporte del Subcomité de Revisión Técnica TRS (según sus siglas en inglés).

A. El Dr. Lené presentó los reportes de las tres últimas reuniones del TRS (según sus siglas en inglés) (ver documento adjunto No. 4). También presentó un informe de avances de la asistencia tecnica para la participación pública (TAPP, según sus siglas en inglés) (ver documento adjunto No. 5).
B. El Sr. Quintanilla preguntó que cuánto se le había pagado al Sr. Lynch (contratista del TAPP, según sus siglas en inglés) por su revisión del reporte del plan de cumplimiento semestral. La respuesta fue de que había sido menos de $7,000. Hubo discusión debatiendo la validez y precisión del reporte del Sr. Lynch. Se concluyó que la aceptación del reporte indicado por parte del RAB (según sus siglas en inglés) mostraba que el RAB (según sus siglas en inglés) estaba de acuerdo en que el contratista había cumplido lo que se le había asignado pero que no necesriamente todos los miembros del RAB (según sus siglas en inglés) estaban de acuerdo con el contenido del reporte.
    1. La Srta. Huerta observó que los representantes del gobierno en el RAB (según sus siglas en inglés) parecían estar preocupados de la responsabilidad de terceros, mientras que los integrantes de la comunidad parecían preocuparse por los efectos de salud y valor de la propiedad. Dijo que el RAB (según sus siglas en inglés) necesitaba

cerrar ese claro. También expresó que los miembros del RAB (según sus siglas en inglés) tienen la tendencia a estar a la defensiva cuando alguien esta en desacuerdo con ellos.

2. Citando agendas personales y predilecciones entre los miembros del RAB (según sus siglas en inglés), el Sr. Paul Person hizo una moción para seleccionar un panel sin “predilecciones” para los futuros contratistas del TAPP (según sus siglas en inglés). Después de una discusión, no fue secundada la moción y se perdió.

VIII. Presentación del contratista del TAPP

A. El Sr. Jeffery Neathery, presentó su informe sobre la sobre la investigación de la corrección en la instalación en su Fase II, IRP Zona 4, Plan de Trabajo OU2 (ver documento adjunto No. 6)
   1. El Sr. Neatherys resumió sus preocupaciones sobre el reporte de la siguiente manera.
      a) El reporte era un tanto vago en cuanto al trabajo que se iba a realizar.
      b) El reporte era confuso en cuanto a los métodos que se iban a usar.
      c) El reporte necesitaba mayor revisión para quitar los errores no técnicos.
      d) Se necesitaba tener una discusión sobre los paleocanales.

Sugería que se revisara el reporte para hablar de esos puntos.

B. Después de la presentación de Sr. Neathery, el Sr. Rice preguntó si la Fuerza Aérea respondería a este reporte como lo había hecho al reporte anterior. Se presentó una moción para pedirle a la Fuerza Aérea. EPA y TNRCC (según sus siglas en inglés) que respondieran al informe del Sr. Neathery. Se aprobó la moción por unanimidad.
C. El Sr. Quintanilla expresó que le preocupaba que una gran cantidad de dinero se había pagado a un contratista para producir un plan de trabajo que se caracterizaba como “vago”. Dijo que la Fuerza Aérea debía hacer un mejor trabajo.
D. Se sugerió que se hiciera una presentación ante el RAB (según sus siglas en inglés) en la siguiente reunión, sobre los “paleocanales”, que había mencionado el Sr. Neathery.
E. Se llevó a cabo una discusión general sobre el papel que desempeñan los contratistas del TAPP (según sus siglas en inglés). Los miembros del RAB (según sus siglas en inglés) comentaron que los reportes de los contratistas eran similares a una revisión de un libro. El trabajo de los contratistas del TAPP (según sus siglas en inglés) es revisar el documento ambiental y darle su opinión al RAB (según sus siglas en inglés) del documento de la misma manera que un editor de libros lee un libro y escribe su opinión al respecto.

IX. Mesa de Trabajo para la Limpieza fuera de la Base

A. El General Murdock agradeció la presencia de las personas que asistieron a la reunión del comité de iniciativas en septiembre e invitó a todos a que asistieran a la reunión del 7 de octubre en la capilla de la Base. El propósito de esta reunión será el de aclarar la extensión de la contaminación fuera de la Base y de aprender más sobre las personas a quienes representan los miembros del RAB (según sus siglas en inglés), cómo llegar a ellos y cómo involucrarlos en el proceso de limpieza.

X. Comentarios de la comunidad

A. Los comentarios variaron desde preguntas sobre el reporte del Sr. Neathery hasta la sesión pública que se llevo a cabo antes de la sesión del RAB (según sus siglas en inglés). El texto completo de estos comentarios se incluye en el documento adjunto No. 7.

XI. Puntos para la orden del día de la siguiente reunión

A. Se programó la siguiente reunión del RAB (según sus siglas en inglés) para el 11 de enero 2000 en la escuela South San High School.

B. Los puntos sugeridos para la orden del día para la siguiente reunión:

1. Presentación sobre el proceso de gerarquerización de la restauración.
2. Informe de avances de la GKDC (según sus siglas en inglés).
3. Resultados de la mesa de trabajo.
4. Elección de miembros y codirectores.
5. Presentación del Distrito Metropolitano de Salud de San Antonio.
6. Informes sobre el metal liberado en las aguas subterráneas .
7. Presentación sobre las relaciones con la comunidad.
8. Presentación sobre los pozos e infraestructura en el terreno de Union Pacific.
9. Sesión de cartelones-estado de la zona.

C. Puntos de acción para la siguiente reunión del RAB (según sus siglas en inglés).

No.	Solicitante	Solicitud
1	Sr. Rice	Una respuesta por escrito sobre la falta de disponibilidad de ciertos materiales del BCT (según sus siglas en inglés).
2	Srta. Gómez	Información sobre un hospital temporal que anteriormente se localizaba en el lugar donde se encontraba su casa.
3	Sr. Rice	Reportarle al RAB (según sus siglas en inglés) lo que se le dijo a la Sra. Gómez.
4	Sr, Rice	La disponibilidad de información ambiental recolectada por los arrendatarios.
5	Sr. Rice	Los efectos de salud al exponerse al gas cloruro de vinilo. Además, si la AF (según sus siglas en inglés) tiene planes de corregirlo, de

		ser así cuándo.
6	Sr. Rice	La posición que tiene la AF (según sus siglas en inglés) sobre bombeo e inyección.
7	Sr. Rice	MHD (según sus siglas en inglés) proporciona la información retenida a la que se hizo referencia en el artículo reciente en el periódico y explicar la razón por la cual se retuvo.
8	Sr. Puffer	Producir gráficas que representen el estado de la zona para las reuniones del RAB (según sus siglas en inglés).
9	Sr. Quintanilla	Información sobre los choferes de camiones que se están removiendo tierra de los sitios y que están reportando que están lavando sus camiones en área donde hay pasto sin tener las precauciones debidas.
10	Sr. Quintanilla	El costo del plan revisado por el Sr. Neathery.
11	Srta. Huerta	La respuesta de la AF (según sus siglas en inglés), TNRCC y EPA (según sus siglas en inglés) al reporte del TAPP (según sus siglas en inglés).
12	Sr. Puffer	Proporcionar una gráfica del proceso de permisos.
13	Sr. Quintanilla	Hacer un reporte sobre los pozos e infraestructura en el terreno del ferrocarril Union Pacific.
14	Srta. Huerta	Hacer un rerporte sobre los paleocanales para la siguiente reunión del RAB (según sus siglas en inglés).

D. Se concluyó la reunión a las 10:40 p.m.

Mociones y resoluciones
Mociones

1. Se hizo una moción para extender el período de tiempo de vigencia hasta la reunión de enero.
    - Se aprobó por unanimidad
2. Se hizo una moción para aprobar las minutas de la reunión del RAB (según sus siglas en inglés) del 10 de julio, 1999.
    - Se aprobó por unanimidad
3. Se hizo una moción para aceptar la lista propuesta de prioridades ambientales.
    - Se aprobó con el desacuerdo del Sr. Quintanilla.

4. Se hizo una moción para solicitarle a la Fuerza Aérea, EPA (según sus siglas en inglés) y TNRCC (según sus siglas en inglés) sus comentarios sobre el informe del TAPP (según sus siglas en inglés).
    - Se aprobó por unanimidad.
5. Se hizo una moción para que se tuviera un comité sin preferencias de 4 contratista del TAPP (según sus siglas en inglés) que se seleccionarán en el futuro.
    - No se aprobó por qué no fue secundada.

Documentos adjuntos (*se proporcionaron a todos los miembros del RAB (según sus siglas en inglés) en la reunión)

1. * Paquete de materiales de la junta asesora de restauración de la AFB Kelly (según sus siglas en inglés).
    - Reunión del RAB (según sus siglas en inglés) del 5 de octubre de 1999.
2. Comentarios de la comunidad-transcripción de los comentarios de la comunidad.
3. Transparencias revisadas de la presentación actualizada del AFBCA (según sus siglas en inglés).
4. Notas del informe del subcomité de revisión técnica.
5. Informe de actualización del TAPP (según sus siglas en inglés).
6. Transparencias de la presentación del TAPP (según sus siglas en inglés).
7. Comentarios de la comunidad-transcripción de la comunidad.

XI. Agenda Items for the Next Meeting

A. The next RAB meeting was scheduled for January 11, 2000 at South San High School.

B Suggested agenda items for the next RAB meeting

1. Restoration priority process briefing
2. GKDC update
3 Results of the workshop
4. Member/Co-chair election
5. Metropolitan Health District briefing
6. Report on metal released into the groundwater
7. Community Relations briefing
8. Briefing on wells and infrastructure on Union Pacific property
9. Poster session - Zone Status

C. Action Items for the next RAB Meeting

ITEM#	Requestor	Request
1	Mr. Rice	A written response concerning the unavailability of certain BCT materials.
2	Ms. Gomez	Information on a temporary hospital formerly located at the site of her home.
3	Mr. Rice	Report to the RAB what Mrs. Gomez was told.
4	Mr. Rice	The availability of environmental data collected by tenants.
5	Mr. Rice	The health effects of exposure to vinyl chloride gas. And does the AF plan to address it and if so how.
6	Mr. Rice	The AF position on pump & inject
7	Mr. Rice	MHD provide the withheld information referenced in the recent newspaper article and explain why it was withheld.
8	Mr. Puffer	Produce zone status charts for RAB meetings
9	Mr. Quintanilla	Information about truck drivers hauling soil removed from sites are reporting they are washing their trucks in grassy area with no precautions.
10	Mr. Quintanilla	The cost of the plan Mr. Neathery reviewed.
11	Ms Huerta	AF, TNRCC & EPA response to the TAPP report.
12	Mr. Puffer	Provide a permitting process chart.
13	Mr Quintanilla	Report on wells and infrastructure on the Union Pacific Railroad site.
14	Ms. Huerta	Report on paleochannels for the next RAB meeting.

D. The meeting adjourned at 10:40 p.m.

Motions/Resolutions

Motions

1. Motion was made to extend expiring terms through the January Meeting.
   - Passed unanimously
2. Motion was made to approve the July 20, 1999 RAB minutes.
   - Passed unanimously
3. Motion was made to accept the proposed list of environmental priorities.
   - Passed with Mr. Quintanilla dissenting

4. Motion was made to request the Air Force, EPA, and TNRCC comment on the TAPP report.
    - Passed unanimously
5 Motion was made to have an unbiased committee of four select future TAPP contractors
    - Failed due to lack of second

Attachments (* Items were provided at the meeting to all RAB members).

1. *Kelly AFB Restoration Advisory Board Materials Package
    - Oct 5, 1999 RAB Meeting
2. Community Statements - transcript of community statements
3. Revised AFBCA Update Briefing Slides
4. Technical Review Subcommittee report notes
5. TAPP Update
6. TAPP Presentation Slides
7 Community Comments - transcript of community comments

Kelly AFB
Restoration Advisory Board

Materials Package

For the
October 5, 1999
RAB Meeting

Index

Action Item Index

1. **Provide slides from EMR Update presentation with minutes.**
2. **What standards apply to treated groundwater that goes into a re-use pipeline and who regulates it.**
3. **Provide copies of briefing slides in the member packet.**
4. **Provide a definition of the groundwater plume(s) and the contaminant concentrations found in them.**
5. **Provide information on health and safety precautions for the Site S-1 soil cleanup project.**
6. **Send a letter on the RAB off-base cleanup workshop objectives and call for steering committee volunteers.**
7. **Include GKDC and AFBCA slides with minutes of 20 Jul 99 RAB meeting.**
8. **Develop chronology of resolved cleanup issues for new staff and RAB members.**

20 July 99 RAB Action Item/Response

Item: 1

Description: Provide slides from EMR Update presentation with minutes.

Requestor: Ms. Huerta

OPR: Maj. de Venoge.

Action: Attach presentation slides to 20 July 99 meeting minutes

Response: Done.

20 July 99 RAB Action Item/Response

Item: 2

Description: Explain what standards apply to treated groundwater that goes into a re-use pipeline and who regulates it.

Requestor: Ms. Huerta

OPR: Mr. Ryan, AFBCA
Mr. Banner, TNRCC
Ms. Stankosky, EPA

Action: Provide to the RAB a presentation or fact sheet that explains treated groundwater standards and identify the responsible agency.

Response: Information concerning treated groundwater and who regulates follows this page.

RULES AND REGULATIONS APPLICABLE TO DISCHARGE AND REUSE OF TREATED GROUNDWATER ON EAST KELLY AFB

- The quality and quantity of treated groundwater to be discharged from the planned groundwater treatment plant on East Kelly is regulated by the Texas Natural Resource Conservation (TNRCC) under provisions of Chapter 26 of the Texas Water Code.
- TNRCC issued a permit (#03955) on 16 Jan 98 to Kelly AFB authorizing the discharge of treated groundwater from East Kelly. In summary:
  - The permit allows an average discharge of 1 million gallons per day, with a maximum of 1.5 million gallons in any 24 hour period, into an underground storm drain which discharges to Six Mile Creek.
  - The permit sets concentration limits for numerous chemicals in the discharge water and frequency of testing for these chemicals
  - The permit also requires testing called biomonitoring to ensure that the discharge is protective of aquatic life.
  - Related excerpts from the permit are included as attachment 1.
- Use of reclaimed water is also regulated by TNRCC as provided in Title 30 of the Texas Administrative Code, Chapter 210 (30 TAC 210).
- Specifically, regulations related to reuse of treated groundwater on East Kelly is outlined in Subchapter E, SPECIAL REQUIREMENTS FOR USE OF INDUSTRIAL RECLAIMED WATER. Some of the requirements and authorizations are listed below:
  - Use of industrial reclaimed water is allowed only specific activities such as irrigation of landscapes, parks, golf courses, athletic fields, non-food crops, and other types of irrigation; fire protection, dust suppression and maintenance of impoundments.
  - Use of industrial reclaimed water within the boundaries of the facility which produced the water must meet one of the following requirements.
    1. The water must be derived from specific sources listed the regulations. Examples are air conditioning condensate, cooling tower blowdown, non-contact cooling water and steam condensate. OR
    2. Meet the limitations set established in the rules for Chemical Oxygen Demand, Total Organic Carbon, Oil and Grease, Nitrate Nitrogen, Priority Pollutants, pH, Fecal Coliform, and others.
  - Use of industrial reclaimed water outside the boundaries of the facility which produced the water requires written authorization from the TNRCC.
    - The user must submit an application for such use to the TNRCC and receive approval prior to beginning reuse activities.
    - The TNRCC reviews the application for impact on human health or waters of the state and may require additional controls, monitoring and/or reporting requirements on the proposed use.
- Related excerpt from Title 30 of the Texas Administrative Code, Chapter 210 are included as attachment 2.

United States Department of the Air Force TNRCC Permit No. 03955

48-HOUR ACUTE BIOMONITORING REQUIREMENTS: FRESHWATER

The provisions of this Section apply to Outfall 003 for whole effluent toxicity testing (biomonitoring).

1. Scope, Frequency and Methodology

   a. The permittee shall test the effluent for toxicity in accordance with the provisions below. Such testing will determine if an appropriately dilute effluent sample adversely affects the survival, reproduction, or growth of the test organism(s). Toxicity is herein defined as a statistically significant difference at the 95% confidence level between the survival, reproduction, or growth of the test organism(s) in a specified effluent dilution compared to the survival, reproduction, or growth of the test organism(s) in the control (0% effluent).

   b. The permittee shall conduct the following toxicity tests utilizing the test organisms, procedures, and quality assurance requirements specified in this section of the permit and in accordance with "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fourth Edition" (EPA 600/4-90/027F), or the most recent update thereof:

      1) Acute static renewal 48-hour definitive toxicity test using Daphnia pulex. A minimum of five (5) replicates with (8) organisms per replicate shall be used for this test. The toxicity tests specified shall be conducted once per six months.

      2) Acute static renewal 48-hour definitive toxicity test using the fathead minnow (Pimephales promelas). A minimum of five (5) replicates with eight (8) organisms per replicate shall be used for this test. The toxicity tests specified shall be conducted once per six months.

      The permittee may be required to repeat an invalid test, including the control and all effluent dilutions. An invalid test is herein defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods or in this permit. An invalid test shall be repeated within the required reporting period.

   c. The permittee shall use five effluent dilution concentrations and a control in each toxicity test. These additional effluent concentrations shall be 32%, 42%, 56%, 75%, and 100% effluent. The critical dilution, defined as 100% effluent, is the effluent concentration representative of the proportion of effluent in the receiving water during critical low flow or critical mixing conditions.

   d. This permit may be amended to require a Whole Effluent Toxicity (WET) limit, chemical-specific effluent limits, a Best Management Practice (BMP), additional toxicity testing, and/or other appropriate actions to address toxicity. The permittee may be required to conduct additional biomonitoring tests if biomonitoring data indicate multiple numbers of unconfirmed toxicity events.

2. Required Toxicity Testing Conditions

   a. Test Acceptance - The permittee shall repeat any toxicity test, including the control and all effluent dilutions, which fails to meet any of the following criteria:

      1) a mean survival equal to or greater than 90% for the control;

2) a percent Coefficient of Variation (CV%, the standard deviation x 100/mean) between replicates of 40% or less in the control and critical dilution in the fathead minnow and Daphnia pulex survival tests. The CV% requirements shall not apply at the critical dilution when statistically significant lethality occurs.

b. Statistical Interpretation - For the Daphnia pulex and fathead minnow survival tests, the statistical analyses used to determine if there is a significant difference between the control and the critical dilution (100% effluent) shall be in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in the "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fourth Edition" (EPA/600/4-90/027F), or the most recent update thereof.

c. Dilution Water

1) Dilution water used in the toxicity tests shall be the receiving water collected at a point upstream of the discharge as close as possible to the discharge point, but unaffected by the discharge. Where the toxicity tests are conducted on effluent discharges to receiving waters that are classified as intermittent streams, or where the toxicity tests are conducted on effluent discharges where no receiving water is available due to zero flow conditions, the permittee shall; (a) substitute a synthetic dilution water that has a pH, hardness, and alkalinity similar to that of the closest downstream perennial water unaffected by the discharge, or (b) utilize the closest downstream perennial water unaffected by the discharge.

2) Where the receiving water proves unsatisfactory as a result of preexisting instream toxicity (i.e. fails to fulfill the test acceptance criteria of item 2.a.), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:

a) a synthetic lab water control was performed (in addition to the receiving water control) which fulfilled the test acceptance requirements of item 2.a;

b) the test indicating receiving water toxicity was carried out to completion;

c) the permittee submitted all test results indicating receiving water toxicity with the reports and information required in Part 3 of this Section.

The synthetic dilution water shall have a pH, hardness, and alkalinity similar to that of the receiving water or a natural water in the drainage basin that is unaffected by the discharge, provided the magnitude of these parameters will not cause toxicity in a synthetic dilution water control that has been formulated to match the pH, hardness, and alkalinity naturally found in the receiving water.

Upon approval, the permittee may substitute other appropriate dilution water with chemical and physical characteristics similar to that of the receiving water.

d. Samples and Composites

1) The permittee shall collect a minimum of two flow-weighted 24-hour composite samples from Outfall 003. The second 24-hour composite sample will be used for the renewal of

the dilution concentrations for each toxicity test. A 24-hour composite sample consists of a minimum of twelve (12) effluent portions collected at equal time intervals representative of a 24-hour operating day and combined proportionally to flow, or a sample continuously collected proportionally to flow over a 24-hour operating day.

2) The permittee shall collect the 24-hour composite samples such that the samples are representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance discharged on an intermittent basis.

3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the first 24-hour composite sample. The holding time for any subsequent 24-hour composite sample shall not exceed 36 hours. Samples shall be maintained at a temperature of 4 degrees Centigrade during collection, shipping, and storage.

4) If flow from the outfall being tested ceases during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions, and the sample holding time, are waived during that sampling period. However, the permittee must have collected an effluent composite sample volume sufficient to complete the required toxicity tests with daily renewal of the effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days if the discharge occurs over multiple days. The effluent composite sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report required in Part 3 of this Section.

3. Reporting

All reports, tables, plans, summaries, and related correspondence required in any Part of this Section shall be submitted to the attention of the Toxicity Evaluation Team (MC 150) of the Water Quality Division.

a. The permittee shall prepare a full report of the results of all tests conducted pursuant to this permit in accordance with the Report Preparation Section of "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fourth Edition" (EPA 600/4-90/027F), or the most recent update thereof, for every valid and invalid toxicity test initiated whether carried to completion or not. All The full reports shall be retained for 3 years at the plant site and shall be available for inspection by TNRCC personnel.

b. A full report must be submitted with the first valid biomonitoring test results for each test species and with the first test results any time the permittee subsequently employs a different test laboratory. Full reports need not be submitted for subsequent testing unless specifically requested. The permittee shall routinely report the results of each biomonitoring test on the Table 1 forms provided with this permit. All Table 1 reports must include the information specified in the Table 1 form attached to this permit.

c. Where monthly biomonitoring is required, test results (Table 1 reports) are due on or before the 20th day of the month following sampling.

d. Where quarterly biomonitoring is required, test results (Table 1 reports) are due on or before April 20th, July 20th, October 20th, and January 20th, for biomonitoring conducted during the previous calendar quarter.

e. Where semiannual biomonitoring is required, test results (Table 1 reports) are due on or before July 20th and January 20th for biomonitoring conducted during the previous 6 month period.

f. Where annual biomonitoring is required, test results (Table 1 reports) are due on or before January 20th for biomonitoring conducted during the previous 12 month period.

4. Persistent Lethality

The requirements of this Part apply only when a toxicity test demonstrates significant lethal effects at the critical dilution. Significant lethal effects are defined as a statistically significant difference, at the 95% confidence level, between the survival of the test organism in a specified effluent dilution when compared to the survival of the test organism in the control.

a. The permittee shall conduct a total of two (2) additional tests (retests) for any species that demonstrates significant lethal effects at the critical dilution. The two retests shall be conducted monthly during the next two consecutive months, unless monthly testing is specified for the species demonstrating significant lethal effects. The permittee shall not substitute either of the two retests in lieu of routine toxicity testing. All reports shall be submitted within twenty (20) days of test completion. Test completion is defined as the last day of the test.

b. If one or both of the two retests specified in item 4.a. demonstrates significant lethal effects at the critical dilution, the permittee shall initiate the TRE requirements as specified in Part 5.

c. The provisions of item 4.a. are suspended upon completion of the two retests and submittal of the TRE Action Plan and Schedule defined in Part 5 of this Section.

5. Toxicity Reduction Evaluation

a. Within forty-five (45) days of the last test day of the retest that confirms significant lethal effects at the critical dilution, the permittee shall submit a General Outline for initiating a TRE. The outline shall include, but not be limited to, a description of project personnel, a schedule for obtaining consultants (if needed), a discussion of influent and/or effluent data available for review, a sampling and analytical schedule, and a proposed TRE initiation date.

b. Within ninety (90) days of the last test day of the retest that confirms significant lethal effects at the critical dilution, the permittee shall submit a TRE Action Plan and Schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A Toxicity Reduction Evaluation is a step-wise investigation combining toxicity testing with physical and chemical analysis to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE Action Plan shall lead to the successful elimination of significant lethal effects at the critical dilution for both test species defined in item 1.c. As a minimum, the TRE Action Plan shall include the following:

1) Specific Activities - The TRE Action Plan shall specify the approach the permittee intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and/or alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled, "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures"

(EPA/600/6-91/003), or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled, "Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;

2) Sampling Plan - The TRE Action Plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/ identification/ confirmation procedures, and chemical-specific analyses when the toxicity tests show significant lethality.

Where the permittee has identified or suspects specific pollutant(s) and/or source(s) of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and/or suspected pollutant(s) and/or source(s) of effluent toxicity;

3) Quality Assurance Plan - The TRE Action Plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, as well as mechanisms to detect artifactual toxicity; and

4) Project Organization - The TRE Action Plan should describe the project staff, project manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.

c. Within thirty (30) days of submittal of the TRE Action Plan and Schedule, the permittee shall implement the TRE with due diligence.

d. The permittee shall submit quarterly TRE Activities Reports concerning the progress of the TRE. The quarterly reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:

1) results and interpretation of any chemical specific analyses for the identified and/or suspected pollutant(s) performed during the quarter;

2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;

3) any data and/or substantiating documentation which identifies the pollutant(s) and/or source(s) of effluent toxicity;

4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;

5) any data which identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant lethality at the critical dilution; and

6) any changes to the initial TRE Plan and Schedule that are believed necessary as a result of the TRE findings.

Copies of the TRE Activities Report shall also be submitted to the U.S. EPA Region 6 office (6WQ-PI) and the TNRCC Region 13 office.

e. The permittee shall continue routine biomonitoring quarterly (as a minimum) during the TRE, using the most sensitive species unless, after initiating the TRE, the effluent ceases to induce lethal responses. A cessation of lethality is defined as no significant lethality at the critical dilution for a period of twelve (12) consecutive months with at least monthly sampling and testing. Such evidence shall be submitted with a statement of intent to cease the TRE. The permittee may then resume routine biomonitoring testing.

This provision does not apply as a result of corrective actions taken. Corrective actions which eliminate or reduce effluent toxicity include source reduction or elimination, housekeeping improvements, changes in chemical usage, and modifications of influent or effluent treatment.

f. The permittee shall complete the TRE and submit a Final Report on the TRE Activities no later than twenty-eight (28) months from the last test day of the retest that confirmed significant lethal effects at the critical dilution. The permittee may petition the Executive Director (in writing) for an extension of the 28-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in their pursuit of the TIE/TRE and must prove that circumstances beyond their control stalled the TIE/TRE. The report shall provide information pertaining to the specific control mechanism(s) selected that will, when implemented, result in reduction of effluent toxicity to no significant lethality at the critical dilution. The report will also provide a specific corrective action schedule for implementing the selected control mechanism(s).

Copies of the Final Report on the TRE Activities shall also be submitted to the U.S. EPA Region 6 office (6WQ-PI) and the TNRCC Region 13 office.

g. Based upon the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements where necessary, to require a compliance schedule for implementation of corrective actions, to specify a WET limit, to specify a BMP, and/or to specify chemical-specific effluent limits.

Attach. 1

United States Department of the Air Force TNRCC Permit No. 03955

TABLE 1 - OUTFALL 003 (SHEET 1 OF 2)

BIOMONITORING REPORTING

Daphnia pulex SURVIVAL

		Date	Time		Date	Time
Dates and Times Composites Collected	No. 1 FROM:			TO:		
	No. 2 FROM:			TO:		

Test initiated: _____ am/pm _____ date

Dilution water used: _____ Receiving water _____ Synthetic Dilution water

PERCENT SURVIVAL

Time	Rep	Percent effluent (%)					
		0%	32%	42%	56%	75%	100%
24h	A						
	B						
	C						
	D						
	E						
48h	A						
	B						
	C						
	D						
	E						
Mean at test end							
CV%*							

*Coefficient of Variation = Standard Deviation x 100/mean

1. Dunnett's Procedure or Steel's Many-One Rank Test as appropriate: Is the mean survival at 48 hours significantly less (p = 0.05) than the control survival for the % effluent corresponding to:

   CRITICAL DILUTION (100%): _____ YES _____ NO

2. Enter percent effluent corresponding to the LC50 below:
   48 hour LC50 (Daphnia) = _____ % effluent
   95% confidence limits: _____
   Method of LC50 calculation: _____

United States Department of the Air Force

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TABLE 1 - OUTFALL 003 (SHEET 2 OF 2)
BIOMONITORING REPORTING

Fathead Minnow (Pimephales promelas) SURVIVAL

		Date	Time		Date	Time
Dates and Times Composites Collected	No. 1 FROM:			TO:		
	No. 2 FROM:			TO:		

Test initiated: _____ am/pm _____ date

Dilution water used: _____ Receiving water _____ Synthetic Dilution water

PERCENT SURVIVAL

Time	Rep	Percent effluent (%)					
		0%	32%	42%	56%	75%	100%
24h	A						
	B						
	C						
	D						
	E						
48h	A						
	B						
	C						
	D						
	E						
Mean at test end							
CV%*							

1. Dunnett's Procedure or Steel's Many-One Rank Test as appropriate:

   Is the mean survival at 48 hours significantly less (p = 0.05) than the control survival for the % effluent corresponding to: CRITICAL DILUTION (100%): _____ YES _____ NO

2. Enter percent effluent corresponding to the LC50 below:

   48 hour LC50 (Pimephales) = _____ % effluent
   95% confidence limits: _____
   Method of LC50 calculation: _____

ATTACH 2

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

Outfall Number 002

Effluent Characteristic	Discharge Limitations			Minimum Self-Monitoring Requirements	
	Daily Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Daily Max. Measurement Frequency	Sample Type
Total PCBs	0.000007	0.000015	0.00002	1/week	Composite
Total Beryllium	0.004	0.009	0.014	1/year	Composite
Hexavalent Chromium	0.014	0.029	0.044	2/month	Composite
Total Manganese	0.273	0.579	0.869	1/week	Composite
Total Mercury	0.00007	0.00014	0.0002	1/week	Composite
Total Silver	0.013	0.027	0.041	1/week	Composite
Cyanide (*1)	0.022	0.047	0.071	1/week	Composite

(*1) Cyanide amenable to chlorination or weak-acid dissociable.

2. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/day, by grab sample.

3. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

4. Effluent monitoring samples shall be taken at the following location: At Outfall 002, discharge from the groundwater treatment unit prior to entering the storm drainage system and commingling with other discharges from the base.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning upon date of issuance and lasting through date of expiration, the permittee is authorized to discharge treated groundwater subject to the following effluent limitations:

The daily average flow of effluent shall not exceed 1.0 million gallons per day (MGD). The total volume discharged during any 24-hour period shall not exceed 1.5 million gallons.

Effluent Characteristic	Discharge Limitations			Minimum Self-Monitoring Requirements	
	Daily Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Daily Max. Measurement Frequency	Sample Type
Flow (MGD)	(Report)	(Report)	N/A	Continuous	Record
Chemical Oxygen Demand	150	300	450	1/day	Composite
Vinyl Chloride	0.011	0.023	0.035	1/week	Composite
Methylene Chloride	0.036	0.170	0.255	1/month	Composite
1,1-Dichloroethene	0.022	0.060	0.090	1/year	Composite
1,1-Dichloroethane	0.022	0.059	0.089	1/month	Composite
1,2-Dichloroethene	0.025	0.066	0.099	1/month	Composite
1,2-Dichloroethane	0.027	0.058	0.087	1/year	Composite
Trichloroethene	0.026	0.069	0.104	1/month	Composite
Benzene	0.027	0.058	0,087	1/week	Composite
Toluene	0.028	0.074	0.111	1/month	Composite
Chlorobenzene	0.142	0.380	0.570	1/month	Composite
Ethylbenzene	0.142	0.380	0.570	1/month	Composite
1,1,1-Trichloroethane	0.022	0.059	0.089	1/month	Composite
Tetrachloroethene	0.027	0.058	0.087	1/year	Composite
1,3-Dichlorobenzene	0.105	0.222	0.333	1/year	Composite
1,2-Dichlorobenzene	0.050	0.106	0.159	1/month	Composite
2,4-Dimethylphenol	0.019	0.047	0.071	2/month	Composite
Naphthalene	0.019	0.047	0.071	1/month	Composite
2-Methylnaphthalene	0.027	0.058	0.087	1/year	Composite
Fluorene	0.004	0.009	0.014	2/month	Composite
Bis(2-Ethylhexyl) Phthalate	0.015	0.031	0.047	1/month	Composite
Anthracene	0.00013	0.0003	0.0005	2/month	Composite
Fluoranthene	0.0008	0.0018	0.0027	2/month	Composite

ATTACH. 1

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

Outfall Number 003

Effluent Characteristic	Discharge Limitations			Minimum Self-Monitoring Requirements	
	Daily Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Daily Max. Measurement Frequency	Sample Type
Total PCBs	0.000007	0.000015	0.00002	1/week	Composite
Total Beryllium	0.004	0.009	0.014	1/year	Composite
Hexavalent Chromium	0.014	0.029	0.044	2/month	Composite
Total Manganese	0.273	0.579	0.869	1/week	Composite
Total Mercury	0.00007	0.00014	0.0002	1/week	Composite
Total Silver	0.013	0.027	0.041	1/week	Composite
Cyanide (*1)	0.022	0.047	0.071	1/week	Composite

(*1) Cyanide amenable to chlorination or weak-acid dissociable.

2. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/day, by grab sample.

3. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

4. Effluent monitoring samples shall be taken at the following location: At Outfall 003, discharge from the groundwater treatment unit prior to entering the storm drainage system and commingling with other discharges from the base.

SUBCHAPTER E : SPECIAL REQUIREMENTS FOR USE OF INDUSTRIAL RECLAIMED WATER
§§210.51-210.55
Effective May 12, 1997

§210.51. When Authorization Is Required and How to Obtain It; Effect on Permitted Discharges.

(a) A person who produces, provides, or uses industrial wastewater as industrial reclaimed water must obtain agency authorization if the use constitutes a discharge. A conveyance or use of industrial reclaimed water that does not constitute a discharge does not require authorization.

(b) This subchapter authorizes the use of industrial reclaimed water if the requirements of the subchapter are met. If a use of industrial reclaimed water is authorized by this subchapter then an amendment to any related wastewater discharge permit is not required.

(c) The requirements of this subchapter do not apply to the use of industrial reclaimed water when the use is authorized by permit or by commission rules other than those in this subchapter. However, when a use of industrial reclaimed water is regulated under Chapter 335 of this title (relating to Industrial Solid Waste and Municipal Hazardous Waste) the use shall comply with the requirements of Chapter 335 and this subchapter.

(d) The use of industrial wastewater as industrial reclaimed water as authorized by this subchapter shall not be considered a violation of the related permit for the discharge of industrial wastewater. Except as provided by §210.54 of this title (relating to the Authorization of Industrial Reclaimed Water Use), effluent limitations provided in the permit remain in effect for the discharge of the industrial wastewater.

(e) Nothing in this subchapter shall alter any requirement to obtain a water right authorization.

Adopted April 16, 1997 Effective May 12, 1997

§210.52. Definitions.

The following words and terms when used in this subchapter have the following meanings unless the context indicates otherwise.

(1) **Blowdown** - The discharge of recirculating water for the purpose of discharging materials contained in the water, the further buildup of which would cause concentration in amounts which could damage or impair machinery, equipment, or systems.

(2) **Commingled Wastewater** - Industrial wastewater that contains any amount of domestic wastewater.

(3) **Discharge** - the release or disposal of waste into or adjacent to any water in the state which in itself or in conjunction with any other discharge or activity causes, continues to cause, or will cause pollution of any of the water of the state.

(4) **Industrial Reclaimed Water** - Any industrial wastewater which has been treated, if necessary, to a quality suitable for reuse .

(5) **Industrial Wastewater** - A non-domestic or non-municipal wastewater.

(6) **Minimum Analytical Level or MAL** - The lowest concentration at which a particular substance can be quantitatively measured in the matrix of concern (i.e., wastewater) with a defined precision level, using approved analytical methods.

(7) **Non-process Area Stormwater** - Stormwater which has not come into direct contact with manufacturing or process areas, and has not come into direct contact with manufacturing or process materials.

(8) **Non-contact Cooling Water** - Water used for cooling which does not come into direct contact with any raw material, intermediate product, waste product, or finished product.

(9) **Once-Through Cooling Water** - Water passed through the main cooling condensers in one or two passes for the purpose of removing waste heat.

(10) **POTW** - Publicly Owned Treatment Works.

(11) **Priority Pollutants** - The pollutants as listed in 40 CFR 122, Appendix D, Tables 2 and 3, plus 2,3,7,8-TCDD and asbestos.

(12) **Producer** - An entity or person that produces industrial reclaimed water as identified in this subchapter.

Adopted April 16, 1997 Effective May 12, 1997

§210.53. Requirements in Other Subchapters.

(a) Except as specified in this section, the requirements for a reclaimed water producer, provider, or user described in Subchapters A, B, C, and D of this Chapter of this title (relating to Use of Reclaimed Water) apply to a producer, provider, or user of industrial reclaimed water.

(b) The producer or user of industrial reclaimed water is not required to hold a permit for treatment and disposal as described in §210.1 of this title (relating to Applicability).

(c) A producer that uses industrial reclaimed water only within the boundaries of the industrial facility, or within the boundaries of properties contiguous to the facility and owned by the producer, is

not required to comply with §210.4 of this title (relating to Notification). However, the producer must comply with all applicable requirements of this chapter pertaining to the industrial reclaimed water use. Unless the facility provides domestic water or wastewater services to the public, such as at a university, hospital, hotel, or similar institution, all exposed or buried piping receiving industrial reclaimed water constructed within the boundaries of the industrial facility is exempt from the color coding requirements of §210.25 of this title (relating to Special Design Criteria for Reclaimed Water Systems).

(d) The requirements of §210.5 (d) of this title (relating to Authorization for the Use of Reclaimed Water) do not apply to a provider or user of industrial reclaimed water.

(e) The requirements of §210.25 (e), (f), and (h) of this title (relating to Special Design Criteria for Reclaimed Water Systems) do not apply to the producer, provider, or user of industrial reclaimed water within the boundaries of the industrial facility or within the boundaries of properties contiguous to the facility and owned by the producer.

(f) The requirements of §210.31 of this title (relating to Applicability), §210.32 of this title (relating to Specific Uses of Reclaimed Water), §210.33 of this title (relating to Quality Standards for Using Reclaimed Water), §210.34 of this title (relating to Sampling and Analysis), §210.35 of this title (relating to Guidelines for Certain Distribution Systems), and §210.36 of this title (relating to Record Keeping and Reporting), do not apply to the producer, provider, or user of industrial reclaimed water.

(g) For purposes of applying the requirements of §210.23 of this title (relating to Storage Requirements for Reclaimed Water) to the authorized uses of industrial reclaimed water identified in §210.54 of this title (relating to Authorization of Industrial Reclaimed Water Use), industrial reclaimed water which is exempt from authorization will be considered equivalent to Type I reclaimed water. If authorization is required, then the executive director may determine whether other lining requirements are needed.

(h) Notwithstanding subsections (b) through (f) of this section, industrial reclaimed water that consists of industrial wastewater commingled with domestic wastewater is subject to all requirements of §§210.1-210.9 of this title (relating to General Provisions), §§210.21-210.25 of this title (relating to General Requirements for the Production, Conveyance, and Use of Reclaimed Water), and §§210.31-210.36 of this title (relating to Quality Criteria and Specific Uses for Reclaimed Water).

Adopted April 16, 1997 Effective May 12, 1997

§210.54. Authorization of Industrial Reclaimed Water Use.

(a) In addition to the other requirements in this section, a producer must:

(1) provide an authorized alternative means of disposing of the industrial wastewater when the user cannot use industrial reclaimed water; and

(2) if the producer is within the service area of a POTW, give notice to the POTW of the intent to reuse industrial wastewater under this subchapter.

(b) This subsection authorizes the use of industrial reclaimed waters if the requirements of paragraphs (1) and (2) of this subsection are met:

(1) The use is for one of the following activities:

(A) Residential or industrial irrigation, including landscape irrigation.

(B) Urban uses, including but not limited to irrigation of parks, golf courses with restricted or unrestricted public access, school yards, athletic fields, right-of-ways.

(C) Fire protection.

(D) Dust suppression and soil compaction.

(E) Maintenance of impoundments.

(F) Irrigation of non-food crops, including but not limited to sod farms and silviculture.

(2) The use of the industrial reclaimed waters satisfies the following:

(A) The industrial reclaimed waters are used within the boundaries of the producer's facility or within the boundaries of property that is contiguous to the producer's facility and owned by the producer, and are derived from one or more of the following sources: air conditioning condensate, cooling tower blowdown, washwater from washing whole fruits and vegetables, non-contact cooling water, non-process area stormwater, once through cooling water, or steam condensate; or

(B) The industrial reclaimed waters are used within the boundaries of the producer's facility or within the boundaries of property that is contiguous to the producer's facility and owned by the producer, and meet the following criteria:

(i) Chemical Oxygen Demand less than or equal to 150 mg/l,

(ii) Total Organic Carbon less than or equal to 55 mg/l,

(iii) Oil and Grease less than or equal to 10 mg/l,

(iv) Nitrate Nitrogen less than or equal to 10 mg/l,

(v) Priority Pollutant concentrations less than or equal to the MAL (2,3,7,8-TCDD and asbestos are only required to be sampled if believed to be present), and

(vi) pH not less than 6.0 nor greater than 9.0 standard units.

(vii) If the industrial reclaimed water is commingled with any amount of domestic wastewater, then the fecal coliform concentration measured from a grab sample must be less than or equal to 75 CFU/100 ml.

(c) The executive director may authorize uses of industrial reclaimed waters for other types of use, locations of use, and of other water quality, in addition to those uses authorized under subsection (b) of this section.

(1) The executive director may approve the use of industrial reclaimed waters at sites other than within the boundaries of the producer's facility and at sites other than within the boundaries of property that is contiguous to the producer's facility.

(2) The executive director will review any proposed use of industrial reclaimed waters for consistency with the wastewater generated. The executive director may impose additional controls on the proposed use.

(3) The executive director may approve of the reuse of industrial reclaimed water if the concentration of a priority pollutant exceeds a MAL. The executive director will consider the concentration of the constituent and its potential for an adverse impact upon human health or waters in the state in making a determination to approve the use and may include additional monitoring and/or reporting requirements.

(4) A user shall submit an application to the executive director on a form provided by the executive director. The user shall not begin use of industrial reclaimed waters before obtaining the executive director's written authorization.

Adopted April 16, 1997 Effective May 12, 1997

§210.55. Record Keeping and Reporting.

(a) The industrial reclaimed water provider shall maintain records on site for a period of five years. The records to be maintained by the provider include:

(1) copies of notifications made to the commission concerning industrial reclaimed water projects.

(2) copies of contracts made with each industrial reclaimed water user.

(3) daily records of volume of water delivered to each reclaimed water user.

(b) For industrial reclaimed waters authorized under §210.54 (b)(2)(B) or (c) of this title (relating to Authorization of Industrial Reclaimed Water Use), records of water quality analyses must be kept on-site for a period of at least five years. A grab sample of the reclaimed water must be taken and analyzed at least once per year for all of the constituents listed in §210.54(b)(2)(B) of this title (relating to Authorization of Industrial Reclaimed Water Use), and once per month for only those pollutants that

are expected to be present in any detectable amount. Additionally, field measurement of pH is required at a frequency of once per week.

Adopted April 16, 1997

Effective May 12, 1997

20 July 99 RAB Action Item/Response

Item: 3

Description: Provide copies of briefing slides in the member meeting packet.

Requestor: Mr. Solis

OPR: Mr. Walters

Action: Include presentation slides in member meeting packets.

Response: Presentations slides are in the member meeting packets. Slides for the 5 Oct meeting can be found at tabs 4, 5, and 6. The TAPP presentation was not available at printing (17 Sept 99).

20 July 99 RAB Action Item/Response

Item: 4

Description: Provide a definition of the groundwater plume(s) and the contaminant concentrations found in them.

Requestor: Ms. Huerta

OPR: Mr. Ryan

Action: Meet with Ms. Huerta and provide the information.

Response: Ms. Huerta has been invited to the base to for a thorough review of the groundwater plume(s) and the contaminant concentrations. For Ms. Huerta's convenience, the session will be set for a date in November.

20 July 99 RAB Action Item/Response

Item: 5

Description: Provide information on health and safety precautions for the Site S-1 soil cleanup project.

Requestor: Mrs. Johnson

OPR: Maj. de Venoge,
Ms. Cisneros

Action: Provide the information to Mrs. Johnson. Include the information in the members meeting packets

Response: Maj. de Venoge talked with Mrs. Johnson and ensured she had the information. Materials are included following this page.

Some Questions and Answers about the Scheduled Excavation of Site S-1 at Kelly Air Force Base

Why is this excavation being done?

Removing the soil will reduce or eliminate the compounds dicholorobenzene, TPH, and BTEX that are currently present in the soil at Site S-1. As they seep through the soil, rainwater and other surface water carry these compounds to the groundwater. This cleanup action also is necessary to meet federal and Texas Natural Resource Conservation Commission regulations.

Explain what the compounds dichlorobenzene, TPH, and BTEX are.

Dichlorobenzene is a member of the benzene family of chemicals. Long-term exposure to benzene at high concentrations may cause cancer. Compounds with dichlorobenzene were used in aircraft maintenance operations.

TPH is "total petroleum hydrocarbons," which are a complex of fuel and lubricant components. Exposure to some of these components in high concentrations for extended periods of time may cause cancer.

BTEX is a combination of compounds found in gasoline, diesel, or other fuels. The compounds are: benzene, toluene, ethyl benzene, and xylene. Benzene may cause cancer if someone is exposed at high concentrations over a long period.

Will workers or nearby residents be exposed to these compounds as the soil is being dug or hauled away?

Workers on the site will wear personal protective clothing primarily to protect them from contact with the soil. They will wear white, paper-like suits made of a material called Tyvek. Soil contact could irritate the skin. Most of their other clothing is for construction safety protection, such as steel-toed boots and hard hats.

Residents should have no contact with this soil. Dust will be controlled with wetting and use of a special foam. Odors will be minimized from use of another special, odor-suppressive foam. Trucks leaving the site will be covered.

Are you going to monitor the air at the site?

Yes. Three 24-hour monitors will operate throughout the removal activities. Additionally, a health-and-safety officer on site will take several readings with a hand-held monitor around the perimeter of the site throughout each day. If standards are exceeded, excavation will be stopped or slowed so that foam can be applied. I can think of no circumstance under which the neighborhood would have to be evacuated. The soil we are removing has much lower concentrations of these compounds than would materials with higher concentrations that might require a HazMAT Team for a cleanup. All readings that we take will be available in documents that are open to the public.

What foams will be used, and do they pose any danger to workers and nearby residents?

The foam that may be used to reduce dust and erosion is called Coherex. This hair spray-like compound is used to control dust. Tests have shown no harmful effects in plants or animals, and the compound will biodegrade over time. It is used all over the country to control dust at ballparks and playgrounds, dirt roads and driveways, and on road shoulders and farm service roads. It is made of natural petroleum resins that encapsulate the dust. This light, glue-like material is sprayed on the soil. IT used it at Fort Benjamin Harris in Indiana. The current project manager from IT Corporation managed this project, too.

The foam that may be used inside the excavation site to control odor is made by Rusmar. This long-duration foam is white and looks like shaving cream. It is often used at municipal landfills to control odors in areas that have not yet been covered by soil. This foam layer, made up almost entirely of air bubbles and a small amount of water and solids, creates a barrier that will trap the odors, dust, and gases that may come from the excavated soil. This foam will biodegrade and is non-toxic, non-hazardous, and non-flammable.

When will the trucks and heavy equipment be in use at the site?

Sometime this fall, the work will begin and last for about eight weeks. We plan to operate from 7 a.m. to 6 p.m., Mondays through Fridays. There may be some work done on Saturdays.

What routes will the trucks take to bring clean soil to the site and to haul away the excavated soil?

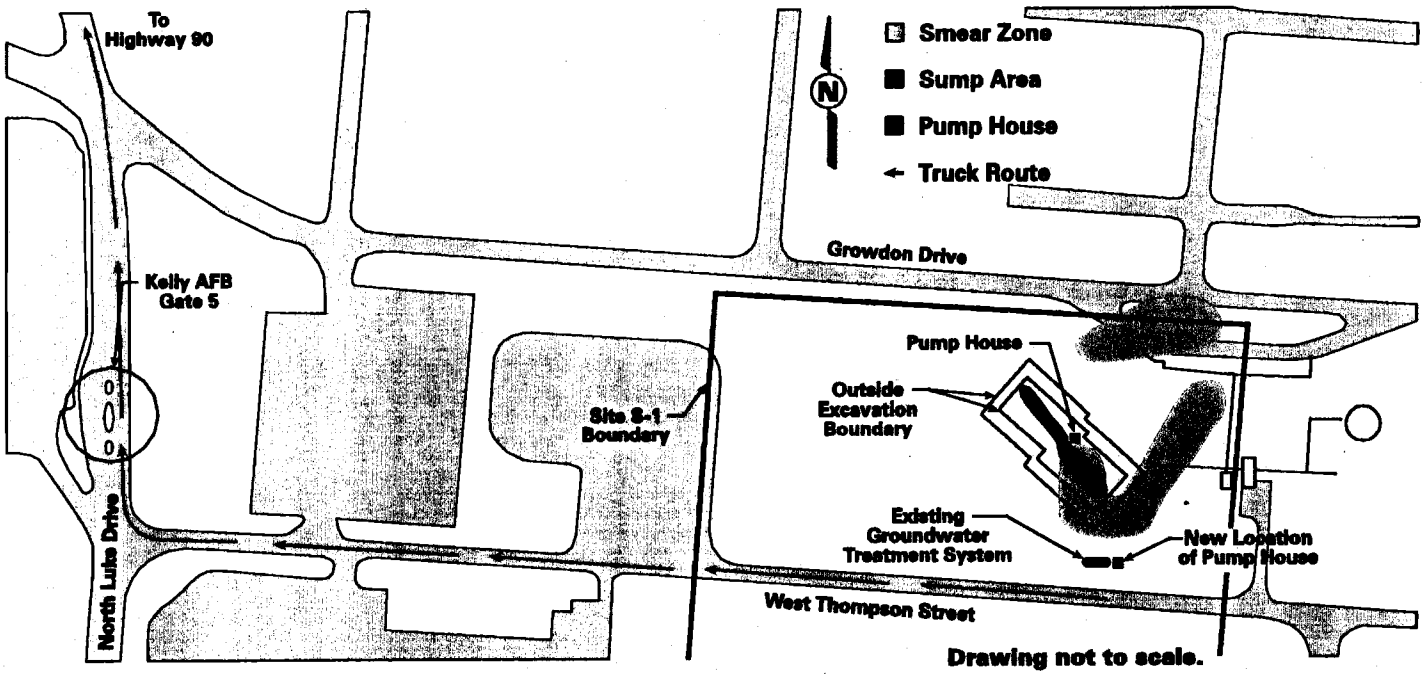
Trucks will load at the site and exit onto West Thompson Street. They will turn onto North Luke Drive and exit Kelly Air Force Base through Gate 5 and proceed to Highway 90 West to Loop 410 to the Covel exit. Should analyses of soil samples taken at the site indicate that the soil needs to go to another type of landfill outside of San Antonio, they will travel by the same route to Highway 90 East to Interstate 37 to Robstown.

The clean soil will be brought to the site via Highway 90 through Gate 5 and enter the site from North Luke Drive and West Thompson Street.

What will happen after the soil has been removed?

The site will be covered with clean soil and reseeded with grass or covered with gravel. Wells will be drilled throughout the site and surrounding area to remove groundwater and vapors from any remaining affected soil at the site. The groundwater will be pumped to the existing treatment facility located at the site. Pumping out the groundwater will keep the water table lower than usual to allow any compounds in the remaining soil to be removed and sent through a vapor treatment system. This system is called a vacuum-enhanced pumping system.

Affected Soils at Site S-1



20 July 99 RAB Action Item/Response

Item: 6

Description: Send a letter on the RAB off-base cleanup workshop objectives and call for steering committee volunteers.

Requestor: Various

OPR: Maj. de Venoge,

Action: Sending a letter to all RAB members stating the workshop's objectives and call for steering committee volunteers.

Response: The letter was sent and follows this page.

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS SAN ANTONIO AIR LOGISTICS CENTER (AFMC)
KELLY AIR FORCE BASE, TEXAS

Brigadier General Robert M. Murdock
Vice Commander
100 Moorman Street, Suite 1
Kelly AFB TX 78241-5808

5 AUG 1999

Dear RAB Member

At the July 20, 1999 meeting of the Restoration Advisory Board (RAB), the RAB approved holding a RAB workshop. The purpose of the workshop will be to discuss Kelly AFB activities that address off-base contamination and the most effective methods for sharing such information with residents. The RAB recommended conducting the workshop after the release of the report from the Agency for Toxic Substances and Disease Registry, scheduled for August 24, 1999. No date for the workshop has been set.

With regard to off-base contamination, our goal is to provide the RAB with clarification and working knowledge of the issue. Kelly staff plans to discuss the types of contaminants, interim actions, alternatives that may be a part of proposed final remedial actions and the cleanup schedule.

Because of the complexity of the information, the off-base contamination issue is particularly challenging to convey in laymen's terms. Therefore, a second objective of the workshop will be to gain a clear understanding of how you, as a RAB member, can share information with the residents you represent. You will be asked at the workshop to recommend methods to disseminate information to residents. This information will allow us to mutually enhance our public outreach initiatives about the remediation process.

As agreed, we are soliciting volunteers to participate in a small working group in conjunction with a facilitator to plan the workshop. We hope you will volunteer.

Please respond to Mr. Dick Walters at 925-3100 ext. 230 no later than August 13, 1999, if you would like to volunteer to develop the workshop and objectives. Working together, we can answer many of the community members concerns about off-base contamination. We look forward to a productive and informative workshop.

Sincerely

ROBERT M. MURDOCK
Brigadier General, USAF
RAB Co-Chair

Gene W. Lené
RAB Community Co-Chair

20 July 99 RAB Action Item/Response

Item: 7

Description: Include GKDC and AFBCA slides with minutes of 20 Jul 99 RAB meeting.

Requestor: Various

OPR: Mr. Roberson
Mr. McCullough

Action: Attach presentation slides to 20 July 99 meeting minutes

Response: Done.

20 July 99 RAB Action Item/Response

Item: 8

Description: Provide chronology of resolved cleanup issues for new staff and RAB members.

Requestor: Ms. Huerta

OPR: Mr. Walters
Mr. Ryan

Action: Develop chronology of resolved cleanup issues for new staff and RAB members.

Response: Environmental Management is currently preparing an illustrated historical brochure summarizing Kelly's environmental initiatives. It will outline the development of the Logistics Depot and the origins of contaminated sites resulting from the application of leading edge technologies and commonly accepted maintenance and disposal practices. Also highlighted will be Kelly's award winning Pollution Prevention Program, the progress of the Installation Restoration Program, and the transition to the Air Force Base Conversion Agency.

Completion is projected for November 1999.

Kelly Air Force Base Restoration Advisory Board Meeting
20 July 1999 6:30 p.m.
Brentwood Middle School

Members/Alternates Present:

Public Members:

Brig. Gen. Robert M. Murdock
RAB Installation Co-Chair
Mr. Gordon Banner
TNRCC
Ms. Laura Stankosky
EPA
Mr. John A. Jacobi
TDH
Mr. Sam Sanchez
Metropolitan Health District
Mr. Adam Antwine
AFBCA

Community Members:

Dr. Gene Lené
RAB Community Co-Chair
Mr. Sam Murrah
Mrs. Dominga Adames
Mr. Paul Roberson
Greater Kelly Development Corp.
Mr. Leo Lozano
Mr. Quintanilla's alternate
Ms. Tanya Huerta
Mrs. Yolanda Johnson
Mr. Allan Hagelthorn
Mr. Juan Solis, Sr.
Mr. Paul Person

Members Absent Without Alternate:

Mr. Mark Puffer
Mr. Carl Mixon
Ms. Annalisa Peace
Mr. Edward Weinstein
Mr. Kent Iglesais
Mr. George Rice
Mr. Nicolas Rodriguez, Jr.

Item I: Call to Order

Brig. Gen. Robert M. Murdock called the meeting to order at 6:34 p.m.

Item II: Administrative Topics

A. RAB members introduced themselves.
B. Gen. Murdock stated that he had received an agenda request from Mr. Quintanilla. Since Mr. Quintanilla could not attend the meeting, the information requested was provided by letter. A copy of the request and response was provided in the RAB Materials Package. The General asked Mr. Quintanilla's alternate, Mr. Lozano, to pass the information on to him.
C. Review of Action Items
    1. Gen. Murdock commented on the action items from the last meeting. He referred members to their materials packet and addressed the following items individually.
        a. Items 1 and 2: In response to the RAB's request to have representative present at BRAC Closure Team (BCT) meetings, Ms. Mary Kelly, Kelly AFB Legal Office, said that, consistent with Department of Defense guidance, BCT meetings would continue to be attended only by BCT members, and not open to members of the public or to RAB representatives. Minutes and any other information relating to BCT activities that would be available under the Freedom of Information Act will continue to be made available to the RAB without FOIA requests. Ms. Kelly said

that a filing has been made with DoD and other federal agencies complaining about, among other things, closed BCT meetings and because that filing is under review, it would be inappropriate for the Air Force to change its policy at this time. In response to a question from Mr. Lozano about whether the documents made available to the RAB had been "sanitized," Mrs. Kelly replied that the documents were the same as were provided to the regulators. Gen. Murdock gave further clarification by saying that any document used in making cleanup decisions at Kelly that the BCT would present to regulators would be made available for review

b. Item 3: In response to a request for information about efforts to evaluate the San Antonio River, Gen. Murdock said that a San Antonio River Authority (SARA) representative will be making a presentation later in the meeting.
c. Item 4: In response to the request for a list of agencies involved in the cleanup and their roles, Gen. Murdock said a chart and handout showing the agencies involved and their relationships is available for review.
d. Item 5: In response to an inquiry about the Air Force's policy on providing access to environmental documents, Gen. Murdock said the policy has not changed. Anyone who wishes to come out to the base and examine documents is welcome to do so.

D. Review of Minutes
1. In a letter to Gen. Murdock, Mr. Quintanilla pointed out that the reply made at the previous meeting regarding the existence of a mission statement for EPA was incorrect and asked the minutes reflect that EPA does have a mission statement. Mr. Quintanilla's letter was attached to the minutes as supplemental information. Corrections to the minutes included changing the word "wells" (Section 10.B.3) to "soils" and changing Ms. Stankosky's references to "grants" to "contractor funding." The minutes were approved with the additions and changes incorporated as noted.

E. New Member vote
1. Dr. Gene Lené, community co-chair, introduced Mr. Roy Botello as an applicant for a seat on the RAB. Mr. Botello was nominated by City Council Representative Vasquez to represent the interests of citizens living in District 5. Mr. Botello spoke briefly about his desire to be on the board, saying he believes anyone should be able to express his concerns or questions to the RAB and receive an answer. RAB community members voted unanimously to approve his application.

F. ATSDR Update
1. Dr. Lené read a letter from Dr. David Fowler of ATSDR (see attached). He said the San Antonio Metropolitan Health District (SAMHD) has been working with ATSDR putting on workshops in the area.
2. Mr. Sam Sanchez, SAMHD, said on June 4, 1999 his agency held an all-day environmental health education seminar for area nurses at Southwest General Hospital. More than 100 nurses attended. On July 22, a one-hour presentation will be given to physicians on the same topic, also at SW General Hospital. He said community education seminars will be held soon.

Item III: Community Comments

A. Dr. Gene Lené invited statements from members of the public in attendance at the meeting. No community members made statements.

Item IV: Cleanup Systems Update

A. Maj. Tom deVenoge, Kelly AFB, presented a zone-by- zone status report on the cleanup at Kelly. (Copies of his presentation slides are attached.) The Major emphasized that much of the work done will have a very positive effect on the plumes extending off base.

B. Discussion

1. With regard to statements made by Maj. de Venoge about a treatment plant located on East Kelly, Ms. Tanya Huerta, community representative, asked what the discharge standards were for treated water released by the plant. She asked if the standards were different if it were discharged into Six Mile Creek or if it were discharged to San Antonio Water System for reuse. Maj. deVenoge replied that an answer would be researched and forwarded to her.

2. Mr. Sanchez commented that the new plume map shows no contamination north of Highway 90. He asked if this was true. Major deVenoge said the map shows the Air Force has not investigated north of Highway 90.
    a. Ms. Huerta asked why the Air Force has not looked north of Highway 90. Major deVenoge said the evidence appears to show there may be sources other than Kelly AFB contributing to the plume east of Kelly. He said the Air Force is working with the EPA and TNRCC to determine how to investigate and clean up the contamination. Gen. Murdock said that the information shows that some of the contamination is coming from sources other than Kelly AFB.
    b. Ms. Huerta asked how the regulatory agencies determine who cleans up the contamination. That question will be answered at the next meeting.
3. Ms. Dominga Adames, community representative, asked who is allowing houses to be built in the areas of contamination and why construction is not being stopped. Maj. deVenoge said the Air Force has no control over building permits. That responsibility belongs to the city zoning authority.
4. Ms. Huerta said the community is concerned about human health and they want assurance human health is being protected.
5. Mr. Juan Solis, community representative, said he is confident the Air Force is doing all it can to clean up the contamination. He asked that the briefing slides be made available to RAB members. He also stated that more technical people should to talk to the public. Gen. Murdock said that every effort would be made to provide briefing slides in future materials package.
6. With regard to comments on a plan to excavate contaminated soil on the north side of the base, Ms. Yolanda Johnson, community representative, asked if there will be air monitoring present during the excavation. She also wanted to know how and where the soil was being transported. Major deVenoge said air monitoring equipment will be on site to monitor emissions and that a suppressive foam will be used to minimize air emissions. He also said he did not have the information to respond to her question on materials transport with him, but would get it for her.
    a. Mr. Solis said it is important for RAB members to have specific information to tell friends and neighbors.
7. Ms. Adames stated that she wants to know why clothes dried outside in her back yard have a terrible smell. No answer was given.
8. Gen. Murdock proposed holding a RAB workshop to help develop strategies for public communication about the off-base contamination. After some discussion, the

RAB decided to hold the workshop sometime after ATSDR releases its report (August 24).

a. Gen. Murdock will provide a letter proposing objectives and goals and asking for volunteers to serve the workshop steering committee.
b. Topics would be proposed by the steering committee. Once a list of topics is developed, the RAB will decide which topics will be discussed. A facilitator will be used to help keep the workshop focused. The meeting will be open to the public.

Item V: Redevelopment Update

A. Because of the shortness of time, and with the concurrence of the RAB members present, the Co-chairs postponed until the next meeting the scheduled presentations from the Greater Kelly Development Corporation (GKDC) and Air Force Base Conversion Agency (AFBCA) on base redevelopment issues..

Item VI: Break

Members took a short break.

Item VII: San Antonio River Authority

A. Mike Gonzalez, San Antonio River Authority, presented the findings of a recent investigation done on the quality of the river. (Copies of his presentation slides are attached.)
B. The investigation has found no evidence that contamination from Kelly AFB has impacted the San Antonio River.
   1. While some seeps near the riverbank contained small concentrations of solvents, no solvents were found to reach the river.
   2. Mr. Gonzalez said the investigation did not indicate a source for the contaminants.
   3. He said in addition to Kelly, there are numerous potential industrial sources along the river.
C. Recent testing shows the San Antonio River is doing well for an urban stream, and an analysis of long-term trends shows gradual improvement in the quality of the stream.

Item VIII: Subcommittee Reports

A. Technical Review Subcommittee (TRS) Report
   1. Dr. Lené gave a brief report of the TRS's three meetings held since the last RAB. (Copies of the slide presentations made at the TRS meetings are attached.)
   2. The TRS identified, by priority, 25 wells for the EPA to sample using the contractor funding recently made available by EPA. EPA has hired a contractor to do the sampling.
   3. A Pre-performance meeting was held July 6 with Mr. Jeff Neathery of Neathery Environmental Services. Mr. Neathery will produce a plain-language summary and technical review of the Work Plan for IRP Zone 4, Operable Unit 2. The TRS will hear the presentation on September 14, and will report to the RAB at the October meeting,

Item IX: TAPP Contractor Presentation

A. Patrick Lynch, Clearwater Revival Company, gave a presentation on the report he submitted to the RAB under the Technical Assistance for Public Participation (TAPP)

contract. His report was an analysis of Kelly's Semiannual Compliance Plan Report, originally submitted in January 1998. (A copy of Mr. Lynch's report is attached.)

B. Discussion:
   1. Ms. Huerta asked where more information could be found on the synergistic effects of the chemicals to which he had referred in his presentation. Mr. Lynch said he was not necessarily concerned with synergistic effects, but rather with the effects of several chemicals considered together. He said he was concerned that risk assessments only consider the effects of chemicals individually. His assertion was that the effects of chemicals at each site should be considered as a whole, not individually.
   2. Ms. Huerta asked who decides when the Semiannual Compliance Plan reports are due. Gordon Banner, TNRCC, said the dates are outlined in the compliance plan, which is part of the permit. The reports are due on a standardized schedule determined by TNRCC, which in the case of the January report, was extended.
   3. Mr. Paul Roberson, GKDC, said he felt like the report was overly critical of the Air Force. He asked Mr. Lynch what he would want to see done if he were on the RAB. Mr. Lynch said he did not believe the report was overly critical. He wrote the report from the perspective of a community member. If he were on the board, he said he would make the cleanup of vinyl chloride a priority.
   4. Mr. Allan Hagelthorn, community representative, said Mr. Lynch's report was based on interim action data. Final cleanup plans have not been submitted or implemented for many of the sites included in the report. He said the RAB should not be so quick to make decisions based on critiques of interim data. He said the RAB needs more information before it makes any decisions. He also stated that in the interest of fairness, the RAB should apply the same standards of skepticism and critique to this report that they apply to the Air Force reports.
   5. Mr. Sanchez commented that he believed the Air Force should present a response to Mr. Lynch's report. He said TNRCC and EPA should also respond in some way to the assertions of the report, especially to the vinyl chloride issues.
   6. Mr. Paul Person, Union Pacific Railroad, said this report was based on one person's opinion and the RAB should keep that in perspective. He said that Mr. Lynch is a consultant who is paid for his opinion. He said if another consultant were hired to do the same thing, it's likely the report would be completely different.
   7. Ms. Adames said the Air Force has lied before. Now that someone has an opinion different from that of the Air Force's, she asked who the RAB is supposed to believe. She said the Air Force told her there was no contamination. Now someone else says there is.
   8. Mr. Roberson moved that the RAB request the Air Force, TNRCC, and EPA to comment on the report and to ask the TRS to address the major issues in the report and to present a report at the RAB workshop. The motion passed unanimously
   9. Dr. Lené asked all additional questions and comments for Mr. Lynch on the report be given to him within a week.

Item X: Environmental Priorities

A. The presentation on Environmental Priorities was postponed until the next meeting.

Item XI: Community Comment

A. There were no additional comments from community members.

Item XII: Summary and Closing

A. Mr. Hagelthorn announced that the meeting was his last, since he is relocating out of state He briefly addressed the Co-chairs and other members of the board, stating that he believed the meeting was the best RAB meeting he has attended. He stressed the importance of community relations, especially community education, on environmental issues.

B. Agenda items for the next RAB meeting
   1. Off-base contamination workshop
   2. GKDC/AFBCA update
   3. Response to TAPP report
   4. Environmental priorities
   5. Community Relations

C. Gen. Murdock reminded the RAB that ATSDR's report would be released on August 24.

D. Action Items for the next RAB Meeting

ITEM	REQUESTOR	REQUEST
1	Ms. Huerta	Provide slides from EMR Update presentation with the minutes.
2	Ms. Huerta	Explain what standards apply to treated groundwater that goes into a re-use pipeline and who regulates it.
3	Mr. Solis	Provide copies of briefing slides in the member packet at the meeting, so that RAB members can follow along.
4	Ms. Huerta	Asked for a clear definition of the groundwater plume(s) and the concentrations found in them.
5	Ms. Johnson	Please provide health and safety precautions information on the Site S-1 soil cleanup project (air/vapor monitoring, truck routes, covers on loads, foam, etc.).
6	Various	BGen Murdock provide letter with idea on the RAB off-base cleanup workshop objectives and call for volunteers to a steering committee to develop concept.
7	Various	Include GKDC and AFBCA slides with minutes of July 20, 1999 RAB meeting.
8	Ms. Huerta	Put together a history or chronology of cleanup issues so that knowledge is not lost with staff changes and new RAB members can see what has been resolved in past years.

E. The next RAB meeting will be held October 5, 1999, at Dwight Middle School.

F. The meeting adjourned at 10:07 p.m.

Motions/Resolutions

Motions

1. Motion was made to approve the April 27, 1999 RAB minutes as corrected.
   - Passed unanimously
2. Motion was made to hold an open RAB workshop, with a facilitator.
   - Not voted on

3. Motion was made to amend the previous RAB workshop motion dropping the open meeting requirement.
    - Failed 10-4
4. First RAB workshop motion was revised to add that the Air Force would send a letter to RAB members stating the workshop's objectives and goals and asking for volunteers to develop the agenda.
    - Passed by voice vote
5. Motion was made to request the Air Force, EPA, and TNRCC comment on the TAPP report and to ask the TRS to address the major issues in the report and to report to all RAB members at the RAB workshop.
    - Passed unanimously.

Attachments (* Items were provided at the meeting to all RAB members).

1. *Kelly AFB Restoration Advisory Board Materials Package
    - July 20, 1999 RAB Meeting
2. *Letter from Dr. David Fowler of ATSDR
3. Cleanup Systems Update Briefing Slides
4. GKDC Update Briefing Slides
5. AFBCA Update Briefing Slides
6. Technical Review Subcommittee report notes
7. TAPP Presentation Slides

Kelly Redevelopment

Restoration Advisory Board

Greater Kelly Development Corporation
September 1999

Development Corporation

Overview

- BRAC Decision and Community Vision
- Timeline
- Successes to Date
  - ➢Tenants; Jobs; Small Businesses
- Two "Biggest" Challenges
  - ➢Financing
  - ➢Work Force
- Other High Interest Issues
- Summary

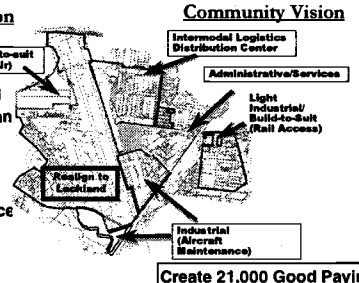
Development Corporation

The BRAC Decision and the Community's Vision

GKDC Board's Vision for Kelly

- Inland Port
- Gateway to Central and South American Businesses
- An Aviation Overhaul & Repair Center of Excellence
- Manufacturing Center for San Antonio

Leaseback Property



Create 21,000 Good Paying Jobs by 2006

Development Corporation

Kelly's Timeline

BRAC Decision | Today's Reports | RIFs 4,000 - 1,600 - 2,000 | Kelly Closes | 21,000 Jobs

Status
- 2/3 way to closure
- 4,630 commercial jobs created
- "Model Closure"

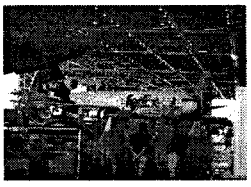
Major Events
- Sale/Transition of Gas/Electric to CPS
- Sale/Transition of Water

TOUGH PART AHEAD
- Facility Improvements
- Infrastructure Upgrades
- Financing
- Work Force Development
- Attracting Major Job Producing Tenants Higher wage job losses

Development Corporation

The Biggest Success to Date--Boeing

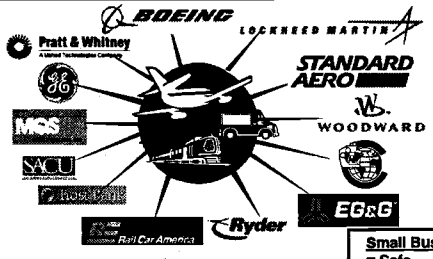
Accomplishments
- 1, 600 Jobs created to date and 2000 expected by 2001
- More than 350 construction jobs created
- $16M in facility upgrades completed
  - ➢Hangar Door
  - ➢Overhead Lighting Systems
  - ➢Fire System Upgrades
  - ➢Ramp Repairs
  - ➢Paint Hangar Improvements
  - ➢Many More!



Future Opportunities
- $9 M in additional upgrades
- New workloads if facilities/ space available

Development Corporation

GKDC's Commercial Tenants



Small Businesses
- Safe
- Cartsmith
- More Coming!

Jobs Created To Date ➡ 3,980 → 4,630

Projected Job Loss 1999-2001 ➡ 8,000

Development Corporation

Small Business Strategy and Successes

GKDC & EG&G's Exceptional Performance In Meeting SMWBE Goals

Category	Goals	% $
Minority Owned	21.3%	36% ($12.4M)
Women Owned	10.4%	9% ($3.2M)
African-American Owned	1.48%	1% ($192K)
Small Businesses	45.0%	55% ($19.0M)

Small Business Opportunities

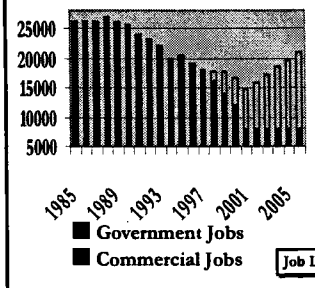
First Opportunity — Provide goods/ services to the Flagship and Cluster Industries attracted by Kelly facilities and workforce → Kelly Tenants

Second Opportunity — EG&G Contracts for Base Operating Support → GKDC & EG&G

As of 1 July 1999

Development Corporation

Job Statistics for Kelly



Success to Date:

★ Boeing	1600 → 2000
★ KDC (Warehouse Contract)	345
★ Pratt & Whitney	300
★ EG&G Operations and Maintenance	265
★ Railcar Texas	135
★ GE PMEL	45
★ MQS Science & Eng.	40
★ Other Leases	50
★ Lockheed Team	1200 → 1450
Total	3980 → 4630

Job Loss Projection Next 18 Months--8,000

Development Corporation

Some Success with Finances

- Increased Line of Credit for operational expenses
- Obtained Air Force funds for facility improvements
- In conjunction with City, State, and Federal agencies
  - ➢ Secured grants (e.g. OEA, TDED and EDA)
  - ➢ Obtained Section 108 Loan for Boeing improvements
- Completed negotiations with CPS & SAWS for utility systems

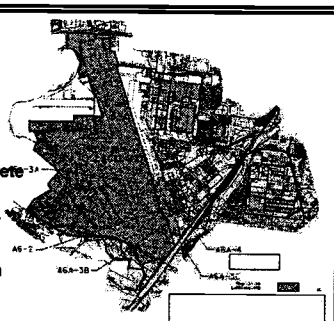
Two Years of Performance

TDED Grants	$6.0M	Grants $10.0M
EDA Grants	$3.0M	
OEA and City of San Antonio	$1.0M	
Section 108/Bank Loans	$50.0M	→ Loans $50M
Air Force Funding	$16.3M	→ Aircraft/PBA
Sale of Gas, Electric, & Water	$ 8.4M+	

Development Corporation

Kelly's Redevelopment--The DOD Model and a Team Success

- EDC agreement--$108M
- Created 4,630 jobs
- 5.4M SF under lease
- $20M of property maintenance work
- Only BRAC 95 base with utility negotiations complete
- Best Air Force and Redevelopment Authority Partnership
- $41M of new construction complete or in progress



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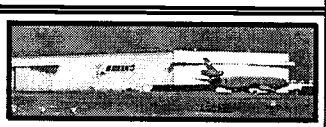
Construction Complete or In Pipeline

- $16M Boeing Projects Completed--$9M of Multiple New Projects in Queue



- Construction on $8.6M Admin Bldg begins Sept 99/leasing Apr 00

- Construction on $7.9M LDF begins Oct/Nov 99 with leasing May 00

Development Corporation

Why Has Kelly Been Successful To Date?

- Great Team!
  - ➢ City, CPS, and SAWS
  - ➢ EDF, FTA, Chamber of Commerce
  - ➢ Exceptional Support from Texas Delegation
  - ➢ Strong Support from Administration and Air Force
  - ➢ Air Force Base Conversion Agency
  - ➢ SA-ALC
- Dedicated Board & Staff
- Community Support Superb

Kudos
Arthur Emerson
Henry Gutierrez
Senator Madla
City Council
Many More!

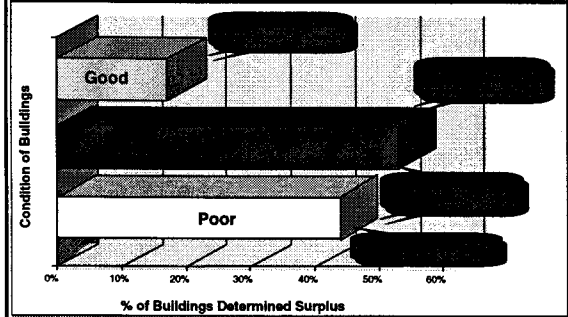
Development Corporation

GKDC's First Big Challenge--Financing

- Kelly needs source of financing
  - EDA grants significant but limited
  - TDED Grant Program funded at minimal level
  - Remaining Section 108 loan pre-designated and a LOAN
  - Bonds, at acceptable rates, are still three years away
- Next plateau of development requires money
  - Major aerospace companies want modern facilities
  - Kelly's facilities and infrastructure need upgrade
- Funding will be critical to realizing the Kelly Vision

16 [redacted] Development Corporation

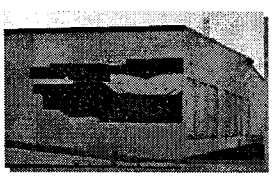
The Financing Challenge-- Improving Facility Condition



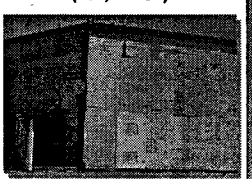
17 [redacted] Development Corporation

The Financing Challenge--Demolishing Wooden Warehouses in Poor Condition

Building 1550 Warehouse (176,075 SF)



Building 1562 Warehouse (151,727 SF)



- 1.4M SF of Warehouses with Potential for Demolition
- Demolition/Replacement Essential for Multi Modal Vision

18 [redacted] Development Corporation

The Financing Challenge--Upgrading Facilities in Fair Condition

- Acceptable Exterior
- 183K SF of Space
  - ➢ Mix of Admin & Shop Space
- Totally Air Conditioned
- Marginal Parking
- Upgrade Needs
  - ➢ Sub Divide for Several Tenants
  - ➢ Divide utilities per tenant

Fair Facilities Need Significant Investment !

The Financing Challenge--Improving Even Good Facilities

Building 331 GTE/SPS Repair (136,532 SF)

Building 345 Fuel Accessories (48,458 SF)

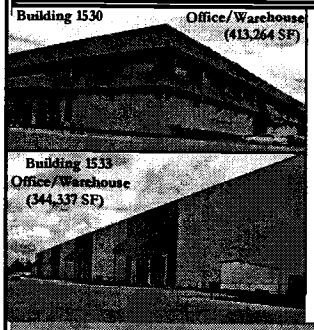
- GTE/SPS Repair Facility--Best in Nation--Assuming Equipment Remains and Large Tenant Occupies Entire Facility
- Fuel Accessory Facility--Excellent Facility--Compartmentalized for Fuel System Work--Will Need Specialized Equipment

Even Good Facilities Need Attention & Equipment

The Financing Challenge--Improving Kelly Infrastructure Systems

Similar Projects with Storm Drainage System and Aircraft Refuel/Defuel Systems

The Financing Challenge--Acquiring Good Facilities on East Side of Kelly



- Two Best Warehouses Being Retained by Air Force
- Air Force will release if replacement facilities available
- Working with Texas Delegation for MCP Insert
- Need $25M Budget for Warehouses and Critical Ramp Facilities

[redacted] Development Corporation

The Financing Challenge--Summary of Real Estate Needs

- **On Base Investments**
  - Facility Modernization $ 50.0M
  - Industrial Utility Upgrades* $ 13.0M
  - Infrastructure Upgrades $142.7M
  - Airfield Upgrades $ 18.0M
  - Relocate AF Functions to West Runway* $ 25.0M
  - Total On-Base Requirements $248.7M
- **Off Base Investments**
  - Highway Infrastructure $150M -- $200M

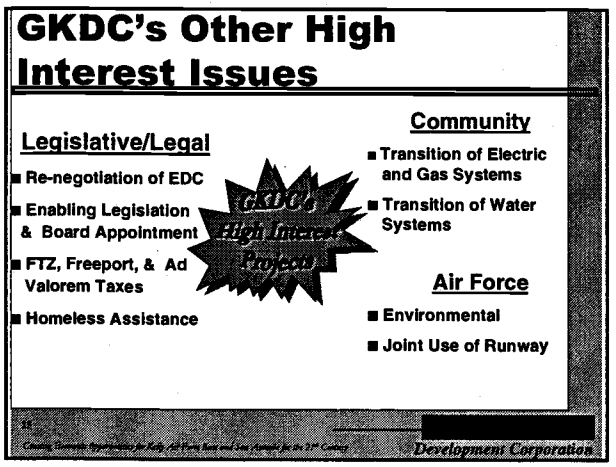
[redacted] Development Corporation

The Second Challenge--Involves The Work Force

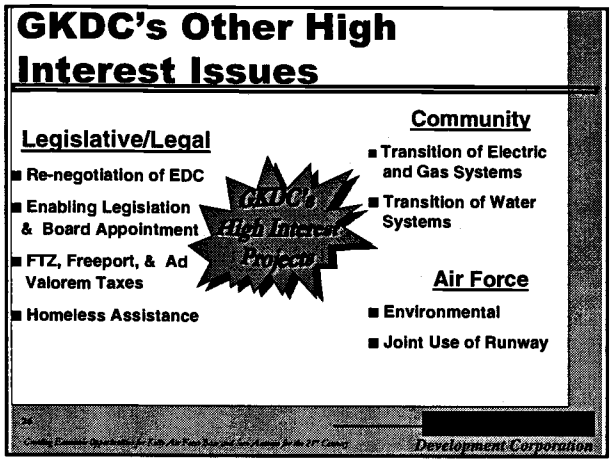
- Two major issues
  - Future pipeline for industrial craftsmen
  - Job opportunities for Kelly's white collar work force
- Industrial Work Force data
  - Large percentage of Kelly's work force retiring or relocating
  - Commercial tenants meeting needs with Kelly and community's human resources
  - Commercial tenants want pipeline for future craftsmen
- "White Collar" Work Force Data
  - Kelly will lose 8,000 jobs in next two years
  - Large percentage in administrative/management positions
  - Need "right" commercial tenants to compensate

[redacted] Development Corporation

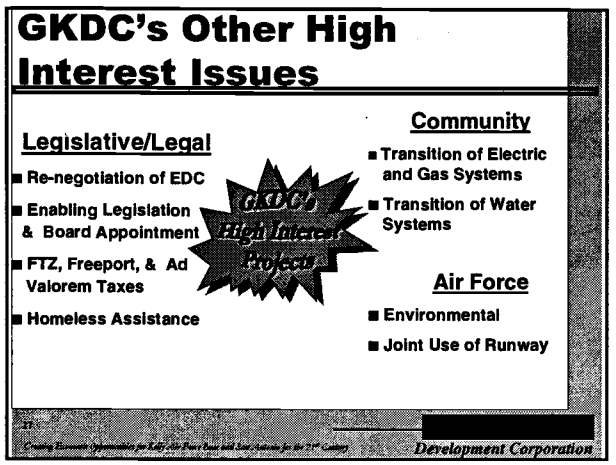
GKDC's Other High Interest Issues



GKDC's Other High Interest Issues



GKDC's Other High Interest Issues



Summary

- A good team has collectively been working to make Kelly's redevelopment a success--Model for Success in DOD!
- Significant job losses at Kelly on Horizon
- Significant Capital Investments in Kelly's Real Estate Required
- Reappointment of New Board Members Necessary and Critical to Achieving Kelly Vision

Air Force Base Conversion Agency(AFBCA)

Presented to
Kelly Air Force Base
Restoration Advisory
Board
October 5, 1999
by
Adam Antwine

Overview

- Air Force's obligation
- Kelly AFB Environmental Program
- Leasing for Reuse
- Conclusion

Air Force's Obligation

- The Air Force's obligation to remediate environmental contamination caused by operations at Kelly AFB will not change.
- The Air Force is obligated to balance protecting the environment with spurring economic opportunity.

KELLY AFB

- Kelly's environmental program is in the process of shifting its focus from the activities of an active base to disposal and reuse of base property.
- Reuse activities at Kelly AFB are closely linked to environmental investigations, restoration and compliance activities.

Leasing for Reuse

- Redevelopment cannot interfere with cleanup activities.
- Any restrictions and lease conditions must be incorporated into the lease.

Leases

- Tenants are required to comply with all federal, state and local environmental regulations including:
  - permits necessary to conduct operations.
  - hazardous materials management and spill response plans.

Property Transfer Language

- CERCLA 120(h) (3)
  "each deed entered into for the transfer of such property by the the United States to any other person or entity shall contain…a covenant warranting that -
- all remedial action necessary to protect human health and the environment. . .has been taken before the date of transfer, and
- any additional remedial action found to be necessary…shall be conducted by the Air Force.

Conclusion

- The Air Force's environmental stewardship at Kelly AFB will not end when the Air Force transfers property outside the federal government
- AFBCA WEB SITE: www.afbca.hq.af.mil

Questions?

RAB PRIORITIES

PRIORITY :

Protection: Protect human health and the environment, both on and off base. Implement interim remedial actions to prevent further environmental damage, and construct preliminary cleanup systems at source areas, which will be compatible with final remedial solutions.

PRIORITY :

Cleanup: Investigate and implement efficient cleanup methods, which will reduce contamination to levels consistent with state and federal standards and guidelines as soon as possible. Priority should be given to reducing contamination which poses an immediate threat to human health and the environment, followed by cleanup of contamination which has moved into off base areas.

PRIORITY :

Redevelopment: Coordinate with GKDC's economic redevelopment and job creation at Kelly AFB to a degree consistent with the protection of human health and the environment and full compliance with all state and federal regulatory requirements.

PRIORITY :

Community Involvement: Promote community involvement in the cleanup planning and decision-making process through the Restoration Advisory Board and the Technical Review Subcommittee. Ensure that all community concerns are promptly and carefully considered, and are addressed to the fullest extent possible while protecting human health and the environment and complying with all state and federal regulatory requirements.

PRIORITY :

Community Outreach: Work to improve community relations and outreach concerning all cleanup investigations and remedies connected with Kelly AFB. Provide timely "plain language" information to the local community which is designed to provide a clear understanding of all cleanup-related plans, decisions and activities. Encourage community members to interact with RAB members for information and input regarding the cleanup effort.

Kelly Air Force Base, July 20, 1999, Restoration Advisory Board Action Item

Request: Who is responsible for determining if groundwater has been impacted by contamination? What is the process for making this determination?

Authority: The Texas Natural Resource Conservation Commission (TNRCC) has been authorized by the United States Environmental Protection Agency (EPA) to oversee an Industrial Solid Waste and Municipal Hazardous Waste Program. The TNRCC implements this program through the Solid Waste Disposal Act. In addition, the TNRCC is responsible for the protection of human health and the environment through the Texas Water Code. Under these programs and statutes, the TNRCC has the primary authority to determine whether groundwater has been impacted by contamination.

Investigation and Determination Process: The TNRCC conducts inspections at a variety of facilities including military bases, large industries and small businesses. Some facilities are inspected as part of the TNRCC's obligation to the EPA. These inspections are scheduled with the company; the facility inspected must meet certain criteria established by the EPA to fulfill the TNRCC's obligation. In addition, some facilities are inspected as a result of a complaint or referral. The complaint or referral may come from a private citizen, a business, or other government entity. Inspections can occur as the result of an accidental spill or release from a facility or during transportation. The TNRCC can also be made aware of spills and releases during independent environmental assessments performed for real estate transactions.

All aspects of waste management are observed during an inspection. If during the inspection it has been determined that bad waste management has caused a release or discharge, the TNRCC can collect samples of soil, water, or waste, including wells, waste piles, and seeps, to verify the discharge or release. In addition, the TNRCC can direct the facility to conduct an investigation to determine the cause and effects of the release or discharge. During this investigation, the facility must determine what media (soil, surface water or ground water) have been impacted, and the nature and extent of the impact.

Also, the facility has an obligation to investigate any releases or discharges discovered in the process of closing out a solid waste management unit (SWMU). Again, the TNRCC will direct the responsible party to determine what media (soil, surface water or ground water) have been impacted, and the nature and extent of the impact.

In cases where the party(ies) responsible for groundwater contamination is unclear, the TNRCC will consider several types of data in the process of trying to identify the responsible party(ies), including: information directly related to spills and releases (i.e., time, place, nature and extent); nature and extent of soil and groundwater contamination; groundwater flow direction and gradient; topography of the surface of geologic units underlying the aquifer; variations in aquifer permeability; and other pertinent data.

Document Review

of the

Quality Program Plan, Phase II
Remedial Facility Investigation
IRP Zone 4 Operable Unit 2
Kelly Air Force Base, Texas

Prepared for

Kelly Air Force Base
Restoration Advisory Board

Project No.: 98-033
September 21, 1999

TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY

Neathery Environmental Services has completed the review of the Quality Program Plan, Phase II Remedial Facility Investigation, IRP Zone 4 Operable Unit 2, Kelly Air Force Base, Texas hereafter referred to as the REPORT. The Report was prepared by CH2M Hill and dated May 1999.

The report lists the RFI objectives as 1) characterize the nature of the groundwater contamination in the shallow alluvial aquifer, 2) evaluate the lateral distribution of the of hydraulic conductivity of the alluvial aquifer and 3) evaluate the human and ecological risks associated with the groundwater contamination.

To accomplish the objectives, seven field tasks were identified. These include 1) identification of off-site sources, 2) use the sonic cone penetrometer and monitoring wells to further define the extent of contamination and to 3) evaluate the internal plume characteristics, 4) evaluate the hydraulic conductivity of the aquifer, 5) evaluate natural attenuation parameters and 6) Evaluate the degree of interaction between the aquifer and the San Antonio River.

To accomplish these seven field tasks, the work plan proposes the use of a sonic cone penetrometer at 75 sampling locations. The SPT will be used to acquire lithologic and hydrologic data to characterize the internal plume, evaluate the lateral extent of groundwater contamination and characterize potential off-site sources of contamination. Based on the results of the SCP testing, 25 new monitoring wells, 5 aquifer test wells and 10 piezometers will be installed. The monitoring wells will be used to collect groundwater samples. The samples will be analyzed for contaminants and natural attenuation parameters. Aquifer testing will be performed to evaluate the hydraulic characteristics of the aquifer in the OU-2 and provide data to support groundwater modeling. A total of 5 constant rate draw-down tests and 30 slug tests are proposed.

Once this work is complete, a Baseline Human Health Risk Assessment and Ecological Risk Assessment is proposed. The Baseline Human Health Risk Assessment will characterize potential health effects to human health from predicted current and future exposures to chemical of potential concern. An Ecological Risk Assessment will be performed to assess the risk to the environment.

There were several weaknesses noted in the REPORT. Portions of the REPORT were vague. Other portions were confusing. There were also some problems with production and internal review of the REPORT.

The REPORT indicates that dense non-aqueous phase liquids (DNAPLs) are used as indicator parameters. DNAPLs are heavier than water and "sink to the bottom of the water column. There is no discussion of the importance of paleochannels which are instrumental in the migration of DNAPLs.

Since this REPORT deals with contamination that has migrated off-base, it vital that any proposed work be clearly defined. **Neathery Environmental Services** recommends that the REPORT be revised. The revisions should include a clearer scope of work. Methodologies that will not be utilized should not be included. If there are alternative methodologies that may be used dependent upon field conditions, they should be stated as such.

2.0 INTRODUCTION

2.1 PURPOSE

The purpose of this project is to review the Quality Program Plan, Phase II Remedial Facility Investigation, IRP Zone 4 Operable Unit 2, Kelly Air Force Base, Texas hereafter referred to as the REPORT. The Report was prepared by CH2M HILL and dated May 1999. The review is to include a simple explanation of the work to be performed and a technical review of the proposed work. This review was conducted for the Kelly Air Force Base Restoration Advisory Board (CLIENT). Under Contract F41622-98-A-5884.

2.2 REVIEWERS

The REPORT was reviewed by Jeffrey S. Neathery, R.G., C.P.G. of **Neathery Environmental Services** and Christopher C. Mathewson, Ph.D., P.E., R.E.G. of **Texas A&M University**.

2.3 LIMITATIONS

The REPORT was reviewed as a "stand alone" document. No other documents were examined during the review of the REPORT. It is assumed that the background information included in the REPORT is accurate. It is further assumed that all of the data collected and relied upon in the REPORT is also accurate. All conclusions and recommendations contained herein are made solely on the contents of the REPORT.

This report was conducted is for the sole use of the CLIENT and may not provide adequate information for other purposes or parties.

3.0 REPORT OVERVIEW

3.1 CONTENTS

The Report consists of four major components. These include:

Work Plan
Field Sampling Plan
Quality Assurance Project Plan
Health and Safety Plan

3.2 PURPOSE

The stated purpose of the Work Plan is as follows:

> "This Work Plan describes the execution of the second phase of the RFI for Zone 4 OU-2 at Kelly AFB. The initial phase of this RFI evaluated the approximate limits of the groundwater contamination in the shallow alluvial aquifer. The results of the initial phase were presented in an Informal Technical Information Report (ITIR) (CH2M HILL, 1998a)
>
> The rational for the second phase of the field program and a description of the planned field activities are introduced. An RFI Report will be prepared to evaluate whether contaminants in OU-2 coming from Kelly AFB Pose a risk to human health and the environment. A logic schedule at the detailed and subtask level is presented. Progress-weighted milestones are assigned to each task to determine its percent of completion. Progress reports will be tracked against the baseline and schedule variances will be reported. A list of deliverables is provided in the Schedule section."

The stated purpose of the Field Sampling Plan is as follows:

> "The Field Sampling Plan (FSP) presents, in specific terms, the requirements and procedures for conducting the field operations and investigations. The project specific FSP has been prepared to ensure the following:
>
> 1. Data quality objectives for this project are met.
> 2. Field sampling protocols are documented and reviewed in a consistent manner.
> 3. Data collected are scientifically valid and defensible."

The stated purpose of the Quality Assurance Project Plan (QAPP) is as follows:

> "The purpose of this document is to present in specific terms the QA/QC requirements designed to achieve the data quality goals described in the approved Field Sampling Plan (FSP) which are part of the activities performed by CH2M HILL at Kelly AFB."

There is no specific stated purpose for the Health and Safety Plan.

In short, the Work Plan describes what will be done. The Field Sampling Plan describes the procedures and protocols to be used to obtain the data. The Quality Assurance Project Plan describes the quality control procedures that will be used to insure the validity of the samples. The Health and Safety Plan describes the procedures to be used to ensure worker safety.

3.3 OBJECTIVES

The report lists the RFI objectives as 1) characterize the nature of the groundwater contamination in the shallow alluvial aquifer, 2) evaluate the lateral distribution of the of hydraulic conductivity of the alluvial aquifer and 3) evaluate the human and ecological risks associated with the groundwater contamination.

To accomplish the objectives, seven field tasks were identified. These include 1) identification of off-site sources, 2) use the sonic cone penetrometer and monitoring wells to further define the extent of contamination and to 3) evaluate the internal plume characteristics, 4) evaluate the hydraulic conductivity of the aquifer, 5) evaluate natural attenuation parameters and 6) Evaluate the degree of interaction between the aquifer and the San Antonio River.

3.4 SCOPE OF WORK

To accomplish these seven field tasks, the work plan proposes the use of a sonic cone penetrometer at 75 sampling locations. The SPT will be used to acquire lithologic and hydrologic data to characterize the internal plume, evaluate the lateral extent of groundwater contamination and characterize potential off-site sources of contamination.

Based on the results of the SCP testing, 25 new monitoring wells, 5 aquifer test wells and 10 piezometers will be installed. The monitoring wells will be used to collect groundwater samples. The samples will be analyzed for contaminants and natural attenuation parameters.

Aquifer testing will be performed to evaluate the hydraulic characteristics of the aquifer in the OU-2 and provide data to support groundwater modeling. A total of 5 constant rate draw-down tests and 30 slug tests are proposed.

Once this work is complete, a Baseline Human Health Risk Assessment and Ecological Risk Assessment is proposed. The Baseline Human Health Risk Assessment will characterize potential health effects to human health from predicted current and future exposures to chemical of potential concern. An Ecological Risk Assessment will utilize the 3-Tier methodology utilized by the Texas Natural Resource Conservation Commission to assess the risk to the environment.

4.0 DISCUSSION

Overall the items listed as objectives in the Work Plan are fairly general items to complete. The Work plan goes on further to describe how these items will be conducted. Page 2-4 of the Work Plan is actually page 2-4 of the Field Sampling Plan. There is a page of information missing from the Work Plan that contains section 2.1.3.

The Work Plan states that the degree of interaction between the alluvial groundwater and the San Antonio River will be evaluated. No information, however, is provided on how this will be done.

In section 2.1.4 Aquifer Testing, the recovery period for the drawdown test should continue until the well has recovered to the original water level. The recovery period should not be limited to 12 hours.

Not until the FSP is the number on new monitoring wells mentioned. The number of new wells should be introduced in the Work Plan.

In section 2.5.1 the word "qualified" should precede hydrogeologist or geotechnical engineer.

In section 2.5.2 of the FSP the REPORT states that samples will be collected on 5 foot intervals for logging purposes. In a shallow alluvial aquifer, continuous sampling is recommended.

The method of well installation is not clear. In section 2.6.1 of the FSP, the REPORT states that the only acceptable drilling fluids include air, water and mud. However, in section 2.6.2 of the FSP the implication is that hollow stem augers will be used. Hollow stem augers do not use drilling fluids.

The slot size to be used in the monitoring wells is not clear. In section 2.6.4 of the FSP, the REPORT states that monitoring wells will have a screen size of 0.020 inches and test wells will have a screen size of 0.040 inches. Yes in item 4 of the same section, the REPORT states that a slot size will be selected to prevent 90 percent of the filter pack from entering the well. For wells where no filter pack is used, a slot size will be selected that will prevent 60 to 70 percent of the formation materials from entering the wells. This implies that the slot size will be variable dependent upon individual well conditions.

The method of collecting groundwater samples is not clear. In section 3.2.5 of the FSP, the REPORT states that collection of methane, volatile organics and TOC samples will be collected using a pump and a three-way valve. In section 3.1 and 4.3 of the FSP, the REPORT states that a new disposable bailer will be used to collect organic samples.

It appears that groundwater samples will be collected from the top of the groundwater column. (Section 3.1 of the FSP). This is a valid technique for sampling light non-aqueous phase liquids LNAPLs). LNAPLs are lighter than water and "float" on top of the water column. However the indicator parameters listed in section 2.1.1 of the Work Plan are dense non-aqueous phase liquids (DNAPLs). DNAPLs are heavier than water and "sink to the bottom of the water column. It is not clear how the DNAPL samples will be collected.

Since DNAPLs are heavier than water and sink to the bottom of the water column, the presence of paleochannels is instrumental in the migration of the contaminants. If free product is present, it will appear in these channels just above the Navarro Formation. There is no discussion of the importance of paleochannels nor is there any proposed investigation of these channels.

There are redundancies in the REPORT. In section 2.1.3 of the Work Plan information on surveying requirements are described. The surveying requirements are also described in 2.12 of the FSP.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The review of the REPORT performed by **Neathery Environmental Services** revealed the following:

- The REPORT was somewhat vague. There was a great deal of information regarding techniques and methodology, but information on what work will be performed and how it is expected to meet the stated objectives.

- The REPORT was confusing. One portion of the REPORT would state the type of work to be performed, however another section of the REPORT would describe a different technique. This leads to confusion as to which method would actually be used.

- The REPORT had production and internal review problems. Page 2-4 of the Work Plan is actually page 2-4 of the Field Sampling Plan. There is a page of information missing from the Work Plan. The REPORT needs further internal review to remove non-technical errors.

- The REPORT indicates that dense non-aqueous phase liquids (DNAPLs) are used as indicator parameters. DNAPLs are heavier than water and "sink to the bottom of the water column. There is no discussion of the importance of paleochannels which are instrumental in the migration of DNAPLs.

Based on the results of this assessment, **Neathery Environmental Services** recommends that the REPORT be revised. The revisions should include a clearer explanation of how the proposed scope of work will meet the stated objectives. Methodologies that will not be utilized should not be included. If there are alternative methodologies that may be used dependent upon field conditions, they should be stated as such. A discussion of paleochannels should also be included.

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

September 8, 1999

Dr. Gene W. Lené, Community Co-Chair
Kelly AFB Restoration Advisory Board
Dept. of Earth Sciences
St. Mary's University
One Camino Santa Maria
San Antonio, Texas 78228-8531

Re: August 11, 1999 Letter Requesting TNRCC Response to TAPP Document on the Kelly AFB *Final January 1999 Semiannual Compliance Plan Report, January 1999*

Dear Dr. Lené:

Thank you for the above-referenced letter, received August 16, 1999, in which you convey the interest of the Kelly AFB Restoration Advisory Board (RAB) in receiving comments from the Texas Natural Resource Conservation Commission (TNRCC) in response to the comments and recommendations of a July 6, 1999 document prepared by a contractor under the Technical Assistance for Public Participation (TAPP) grant awarded to the RAB. The document prepared by the TAPP contractor provided a review of the above-referenced January 1999 *Report* prepared by Kelly AFB.

The TNRCC wishes to express its appreciation for the RAB's continued interest and efforts in advising the U.S. Air Force on the investigation and remediation actions relating to Kelly AFB. Moreover, the TNRCC appreciates having the benefit of the additional perspectives provided by the TAPP contractor. Please be assured that the TNRCC will take into account the TAPP contractor's comments and recommendations in the review of the *Report*.

Thank you again for your efforts in facilitating the cleanup in connection with Kelly AFB. If you have any questions regarding this letter, please contact me at 512-239-5914.

Sincerely,

Gordon Banner, Project Manager
Team II, Corrective Action Section
Remediation Division

cc: Ms. Laura Stankosky, EPA Region 6, Dallas

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

September 10, 1999

Dr. Gene W. Lené
RAB Community Co-chair
Dept. of Earth Sciences
St. Mary's University
San Antonio, TX 78228

RE: Technical Assistance for Public Participation Review of the January 1999 Semiannual Compliance Plan Report

Dear Dr. Lené:

Thank you for providing the EPA the opportunity to respond to the report prepared by Mr. Patrick Lynch under the Technical Assistance for Public Participation (TAPP) program. Mr. Lynch prepared an executive summary, report review, and comments and recommendations section on the January 1999 Semiannual Compliance Plan Report (July-December 1998).

The report provided by Mr. Lynch has been reviewed by the EPA. Comments and recommendations included in the report will be taken under advisement by the Base Realignment and Closure (BRAC) Cleanup Team (BCT). This snapshot of conditions at the base should enhance overall project activities as input for improving investigation and remediation efforts is always appreciated.

Should you have any questions or need any additional information please do hesitate to contact me at (214) 665-6785 or Laura Stankosky, of my staff, at (214) 665-7525.

Sincerely

David Neleigh
Chief, New Mexico - Federal
Facilities Section

cc: William Ryan, Chief, Environmental Restorations Operations Branch
Gordon Banner, TNRCC
Abigail Power, TNRCC/Region 13

Kelly AFB Responses to TAPP Review Report on the Semiannual Compliance Plan Report

General Comments:

- The TAPP Report goes beyond a review of the semiannual compliance plan report, and actually critiques aspects of the Kelly cleanup program that are not in the scope of the compliance plan report.

- If the purpose of the TAPP report was to provide the community with a layman's interpretation of a technical document, the contractor failed to achieve that goal in this report. Rather than clarify technical issues and simply interpret the information for the community, the community received a critical review and in many instances providing misleading information or information presented in an improper context. Unfortunately, as demonstrated at the RAB, the reaction was one of alarm to some of the issues raised without the proper context being provided (e.g. saying that there is a 150 times greater increase in cancer risk to vinyl chloride when in fact no exposure is known to exist to this contaminant).

- The AF must question the objectivity of the report review as it was completely critical in nature. As background, Kelly has been performing the Basewide Remedial Assessment (BRA) voluntarily since 1994. The voluntary program became mandatory when the BRA was included as part of the permit requirements in 1998 (and is now known as the semiannual compliance plan report). Kelly found no instance in the TAPP report where Kelly was commended for doing something right or correctly. An objective review would have included identifying aspects of the report that were noteworthy and positive. Because the report was devoid of these observations, the AF questions the objectivity of the reviewer and the review.

Kelly AFB Responses to TAPP Review Report on the Semiannual Compliance Plan Report

	TAPP Report Comments/Recommendations	Remarks
1.	Full extent of off-base groundwater contamination still unknown	**TAPP Report:** The full extent of groundwater contamination has not been determined to the Northeast, West and Southeast of Kelly AFB. Current data shows two chlorinated solvents, tetrachloroethylene (PCE) and trichloroethylene (TCE) exceed cleanup standards in groundwater samples collected three miles from Kelly AFB near the San Antonio River. This finding indicates that contaminated groundwater is moving away from Kelly AFB much faster than previously thought. The interaction of surface water and groundwater, the locations of faults, and the locations of Edwards Aquifer wells should be determined in the over 3,000 acre off-base area impacted by Kelly AFB contamination.
		Kelly AFB Response: *Since the time of the TAPP contractor's review of the BRA, Kelly AFB mailed out more information showing the extent of shallow groundwater contamination in the vicinity of Kelly. As noted at the Restoration Advisory Board meeting on 20 Jul 99, only the area north of highway 90 remains in question. All other contamination has been delineated around Kelly AFB. Kelly AFB will be working with the regulatory agencies regarding further investigation of shallow groundwater contamination in the area north of highway 90. Kelly AFB is also working with the US Geological Survey (USGS) regarding interaction of surface water and shallow groundwater systems. The USGS also has a vast amount of information regarding local geology including location of faults around Kelly AFB. Although Kelly is investigating locations of old Edwards aquifer wells. the Edwards Aquifer Authority, Bexar Metropolitan Water District and the San Antonio Water system all maintain information on Edwards wells including chemical analytical data.*
2.	Effectiveness of existing Groundwater pump and treat Systems	**TAPP Report:** Groundwater cleanup includes both the control of contamination sources as well as the recovery of contaminants. The existing pump and treat systems have addressed source control. Combined, the systems intercept contaminated groundwater as it migrates off base or into Leon Creek with varying effectiveness. The existing pump and treat systems do not address off-base groundwater contamination. Combined the pump and treat systems recover an estimated 35 gallons of solvent per year. Adding new recovery wells near spill area would increase contaminant recovery rates and reduce cleanup time.
		Kelly AFB Response: *Groundwater pump and treat systems have been in operation on and off base for many years at Kelly. However, none of these systems are FINAL systems. All systems are INTERIM, the main purpose of which is to CONTAIN and CAPTURE contamination prior to moving off base, into the creek, or moving further off base. CLEANUP of contaminated groundwater is a secondary benefit of the interim capture systems. Kelly has data showing that cleanup of contaminated groundwater is occurring as a result of these systems working in concert with other mechanisms (e.g natural attenuation) at several sites (e.g. S-1, S-4, E-3). None of the systems were installed for the specific purpose of cleanup. However, it is Kelly's intent that these interim actions be part of the FINAL cleanup action at a site. The inefficiency of pump and treat systems is well known throughout industry and Kelly is well aware of the limitations of pump and treat systems, particularly when viewed on a mass removal basis. However, the regulatory standards are the drinking water limits (5 parts per billion for PCE and TCE). A groundwater pump and treat system operating on a contaminated groundwater plume with very low concentrations of contaminants attempting to contain a very low concentration plume will inevitably be perceived as "inefficient" when viewed on a mass removal basis. Ultimately, Kelly will determine if other technologies are more efficient at achieving site cleanup goals.*

Kelly AFB Responses to TAPP Review Report on the Semiannual Compliance Plan Report

3.	Risk-based groundwater protection standards	**TAPP Report:** Groundwater cleanup standards were based on ingestion of groundwater. Vinyl chloride is a gas formed by decomposing PCE and TCE. The groundwater cleanup standards for Kelly AFB did not consider the potential risk from vinyl chloride exposure in residential air, as a result of migration upward from a groundwater plume. Expedited cleanup of PCE and TCE contamination would reduce the continued formation of vinyl chloride.
		Kelly AFB Response: *Kelly is subject to cleanup standards as promulgated by the TNRCC and EPA. Kelly cannot change cleanup standards, however, risk assessments can and do consider exposures from multiple pathways (ingestion, inhalation, contact, etc). Because the shallow groundwater is not used as potable water, there is no ingestion exposure pathway. Exposure to vinyl chloride via inhalation can and will be evaluated in an off base risk assessment, but given the known off base concentrations in the shallow groundwater, Kelly does not expect to find a significant contribution to cumulative risk as a result of vinyl chloride. Lastly, the TAPP report failed to note that vinyl chloride also degrades in the environment. In fact, the presence of vinyl chloride indicates that natural attenuation is occurring in the shallow groundwater. Although the TAPP report did not mention it, there are also available analytical results for ethene and ethane, breakdown products of vinyl chloride. Kelly does not concur with a course of action to prevent formation of vinyl chloride when vinyl chloride is known to degrade through natural means, and there is no eminent health threat. However, future remedial actions will be addressed in respective cleanup site reports.*
4.	Missing remedial system information.	**TAPP Report**: The Compliance Plan Report did not contain information to fully evaluate the effectiveness of the groundwater pump and treat systems as required by the Compliance Plan Report Checklist.
		Kelly AFB Response: *The Clearwater revival review overlooked the inclusion of the cone of depression and plume migration rates located in Part IV Section 5, and Part III Sections 4 and 5. A technical memorandum was delivered to the TNRCC with the quantities of recovered groundwater and graphs of monthly flow rates. This information could not be included into the referenced document due to time constraints, but the information was delivered to the TNRCC prior to the TNRCC CP deadline.*
5.	Errors in Key Figures.	**TAPP Report**: Key figures in the Compliance Plan Report did not properly show monitoring wells used to determine groundwater compliance.
		Kelly AFB Response: *The only noted errors from a follow up review are an improper color code on one well*
6.	Remedial recommendations	**TAPP Report**: The following remedial alternatives should be installed or completed: 1)Install soil vapor extraction 2)Soil excavation 3)Install off-site groundwater extraction wells 4) Monitor sites
		Kelly AFB Response: *Remedial recommendations is not the purpose and scope of this report. Remedial recommendations are not required in the compliance plan. This comment has no relevance to this document Kelly AFB is currently evaluating different remedial alternatives for each site, and looking at the remedial*

		alternatives cited in the review document along with new state of the art remedial technologies.
7.	Ethylene Dibromide (EDB) Sampling	**TAPP Report:** There is no indication that sampling for this chemical has been conducted at any of the Kelly AFB jet fuel spill sites.
		Kelly AFB Response: *The compliance plan does not require Kelly to sample for ethylene dibromide, EDB. However, Kelly has a total of 2,546 records for 1,2-Dibromoethane (Ethylene Dibromide) in the database. Of those 2,546 records, 1,048 are for soil and 1,488 are for groundwater. The rest are surface water and free product results. All results are ND: Non-Detect*
8.	Timeliness of data reporting	**TAPP Report:** These sample results for May-June 1999 will not be reported to TNRCC and the public until January 2000 seven months later.
		Kelly AFB Response: *Timelines are specified in the compliance plan. Kelly meets these requirements. Although, analytical data from sampling can be made available to Kelly by September each year, the interpretation and associated reports take considerably longer to generate.*
9.	Accuracy of well identifications	**TAPP Report:** Several of the wells had measured well depths that exceeded the installed well depth. Field measurements have raised concerns that well locations are not properly shown on site maps.
		Kelly AFB Response: *Errors in reporting are noted and corrected when identified. These errors are infrequent (nearly 1500 monitoring wells exist) and these few results will not impact cleanup decisions. Approximately 1500 monitoring wells exist on and off Kelly. These wells have been installed by multiple contractors since the early 1980s. A resurveying effort of selected wells commenced last year on 160 wells and another 100 will be performed soon. The contractor verifies well identities during the sampling event, and discrepancies. Any misidentification is corrected when discovered, but this situation is rare and not expected to drastically change any results or decisions.*
10.	Missing data	**TAPP Report:** A number of analytical results were not included in Volume IV, Appendix C, though these results were depicted on plume maps. These data emissions made verifying the statistical analysis very difficult.
		Kelly AFB Response: *The text, (Part I, Section 1) in the report lists all different sources of data used in the report. Data from projects outside of this project were used to help enhance and improve this report, but the detailed analytical results are not included. However, these reports are available for review. Future versions of the compliance plan report will be more "stand-alone" in nature as Kelly moves towards a predominantly operations and monitoring type program.*

Kelly AFB Responses to TAPP Review Report on the Semiannual Compliance Plan Report

11.	Monitoring well design	**TAPP Report**: Many of the monitoring wells were constructed with submerged screens rather than being screened throughout the shallow aquifer. Submerged screens limit the ability to detect impacts to shallow groundwater caused by fuel hydrocarbons. In wells with submerged screens, LNAPLs, including vinyl chloride may also go unobserved. This well design may not provide accurate groundwater level readings because air is trapped in the casing. The groundwater level in the well may not equilibrate with atmospheric pressure if sufficient time is not provided between the opening of the well and the measuring of the groundwater depth.
		***Kelly AFB Response**: All new monitoring wells are constructed per the compliance plan provisions. Some older wells may not have been screened across the entire shallow aquifer. Kelly is very confident that the extent of fuel hydrocarbon (LNAPL) has been adequately delineated using the present network of monitoring wells. However, vinyl chloride is found as a dissolved phase component, not an LNAPL, and no complications with its detection would be expected as a result of well screen placement. Regarding the effect of atmospheric pressure, the shallow groundwater system around Kelly is very shallow and discontinuous in nature and relatively thin. While atmospheric pressure may have significant bearing in deeper wells such as in California, this is not a problem at Kelly.*
12.	Source of metal contamination	**TAPP Report:** For Site CS-3, well screens (presumably constructed of stainless steel) were cited as a Potential source of the chromium and nickel found in groundwater. The sampler also noted that the sample appeared to "turn green when exposed to sunlight." Nickel and chromium are likely site related. Well is constructed of PVC based on sampling log.
		• ***Kelly AFB Response:*** Kelly has conducted a chromium / nickel study on well screens and the correlation with elevated levels of these metals found in the groundwater. The text only states the stainless steel screens as a potential source of Chromium and Nickel. Site CS-3 (landfills) is a potential source for chromium and nickel. The surface of each monitoring well is completed with PVC, and all pipe and screen at or beneath the water table is stainless steel. The field person was strictly noting the surface PVC completion.
13.	Off-base surface water/groundwater interaction	**TAPP Report:** The San Antonio River, San Pedro Creek, Six Mile Creek, and some unnamed waterways appear to be within the boundaries of Kelly AFB groundwater contaminant plumes. An evaluation of the interaction between these surface water bodies and the shallow aquifer should be performed.
		***Kelly AFB Response:** Kelly began several months ago working with the San Antonio River Authority and the US Geological Survey (USGS) in studying the interaction of shallow groundwater and the river. Only the San Antonio River has any hydraulic connection to the shallow groundwater system. Six Mile Creek is often dry and is primarily used for surface drainage. Also, Leon Creek has been the subject of extensive investigation by Kelly since 1994.*
14.	Fault study and Edward's aquifer wells	**TAPP Report:** A well search and proper abandonment of out-of-services Edward's Aquifer wells was previously completed at Kelly AFB. In addition, a fault trace analysis was performed. A similar study should be completed in off-base areas impacted by the Kelly AFB groundwater contamination plumes.
		***Kelly AFB Response:** Kelly has used mailouts to local residents seeking information on known locations of old or abandoned Edwards wells. Another similar effort is planned in the near future. Information on faults in the local area is available through the USGS.*

(1)

27 Jul 99

Brigadier General Robert M. Murdock
Vice Commander
100 Moorman Street, Suite 1
Kelly AFB Tx 78241-5808

Dear General Murdock,

I find the attached RAB Priorities very confusing. They are not what I requested. What I did request was a site-by-site prioritization based on relative risk. Please see page 3, item IB74 of the 27 April 99 Kelly RAB minutes.

To be honest with you, I can not tell if the attached RAB Priorities give the GKDC sites a lower & higher cleanup priority over the sites being transfered to Lackland. The question still on my mind is, do the attached RAB Priorities give the GKDC sites a lower or higher priority over the off base sites based on protection of human health and the environment?

(2)

Further, site-by-site cleanup prioritization may not been applied to Kelly's Restoration Requirements by your Environmental Management Staff, nor site-by-site clean up priorities been presented to the RAB or the Technical Review Sub-Committee for review. Why?

As a matter of information, requirements for site-by-site prioritization can be found on the following pages and paragraphs of the "Management Guidance For The Defense Environmental Restoration Program as outlined by the Office of the Deputy Under Secretary of Defense-Environmental Security) dated March 1998.

- Page 8, par b, (1), (2), (3), (4), (5).
- Page 8, par 2 a, (b-)
- Pages 9-10, par 3 d, (1)(f)

These pages and paragraphs require DOD components to develop prioritizan of clean up sites coupled with:

(3)

- Addressing sites that present the greatest risk to human health and the environment.

- Using Relative Risk Site evaluations - "Medium", "High" and "Low".

- Funding.

- Community reuse requirements.

- Other Management Factors.

Additional prioritization requirements can also be found on Pages 13, 14, 17, 26, 34, 35, 36, and 37 of the March 1998 Management Guidance for the Defense Environmental Program from Secretary Goodman's office.

In closing, I stand ready to assist you, Your Environmental Management Staff, the BCT and GTDC and the AFBCA, in developing a site-by-site priority plan for the restoration of "On-base" and "Off-base sites"

(4)

It is my hope to complete site-by-site clean up prioritization for all the 52 Kelly sites plus the contaminated Hispanic neighborhoods before the next RAB meeting in October 1999.

If you have any questions, or require additional information please call me at (210) [redacted].

A prompt answer will be appreciated.

Respectfully

Armando R. Quintanilla
[redacted]
San Antonio, Tx 78211-3420
Phone: (210) [redacted]
Fax (210) [redacted]

2 atch
- RAB Priorities
- DERP Guidance

cy: Helen Evans

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS SAN ANTONIO AIR LOGISTICS CENTER (AFMC)
KELLY AIR FORCE BASE, TEXAS

13 AUG 1999

Brigadier General Robert M. Murdock
Vice Commander
100 Moorman Street, Suite 1
Kelly AFB TX 78241-5808

Mr Armando C. Quintanilla

San Antonio TX 78211

Dear Mr Quintanilla

Thank you for your letter of 27 July 99 regarding prioritization of cleanup sites on Kelly Air Force Base (AFB). In response to your inquiry, I am providing you with attachments that may be useful reference material. One attachment, a presentation by Mr. Richard Trevino, describes the history of site prioritization at Kelly including the relative risk rankings that were reviewed, voted on, and accepted during the 6 March 95 Restoration Advisory Board Meeting at which you were a participant. The second attachment is a copy of the March 95 RAB Meeting Minutes and the third attachment is the current relative risk rankings.

As shown in Mr. Trevino's presentation, the proposed rankings scored 32 of the 52 IRP sites. The remaining 20 sites had been recommended for "No Further Action" or had been closed. Further, 26 of the 32 Sites were ranked as "High", 6 Sites were rated as "Medium", and none were rated as "Low". The relative risk rankings have changed little since they were reviewed by the RAB in 1995.

Kelly AFB, in conjunction with the RAB, assessed the factors that determined the priority of cleanup sites and has therefore fully complied with the Management Guidance for the Defense Environmental Program (March 1998) by ranking sites either "High", "Medium", or "Low". The Department of Defense does not require the delineation of a sequence in which ranked sites will be remediated. Therefore, Kelly does not have a list that ranks the 32 sites and their relative priority to each other.

It is important to note that the Relative Risk Ranking was relevant at the time as Kelly was relying solely on cleanup funds from the Defense Environmental Restoration Account (DERA). Funds from the DERA program were prioritized and dispersed based on the ranking of each site with the intent to first clean up sites that were ranked in the "High" category. Today, most of Kelly's cleanup funding comes from the Base Realignment and Closure (BRAC) account. In essence, the relative importance of the 1995 rankings is minimal considering the prioritization methodology is no longer used as a basis for disbursement of cleanup funds.

A review of our cleanup history clearly indicates that high priority has been given to certain sites. Specifically, priority was placed on sites discovered to be impacting shallow groundwater and where contaminated groundwater was moving off base. These sites now have Interim Remedial Actions (IRAs) in place and operating. Currently, all of the 1995 "High" priority and many of the other sites are well into the process of having a final cleanup remedy in place. In fact, a final remedy is anticipated for our last site in the year 2004.

Regarding your question about GKDC sites, I believe you are inquiring about sites located on property that is scheduled to be transferred to the Greater Kelly Development Corporation (GKDC). Sites located on the Base Realignment and Closure (BRAC) property and sites that will be transferred to Lackland are remediated simultaneously and with equal vigor.

Please contact Mr. Dick Walters or Jeannie Cisneros at 925-3100, ext. 230 and 235, respectively, should you have any additional questions regarding this matter. Thank you for your continued interest in Kelly AFB cleanup program.

Sincerely

ROBERT M. MURDOCK
Brigadier General, USAF
RAB Co-Chair

Attachments:
1. Presentation
2. 6 Mar 95 RAB Meeting Minutes
3. Site List (Zones 1 and 5, including relative risk)
4. Current Relative Risk Rankings (Zones 2-5)
5. Cleanup Program Schedule

cc:
RAB

Relative Risk Rating
Installation Restoration Program

SAN ANTONIO AIR LOGISTICS CENTER

PARTNERS WITH THE ENVIRONMENT

ENVIRONMENTAL MANAGEMENT

March 6, 1995

Purpose of Relative Risk

- *PURPOSE* of the Relative Risk

- The Department of Defense developed a method of ranking sites based upon relative risk.

- The sites are ranked into one of three categories.
  High, Medium, or Low

- *FOCUS* - Use funding on cleanup actions reducing relative risk to human health and/or the environment.

Relative Risk Factors

- Some factors that determine the priority of cleanup actions at sites:
  - Relative Risk Evaluation
  - Regulatory Agreements
  - Public Health Recommendations
  - General Public Involvement
  - Stakeholders Involvement and Input

Relative Risk - Definition

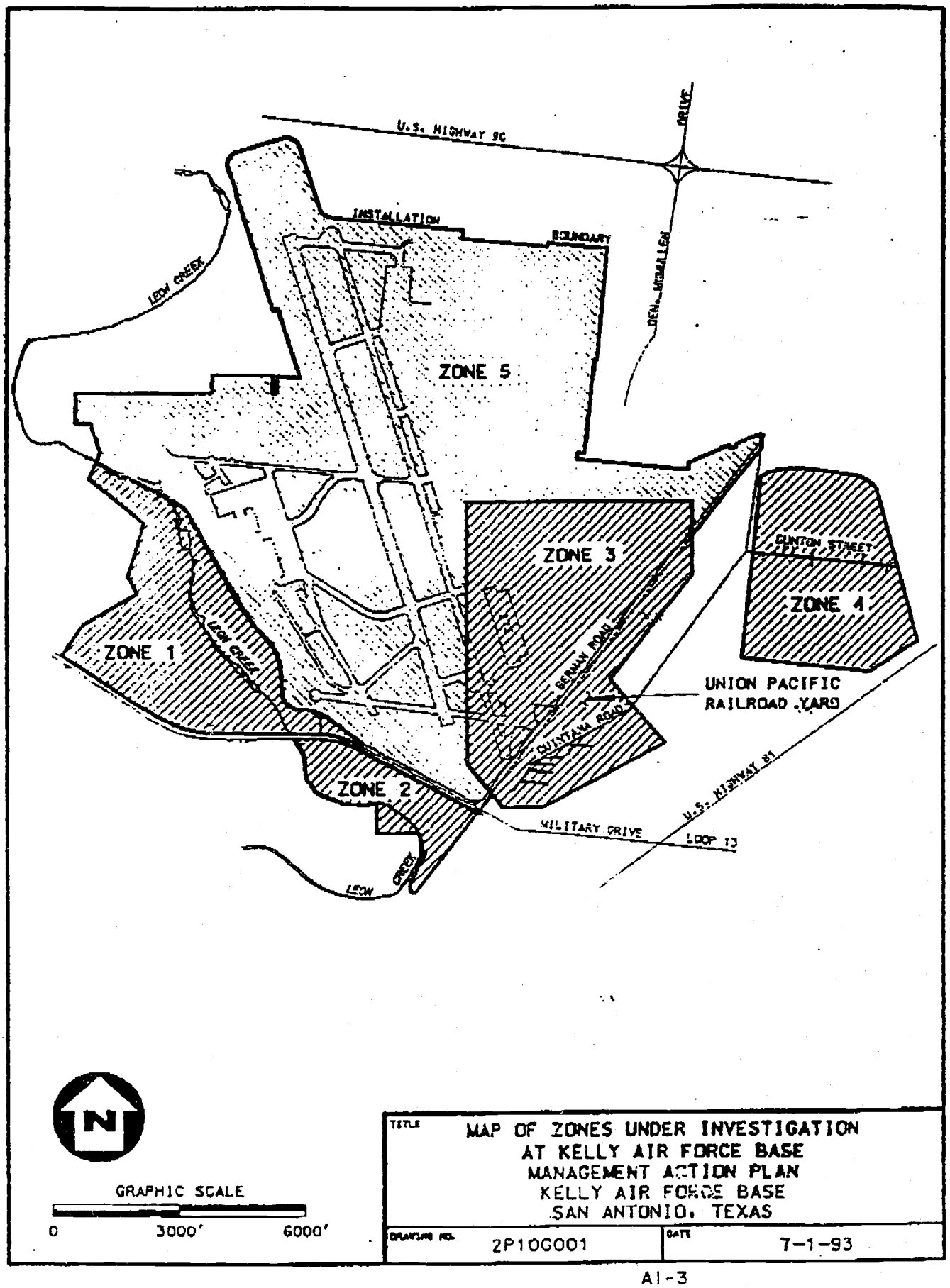
- Relative risk rates sites based upon 3 factors:
  - Evaluation of Contaminants
  - Evaluation of Pathways
  - Evaluation of Human/Ecological Receptors
- Focuses on the following media:
  - Groundwater
  - Surface Water and Sediment
  - Surface Soils

Proposed Ratings

- Scored 32 of our 52 IRP sites
  - *Remaining 20 have been recommended for No Further Action or have been closed.*
- Rating of 32 IRP sites
  - 26 Rated - High
  - 6 Rated - Medium
  - None - Low

Summary

- Focus on cleanup actions through Relative Risk.
- Priority of sites based upon H-M-L rating.
- Proposed Ratings require RAB concurrence
- Results will be forwarded to HQ AFMC/CEVR


U.S. HIGHWAY 90
INSTALLATION
BOUNDARY
DEN. McMULLEN
LEON CREEK
ZONE 5
ZONE 3
ZONE 4
ZONE 1
ZONE 2
CLINTON STREET
BERMAN ROAD
QUINTANA ROAD
UNION PACIFIC
RAILROAD YARD
MILITARY DRIVE
U.S. HIGHWAY 81
LOOP 13
N
GRAPHIC SCALE
0
3000'
6000'
TITLE
MAP OF ZONES UNDER INVESTIGATION
AT KELLY AIR FORCE BASE
MANAGEMENT ACTION PLAN
KELLY AIR FORCE BASE
SAN ANTONIO, TEXAS
DRAWING NO.
2P10G001
DATE
7-1-93

Installation Restoration Program Relative Risk Rating Kelly Air Force Base, Texas March 6, 1995			
Quantity	**IRP Zone**	**Site Name(s)**	**Relative Risk Rating**
1	1	LF001 (D-9)	HIGH
2	2	SS002 (IWTP)	NFAP
3	5	SS003 (S-1)	HIGH
4	4	SS004 (S-2)	CLOSED
5	2	SS005 (S-3)	MEDIUM
6	3	ST006 (S-4)	HIGH
7	5	ST007 (S-5)	MEDIUM
8	3	ST008 (S-6)	NFAP
9	4	SS009 (S-7)	NFAP
10	2	ST010 (S-9)	HIGH
11	1	LF011 (D-1)	HIGH
12	1	LF012 (D-2)	HIGH
13	1	LF013 (D-3)	MEDIUM
14	1	LF014 (D-4)	MEDIUM
15	1	LF015 (D-5)	HIGH
16	1	LF016 (D-6)	HIGH
17	1	LF017 (D-7)	HIGH
18	1	LF018 (D-8)	NFAP
19	2	LF019 (D-10)	HIGH
20	2	WP020 (E-1)	HIGH
21	1	WP021 (E-2)	NFAP
22	2	WP022 (E-3)	HIGH
23	1	FT023 (FC-1)	CLOSED
24	2	FT024 (FC-2)	HIGH
25	5	SS025 (IS-1)	CLOSED
26	1	RW026 (RD-1)	NFAP

NFAP = No Further Action Proposed CLOSED = Cleanup Complete

Installation Restoration Program
Relative Risk Ratings
Kelly Air Force Base, Texas
March 1995

Quantity	IRP Zone	Site Name(s)	Relative Risk Rating
27	1	RW027 (RD-2)	NFAP
28	2	SS028 (S4-A)	NFAP
29	1	WP029 (SA-1)	NFAP
30	2	SS030 (SA-2)	HIGH
31	2	SS031 (SA-3)	NFAP
32	2	SS032 (SA-4)	HIGH
33	2	WP033 (SD-1)	HIGH
34	2	WP034 (SD-2)	NFAP
35	1	SS035 (GW Z1)	HIGH
36	2	SS036 (GW Z2)	HIGH
37	3	SS037 (GW Z3)	HIGH
38	3	ST038 (S-8)	HIGH
39	2	SS039 (OT-1)	NFAP
40	3	SS040 (OT-2)	HIGH
41	1	SS041 (B-1)	NFAP
42	2	SS042 (CS-2)	HIGH
43	1	SS043 (CS-3)	HIGH
44	3	SS044 (IWCS)	HIGH
45	5	SS045 (S-10)	MEDIUM
46	3	ST046 (B182)	NFAP
47	3	ST047 (B386)	NFAP
48	3	ST048 (B308)	CLOSED
49	3	ST049 (B38)	NFAP
50	5	SS050 (GW Z5)	HIGH
51	4	SS051 (IWCS)	MEDIUM
52	4	SS052 (GW Z4)	HIGH

*NFAP = No Further Action Proposed, CLOSED = Cleanup Complete

Minutes
of
The Kelly AFB Restoration Advisory Board Meeting
6 March 1995

The third meeting of the Kelly Air Force Base Restoration Board (RAB) took place at 6:00 p.m. at the San Antonio Fire Training Academy at 4531 South Zarzamora, San Antonio, Texas.

The RAB meeting agenda is attachment 1.

These minutes follow the progression of topics as the meeting took place and correspond to similarly numbered agenda topics.

I. Welcome

Mr. Larry Bailey, Kelly AFB Co-Chair, welcomed RAB members and the audience in attendance. Fourteen RAB members or alternates were present. A list of attendees is provided at attachment 2. Mr. Bailey advised members and audience that, in addition to minutes being taken, the meeting was being transcribed, and requested that anyone wishing to speak to please state their name before talking.

II. Administrative Topics

A. Approval of January 29, 1995 Meeting Minutes

Mr. Bailey submitted minutes (previously distributed to RAB members) for approval. Mr. Mixon made a motion for approval. Discussion ensued as follows:

Mr. George Rice requested clarification of item No. 8 of the proposed minutes of the previous meeting regarding access to work, including proprietary modeling, being done by contractors (for Kelly) for the purposes of forming his own opinion about quality of the work being done. Mr. Trevino (Kelly) indicated that access would be given to RAB members for the stated purpose. Mr. Armando Quintanilla suggested they form a sub-committee and volunteered to serve on it. It was agreed that a sub-committee would be formed with Mr. Rice as chair and Mr. Quintanilla, Mr. Gary Beyer, and Mr. Gene Lene as members.

There were no other comments regarding the minutes. Mr. Carl Mixon's motion was seconded by Mr. Gene Lene and the minutes were approved as written.

B. Membership Issues

- **Approval of new members (Agenda Item II. B. 1.)**

  Copies of RAB member applications for:

  Ms. Joan Falkenberg **Mr. Tom Smith** **Ms. Lexia Ribeiro**

  were distributed for review and consideration. Time was given for review of these applications.

Discussion: The ensuing discussion revolved around two questions:

a. Whether the membership would or should be increased beyond the current 21 members. Although discussed here, decision was deferred to agenda item II. B. 2.

b. Whether or not membership should be restricted by criteria other than the interest and request for membership.

Several members spoke in support of both Ms. Falkenberg and Mr. Smith. No one present knew Lexia Ribeiro. Mr. Quintinilla suggested that the RAB approve the application of Ms. Falkenberg (who was present) and defer the other two until the next meeting so that the members could ask them some questions.

With both primary and alternative proposals before the RAB (to approve all three as offered or to approve only Ms. Falkenberg and defer the others until the next RAB meeting), Mr. Bailey called for a show of hands on first the primary and then the alternative proposals. In a vote of 7 to 3, the RAB approved the alternative proposal to accept Ms. Falkenberg's application now and defer the others until the next RAB meeting. Mr. Smith and Ms. Ribeiro will be invited to the next RAB meeting for discussion of their membership.

Joan Falkenberg was asked to step forward and join the other RAB members at the tables.

- **Removal of Absent Members (Agenda Item II. B. 2.)**

Mr. Bailey started discussion by pointing out that the RAB Charter provided that members who, both they and their alternates, have missed two consecutive meetings would be recommended for removal or asked to resign. Three such members were referred to the RAB for consideration of removal:

Ricardo Jiminez **Jessie Bankston** **Leonel Benavidez**

The record shows that Ricardo Jiminez has never attended a meeting. The other two members have missed two consecutive meetings and did not send alternates. Mr. Carl Mixon made a motion to remove these three members per the charter; Mr. Hagelthorn seconded. The motion was carried.

At this time, Mr. Bailey reminded members to get alternates for any meeting they could not attend.

C. Frequency of RAB Meetings

Mr. Bailey asked the RAB to consider setting meeting frequency at every 6 to 8 weeks unless it was necessary to meet more often. Mr. Quintanilla suggested having two more monthly meetings and then consider going to the 6-8 week frequency.

After discussion, two options were proposed. (1) April and May meetings being 4 weeks apart and then consider going to 6-8 weeks between meetings; or (2) going to a 6-8 week time period now, and calling more frequent meetings as and if necessary. Vote was 6 to 5 in favor of option 2 (going to 6-8 week meetings now).

D. Potential Conflict of Interest - Letter to RAB Members

Mr. Bailey started discussion in reference to a letter sent to all RAB members regarding who can be a RAB member, potential for Conflict of Interest, and a potential revision to the RAB Charter.

In response to questions for clarification of the issues involved, Mr. Bailey introduced Ms. Adrienne Williams of the Kelly Air Force Base legal office. Ms. Williams responded to several hypothetical questions. She explained that "The essence of what we are trying to do is to ensure that the RAB member is not a contractor for Kelly and will not [be] in the future . . ."

Mr. Bailey proposed that the minutes of this meeting include specific, possible language for such a change for the RAB Charter so that RAB members will have time to review and prepare to discuss the language at the next RAB meeting. The members voted and passed this suggestion by show of hands.

NOTE: The Draft proposed RAB Charter modification language is attachment 3.

E. Topics to be Discussed at Future RAB Meetings

- **Legal Standards for Cleanup**

Pursuant to Mr. Haglethorn's request, from the last RAB meeting, (for a discussion and briefing concerning cleanup standards), Mr. Bailey asked Ms. Williams to explain Kelly's action in response to his request.

Ms. Williams explained that the Texas Natural Resource Conservation Commission (TNRCC) has authority in this area. To better respond to the request, a legal representative from the TNRCC has accepted Kelly's invitation to come to the next RAB meeting to discuss the standards and the process.

Mr. Quintinilla asked if the TNRCC representative would discuss "right of capture" regarding groundwater. Mr. Bailey indicated that Kelly would make sure that the TNRCC representative is aware of that interest.

Mr. Quintinilla raised an issue about damage to foundations as a result of "water being taken from the ground aquifer". Mr. Bailey agreed to provide name and phone number of a contact at KAFB, who handles claims. This information will be included in minutes and in the next mailing.

Kelly Contact for all community activities is:

Michael Estrada
Community Involvement Coordinator
807 Buckner, Suite 1
Kelly AFB TX, 78241-5842

At this point, Mr. Bailey deferred discussion of agenda item II. F. (post-meeting discussions from last meeting) until the end of the meeting. He then introduced Mr. Richard Trevino who presented two briefings, agenda items III. and IV.

III. Public Hearing Update

Mr. Richard Trevino gave a slide presentation describing the logistics of a Groundwater Feasibility Study, the establishment of a library for restoration program documents under the care of the Community Co-Chair, the comment process for Proposed Plans relating to groundwater and soil cleanup, and a demonstration of groundwater modeling. A copy of his briefing slides is attachment 4.

IV. Relative Risk Evaluation

Mr. Richard Trevino briefed the Risk Factors and the five basic factors that determine priority and scoring. Out of 52 total sites at Kelly, 20 are closed. The remaining 32 were scored. Of these, 26 rated high, 6 rated medium, and none rated low.

After discussion and explanation of the process, Mr. Trevino proposed the RAB concur with relative ratings. Mr. Hagelthorn moved and Ms. Falkenberg seconded the proposal.

More discussion followed before voting. Mr. Trevino clarified that the ranking before the board for approval was for zones 1, 2, and 3 only and that the risk evaluation covered groundwater, surface water, and soils. Zones 4 and 5, being in earlier stages of investigation, will be ranked later. In response to a question from Mr. Brown, Mr. Dan Medina confirmed that Groundwater Recovery was being accomplished on sites D-2 and D-4.

In response to a question as to whether the RAB was being asked to vote on all or part of the list of sites, Mr. Trevino stated that members were voting on the entire list. He further clarified that the list will then go to Headquarters Air Force. The budget process will apply available federal funding, first to high risk, then to medium. Low risks will not be forgotten, merely deferred until a later date. He also explained that Kelly would use the ranking in future decision making.

In response to a question from Mr. Florencio Martinez, Mr. Trevino confirmed that the ranking list was a dynamic one that could be revised and updated as the situation warrants.

Mr. Trevino called for a show of hands for RAB concurrence in the Relative Risk Ranking as presented. The Board concurred in the ranking as presented. A copy of briefing slides is attachment 5.

V. RAB Newsletter

Mr. Bailey introduced an issue, relating to the need/desire for some newsletter or other vehicle, which was raised at the last RAB meeting. Discussion ensued as to what type of document, how often should it be published, who would edit it, what issues and ideas should be incorporated, etc.

RAB members offered and discussed a variety of options for "getting the word out" better. Issues included press releases, increased scope and distribution of the minutes and current updates, identifying "key" phone numbers, etc.

It was suggested that the RAB might issue Press Releases after each RAB meeting. Questions were then raised about funding. Several "throw-away" papers (The Westside Sun, Southside Recorder and La Prensa) in addition to The San Antonio Express News, were suggested as "targets" for press releases. It was proposed that a progress report be added to the summary

of the minutes and that it would include identification of key phone numbers such as the one identified for the claims office. This information would be published prior to the next RAB meeting, then at the next meeting it would be discussed further.

Mr. Bailey summarized the Board consensus: that Kelly would, before the next RAB meeting, prepare a proposed expansion of current updates to include meeting minutes, key phone numbers, upcoming milestones and dates, etc., for Board consideration. He then asked for a show of hands for concurrence in this course of action. The Board approved the action as stated.

VI. Upcoming Environmental Events

Mr. Dick Walters from Public Affairs presented a briefing summarizing two upcoming environmental activities that would take place in the surrounding community. The placement of 10 monitoring wells in the area immediately surrounding East Kelly, and "Strataprobe" work in the Quintana Road area. Mr. Walters' presentation slides are attachment 6.

Mr. Walters reminded Board members about Earth Day, 22 April 1995. The event will be celebrated in San Pedro Park and Kelly will have a booth there. Mr. Walters indicated that volunteers from the RAB/Kelly/Community partnership would be welcomed and appreciated.

VII. Summary and Closing

There being no "new business", Mr. Bailey moved to summary and closing issues.

News coverage regarding Kelly: Mr. Bailey summarized key issues concerning the BRAC, speculation about Kelly, reductions in DOD cleanup funding, closure of Brooks AFB and how all or any of these might impact Kelly.

It is uncertain how the reduction in budget will affect Kelly. Mr. Bailey reminded everyone the BRAC list is not a final closure list. The closure of Brooks is only a recommendation at this time. The final list will be public in June or possibly July. Any prediction about cleanup funding or BRAC impacts on Kelly would be mere conjecture at this time.

Mr. Bailey also asked the RAB members to reflect on the visual aids used at this meeting and consider how they might be improved -- to get technical issues across better. Mr. Bailey requested that those individuals interested in the DRMO incident and information about minority environmental contractors at Kelly stay for informal discussions immediately following adjournment of the RAB meeting.

The next RAB meeting will be April 17, same location 6:00 p.m. At that meeting discussion will also involve finding another location to meet.

Site List

MAJCOM	INST	Site ID	Site Name	ROD	RIP	RC	SC	Legal Driver	Relative Risk	DOD Type	AF Type	Validation Date	On NPL
AFMC	KELLY	LF001	SECURITY HILL AREA	12/15/1999	04/01/2003	05/01/2025	05/06/2027	C	Medium	LF	LF	05/01/1991	N
		ST007	WASTE POL STORAGE AREA	06/01/1998	06/01/1998	06/01/1998	06/01/1998	C	NR	TU	US	05/01/1991	N
		LF011	SITE D-1 LANDFILL	12/15/1999	05/20/2002	08/04/2022	10/04/2024	C	High	LF	LF	05/01/1991	N
		LF012	D-2 LANDFILL	12/15/1999	08/30/2002	08/04/2022	10/04/2024	C	Medium	LF	LF	05/01/1991	N
		LF013	SITE D-3 LANDFILL	12/15/1999	04/02/2003	05/02/2023	05/06/2025	C	High	LF	LF	05/01/1991	N
		LF014	D-4 LANDFILL	12/15/1999	07/05/2002	08/04/2022	10/04/2024	C	Medium	LF	LF	05/01/1991	N
		LF015	SITE D-5 LANDFILL	12/15/1999	04/02/2003	05/02/2023	05/06/2025	C	High	LF	LF	05/01/1991	N
		LF016	D-6 LANDFILL	12/15/1999	04/02/2003	05/02/2023	05/06/2025	C	High	LF	LF	05/01/1991	N
		LF017	SITE D-7 LANDFILL	12/15/1999	04/01/2003	05/01/2024	05/06/2026	C	High	LF	LF	05/01/1991	N
		LF018	D-8 LANDFILL-LEON CREEK ZONE	09/08/1992	09/08/1992	09/01/1999	12/30/1999	C	NR	LF	LF	05/01/1991	N
		WP020	E-2 CHEMICAL EVAPORATION PIT	09/03/1991	09/03/1991	09/01/1999	12/30/1999	C	NR	DP	DP	05/01/1991	N
		FT023	SITE FC-1 FCTA	08/21/1992	08/21/1992	10/19/1993	10/19/1993	C	NR	AT	FT	05/01/1991	N
		SS025	SITE IS-1 STILL SPILL AREA	09/01/1992	09/01/1992	09/01/1992	09/01/1992	C	NR	SS	SS	05/01/1991	N
		RW026	SITE RD-1 RAD DISPOSAL AREA	09/03/1991	09/30/1999	09/30/1999	12/31/1999	C	Low	WR	RW	05/01/1991	N
		RW027	SITE RD-2 RAD DISPOSAL AREA	09/08/1992	09/08/1992	09/08/1992	12/31/1999	C	NR	WR	RW	05/01/1991	N
		WP029	SITE SA-1 SLUDGE SPRDNG AREA	12/15/1999	04/01/2003	09/30/2024	09/30/2026	C	Low	DP	DP	05/01/1991	N
		SS035	GW CONTAMINATION ZONE 1 - LEON CREEK	03/15/1996	06/29/2002	09/30/2020	01/01/2024	C	High	SS	SS	07/01/1994	N
		SS036	GROUNDWATER CONTAMINATION ZONE 2	09/30/1999	10/01/2001	03/01/2006	06/30/2014	C	High	SS	SS	07/01/1994	N
		SS041	B-1 BURN AREA	09/03/1991	09/03/1991	09/03/1991	11/30/1999	C	NR	SS	SS	07/01/1994	N
		SS043	COMBINED SITE (CS-3) RAVINE	12/15/1999	04/01/2003	05/01/2025	05/06/2027	C	High	SS	SS	07/01/1994	N
		ST045	SITE S-10 SPILL SITE	05/30/2000	01/03/2001	01/03/2001	01/02/2002	C	Medium	TU	US	10/01/1993	N
		SS050	GROUNDWATER ZONE 5	05/30/2000	11/14/2001	01/22/2015	01/01/2018	C	High	SS	SS	07/01/1994	N

MAJCOM: Division C
Installation: Kelly
Site ID:

(•) All Sites ( ) Sites Not RC
( ) AOCs ( ) Sites RC

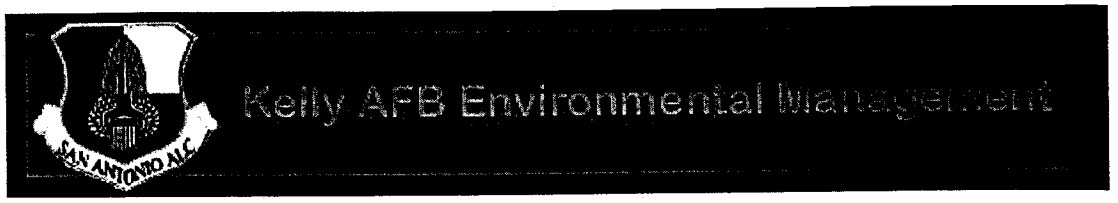
Record Search

MAJCOM	Installation	Site ID	Site Name	RC	Legal	Relative Risk
Division C	Kelly	SS002	Former IWTP	05/17/2000	C	NE
Division C	Kelly	SS003	Spill Site S-1	09/30/2003	C	High
Division C	Kelly	SS004	Storage Yard Site S-2**	09/08/1992	C	NR
Division C	Kelly	SS005	Storage Yard Site S-3	04/26/2019	C	Medium
Division C	Kelly	ST006	UST/Spill Site S-4	12/02/2017	C	High
Division C	Kelly	ST008	UST/Spill Site S-6	04/19/1993	C	NR
Division C	Kelly	SS009	Storage Yard S-7	09/30/1997	C	NR
Division C	Kelly	ST010	Fuel Site S-9	03/16/2000	C	High
Division C	Kelly	LF019	Landfill Site D-10	12/22/2000	C	High
Division C	Kelly	WP021	Evaporation Pit E-1	04/26/2019	C	NE
Division C	Kelly	WP022	Evaporation Pit E-3	12/22/2003	C	High
Division C	Kelly	FT023	Fire Training Area FC-1*** (Tra	10/19/1993	C	NR
Division C	Kelly	FT024	Fire Training Area FC-2	12/23/2005	C	High
Division C	Kelly	SS025	Spill Site IS-1***	12/22/1992	C	NR
Division C	Kelly	SS028	HW Storage Yard S4-A	05/17/2000	C	NE
Division C	Kelly	SS030	Sludge Lagoon SA-2	05/17/2000	C	High
Division C	Kelly	SS031	Sludge Area SA-3	05/17/2000	C	NE
Division C	Kelly	SS032	Sludge Area SA-4	05/17/2000	C	High
Division C	Kelly	WP033	Sludge Bed SD-1	05/17/2000	C	High
Division C	Kelly	WP034	Sludge Bed SD-2	05/17/2000	C	NE
Division C	Kelly	SS036	Groundwater Zone 2	02/03/2017	C	High

Division C	Kelly	SS037	Groundwater Zone 3	11/13/2015	C	High
Division C	Kelly	ST038	UST/Spill Site S-8	12/22/2003	C	High
Division C	Kelly	SS039	Incinerator Site OT-1	12/23/2005	C	NE
Division C	Kelly	SS040	Plating Shop OT-2	12/22/2017	C	High
Division C	Kelly	SS042	Spill Sites CS-2	05/17/2000	C	High
Division C	Kelly	SS044	Industrial Waste Collection Line	12/22/2006	C	High
Division C	Kelly	SS045	Fuel Spill Site S-10 (ST045 in	01/27/2000	C	NE
Division C	Kelly	ST046	Bldg 182 UST	02/02/1994	C	NR
Division C	Kelly	ST047	Bldg 386*** UST	02/02/1994	C	NR
Division C	Kelly	ST048	Bldg 308*** UST	02/02/1994	C	NR
Division C	Kelly	ST049	B38 UST	10/30/2000	C	NE
Division C	Kelly	SS050	Groundwater Zone 5	02/17/2017	C	High
Division C	Kelly	SS051	Industrial Waste Collection Syst	03/27/2002	C	Medium
Division C	Kelly	SS052	Groundwater Zone 4	02/01/2019	C	High

New Site | Site Information | Phase Information | Relative Risk | Show Associated Projects | Exit

6.23 99



You are here: Home Page -> Clean Up Program Information -> Cleanup Program Schedule

Cleanup Program Schedule

		Start	Complete
Zone 1	Design	1998	2001
	Construct	2001	2005
	Cleanup	2002	2022
	Monitor	2022	2027
Zone 2	Design	2000	2001
	Construct	2001	2001
	Cleanup	2001	2015
	Monitor	2015	2025
Zone 3	Design	1998	2000
	Construct	2001	2001
	Cleanup	2001	2014
	Monitor	2015	2025
Zone 4	Design	1998	1999
	Construct	1999	1999
	Cleanup	2000	2015
	Monitor	2000	2025
Zone 5	Design	1999	2001
	Construct	2001	2002
	Cleanup	2002	2016
	Monitor	2016	2019

Current as of Jan 12, 1999

Phases

Design
Most cleanup systems are very complex and take engineers hundreds of hours to design and review.

Construction
Cleanup systems usually take a couple of years to build. Some take longer, some shorter, depending on the size and complexity

Cleanup
The actual time to run a cleanup system. At the conclusion of this phase, the site is essentially cleaned up.

Monitoring
Environmental laws require us to monitor a site to ensure the cleanup is complete. Monitoring is your warranty that the cleanup is complete. Monitoring periods vary from site to site and are usually the longest phase of a cleanup project.

The following RAB member's term expire Dec. 31, 1999 per the RAB Charter.

1. **Mrs. Johnson**
2. **Ms. Peace**
3. **Mr. Rice**
4. **Mr. Solis**
5. **Mr. Puffer**
6. **Mr. Person**

KELLY AIR FORCE BASE, TEXAS

Environmental UPDATE

Environmental Management web site - http://empub.kelly.af.mil/ Summer/Fall 1999

Contents

RAB MEETING OCT. 5

DWIGHT MIDDLE SCHOOL
2454 W. Southcross

INFO FAIR
5 p.m

RAB MEETING
6 p.m.

PUBLIC HEALTH ASSESSMENT

The Public Health Assessment is now available for public comment. The public comment period will continue through Oct. 26.

For more information, visit ***http://empub.kelly.af.mil/*** and click on ATSDR.

Kelly AFB Wants Community More Involved With Cleanup Program

Brig. General Robert M. Murdock

Kelly AFB environmental managers have made a concerted effort over the years to involve southwest San Antonio residents in the base's ongoing environmental cleanup program.

The public involvement effort has included information releases to area news media, fact sheets, newsletters and public meetings, including Restoration Advisory Board (RAB) meetings, with invitations mailed directly to area residents and published in newspaper ads. The advisory board promotes communications among the community, the Air Force and environmental regulators, and has been meeting since late 1994.

However, Kelly AFB officials are disappointed at the results of their efforts, especially since the base's environmental cleanup program is well into its busiest summer of construction activities on record. Indeed, at a well-advertised meeting of the RAB on July 20, only three members of the community were in attendance, not including community members on the advisory board.

Similar low attendance was noted by City Councilman José Menéndez at a recent public meeting held by Kelly to discuss a cleanup project near the North Kelly Gardens neighborhood. Menéndez complimented the Air Force's efforts but asked community members to please encourage neighbors to participate in the cleanup process.

"We need your involvement," says Brig. Gen. Robert M. Murdock, vice commander of Kelly and co-chair of the RAB. "This is an incredibly busy year for our cleanup program - we are putting a lot of work and funding into getting cleanup systems in place and operating, and we want people to know about it and get their thoughts," Murdock said. "These cleanup systems are targeting on-base contaminated source areas that result in off-base contaminated groundwater. By attacking the problems at their source, we have seen positive effects in reducing the contamination in off-base areas. Cleaning up these areas off base is very important to us and the community."

Murdock noted that several ways exist for interested members of the community to become involved. Perhaps the easiest is to call the environmental public affairs office at 925-3100, extension 230, to obtain the published newsletters and fact sheets already available.

Kelly also has designated two Information Repositories where current and historical documents relating to the Kelly cleanup program are available for study. One repository is located at the San Antonio Central Public Library, while the second was established at the Kelly Base Library.

Attending the quarterly RAB meetings is another way for residents of the Kelly area to become involved. Each advisory board meeting has time set aside for members of the public to ask questions or make comments. The next RAB meeting is scheduled for 6 p.m., Oct. 5, 1999 at Dwight Middle School, located at 2454 West Southcross.

Murdock emphasized the Air Force's commitment to meet its responsibilities to clean up the base and its surrounding areas to meet federal and state regulatory standards. "The Air Force will clean up any environmental pollution from its Kelly activities to the satisfaction of both the EPA and the TNRCC and bear the cost of the cleanup," he said. "And even after the Air Logistics Center closes, the Air Force will be at Kelly until the cleanup job is done."

Kelly RAB Elects New Community Co-Chair, Three New Community Members

When noted St. Mary's University professor Dr. Gene Lené stepped on to the Restoration Advisory Board meeting floor this January, it may have seemed like one small step. But it was truly a giant step: Lené and three newly-elected mem-bers of the RAB are stepping to the forefront of community involvement and environmental issues with their strong commitment to the Kelly AFB environmental cleanup program.

Dr. Gene Lené

Lené, who was unanimously elected as the RAB new Community Co-Chair in January, joins Tanya Huerta, TSgt. Kent Iglesias and Roy Botello, the newest community members appointed to the RAB team. Lené has been an original member of the RAB since 1994.

The RAB consists of 23 members of the community, including activists, neighborhood residents, and representatives of the Environmental Protection Agency, the Texas Natural Resource Conservation Commission, Bexar Metropolitan Water District, Greater Kelly Development Corporation, San Antonio Metropolitan Health District, San Antonio Water System and the Texas Department of Health.

Since joining the faculty of St. Mary's University in 1978, Lené has become increasingly active in local environmental issues. Lené said he has learned a lot about environmental issues since becoming a member of the RAB; however, he hopes to provide more support by helping to bridge the gap in understanding that exists between Kelly and the community.

"Bridging the gap in understanding, not a lack of technical expertise, is the biggest problem facing the RAB at present, and I hope that the skills I have acquired in my many years as a teacher may prove helpful in this regard," he said. "I look forward to a time when there is much greater mutual trust between Kelly and the surrounding community."

Tanya Huerta

What drove physical therapy consultant Tanya Huerta to join the RAB in January was her strong commitment to human health issues. "As a physical therapist, human health is very important to me, and I am very interested in science and learning, which is why I joined the RAB," she said. "I try to understand and help make decisions that would be in the best interest of all parties, parties being the neighborhood and taxpayers."

Huerta grew up in San Antonio's South Side in the same area she now represents, attending both junior high and high school in the area. She has also raised her four daughters in the neighborhood. Huerta also has seen significant improvement in the RAB over the past year. "People are more focused and committed," she said. "It is a good group of people, and I think our goal should be to determine the best plan to help keep our environment safe for humans."

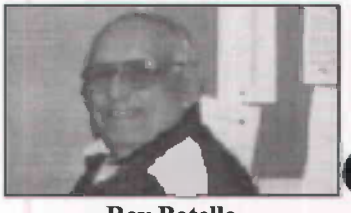
TSgt. Kent Iglesias

Kent Iglesias also has a local interest in the environmental cleanup. TSgt. Iglesias, assigned to the 651st Munitions Squadron at Kelly, was inducted into the RAB in January.

Iglesias is a current resident of Kelly, and has been assigned to the base since 1994. He joined the RAB because he wanted to become an active representative and a voice of the Kelly community. "To be an active member of the RAB will ensure that I am part of the information chain and capable of making a recommendation to help solve the issues concerning our community and the environment." Iglesias said.

The newest member of the RAB is no stranger to community involvement. Roy Botello has spent his whole life helping others in his community. Other RAB members unanimously voted Botello into the RAB this July. The American Red Cross, the Special Olympics, the Texas Crime Prevention Association and the Collins Garden Neighborhood Association all have benefited from Botello's leadership and infectious volunteer spirit. He heard about the RAB through City Councilman Rick Vásquez. "I work pretty closely with Rick Vásquez. He told me about the RAB and sent in a letter nominating me."

Besides his volunteer experience, Botello also has been a theater owner in Karnes City, worked for the Texas Department of Public Welfare and has been a supply requirements officer for Kelly AFB.



Roy Botello

His latest interest has led him to the world of computers. "At the age of 70, I became very interested in the computer." he said. "In the past five years I have learned more about this computer than in all my previous life and I am still learning something new all the time." So interested in fact, that Botello has established his own web page. *www.txdirect.net/users/rrbotell/*

Botello is interested in reaching out to the community to find out what his neighbors' concerns are. "I don't care if you are a college graduate or just the average Joe down the street, you have to understand what they are trying to convey, and I want to do that," he said. "We owe it to the community. If we're not reaching out to them, then we're not doing our job."

Site S-1 Soil Cleanup Begins

The cleanup at Site S-1, the former Defense Property Disposal Office intermediate storage area on the northern boundary of Kelly AFB, takes a visible step this October, beginning with the excavation of the contaminated soil from the site.

The cleanup project consists of two parts: removal of contaminated soil and installation of a soil vapor recovery and treatment system.

Approximately 13,000 cubic yards of soil will be removed and transported to an off base landfill. The excavation then will be backfilled with clean soil.

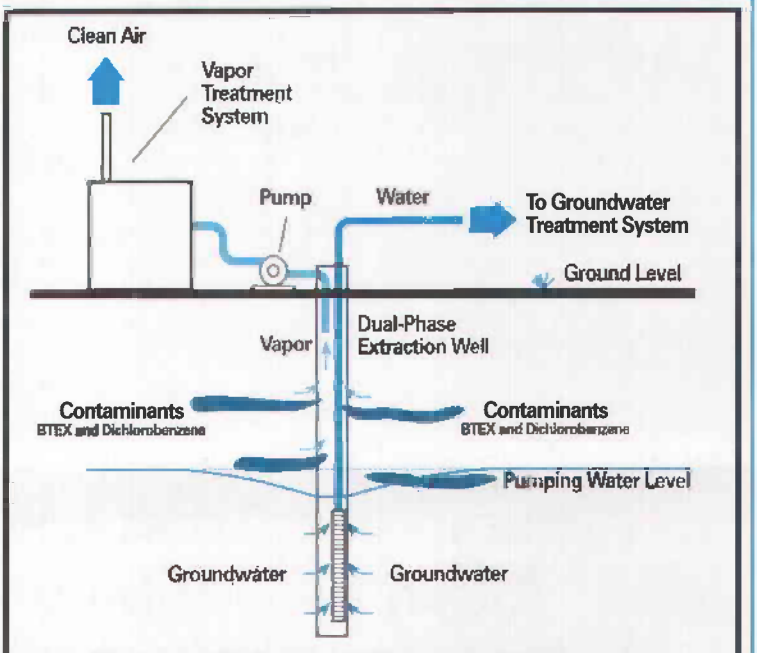
Construction of a soil vapor extraction (SVE) system will follow. Soil vapor extraction is a process by which contaminant vapors in the soil are pulled through wells using a vacuum pump. The system will then treat organic contaminant vapors from the soil.

Currently, a system to contain and treat contaminated groundwater from the site has been in operation since 1995.

Site S-1 is the former location of an intermediate storage area for wastes on their way to off-base recycling or disposal facilities. The storage area was located at the bottom of an abandoned gravel pit that has since been filled and graded.

Samples were collected in March 1999 at different depths down to 28 feet below ground level, to determine how much soil was contaminated at Site S-1.

Wastes were stored in above-ground tanks at the site and included carbon cleaning compounds, petroleum, oil and lubricants. The tanks sometimes overflowed, and spills occurred when the tanks were loaded or unloaded. Surplus electrical transformers also were stored on site.



Vacuum-Enhanced Pumping System for Groundwater and Soil at Site S-1

To make it easier to study and recommend effective cleanup measures, engineers divided the site into two distinct areas of concern, which they called the sump area and the smear zone.

The sump area was a low spot where leaks, spills or rainwater collected over the years. The smear zone is a layer of contaminated underground soil that has been affected by fluctuations in the water table, leading to contamination of the groundwater.

Treating the sump area separate from the smear zone will allow for the selection of a more effective treatment alternative in each area. The sump area has been identified as a source of soil groundwater contamination.

The soil contamination is found down to a depth of 28 feet below ground surface. The excavation effort will remove the highly contaminated soil to 28 feet and replace the volume of soil removed with clean backfill.

High concentrations of chlorobenzene were detected in the sump area, while lower concentrations of chlorobenzene were widespread in the smear zone.

Several alternatives for treating the contamination site S-1 were studied. The study information was provided to the community during a month-long public comment period in January 1999, which gave members of the community an opportunity to provide input regarding proposed cleanup alternatives for Site S-1. Kelly also held a neighborhood meeting in May at Winston Elementary School for residents of the area to ask the engineers questions and hear more about what would happen during the cleanup.

Excavation and off-site disposal was chosen as the solution for the soil in the sump area. Six alternatives were evaluated, including capping, soil vapor extraction, biological treatment at another location, excavation and disposal, monitored natural attenuation and no action, according to the feasibility study. The solution chosen for the smear zone was soil vapor extraction (SVE) and a groundwater recovery system.

The remediation method for the smear zone was chosen after evaluating three other alternatives, including soil vapor extraction alone, monitored natural attenuation, and no action at all.

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Kelly AFB, TX 78241-5917

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Pump and Treat Cleanup Technique Used as Containment at 11 Sites

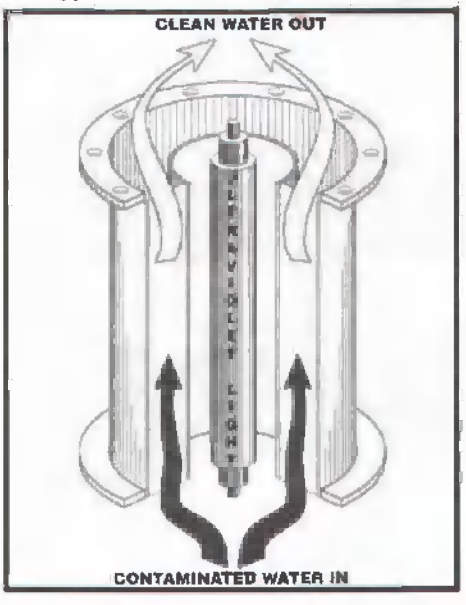
"Pump and treat" is just one of several alternatives being reviewed to determine the most efficient and effective means of cleaning up contaminated groundwater sites both on and off Kelly Air Force Base, where it already is being used as the interim containment system at 11 sites on the base.

When pump and treat is used for containment, it simply prevents the contaminated zone from continuing to expand. When used as final cleanup method, as it may be at Kelly, it is intended to reduce contaminant concentrations in groundwater sufficiently to comply with regulatory standards or to make beneficial use of treated water.

The technology is being reviewed as a final cleanup alternative at all 11 Kelly AFB pump-and-treat sites.

Today at Kelly, contaminated groundwater is pumped from the shallow aquifer and transferred to a treatment plant, where it is treated by chemical and physical processes that remove or destroy contaminant's. Treated groundwater is then discharged at regulated outfalls.

The primary treatment used at Kelly AFB for contaminated groundwater is called Ultraviolet Oxidation (UV-Ox). UV-Ox uses the energy of ultraviolet radiation,



which is a component of ordinary sunlight, to enhance chemical reactions that destroy organic chemical contaminant's, such as chlorinated hydrocarbons, in the water. The water is pretreated to remove solid particles and oils and make sure it is clear enough for the ultraviolet light to pass through.

Hydrogen peroxide is added to the filtered water in the final pre-treatment step. As the water flows past a bank of ultraviolet lamps, the UV radiation breaks up the hydrogen peroxide to produce highly reactive hydroxyl radicals that begin to attack the molecules of organic contaminant's in the water. At the same time, the ultraviolet light is weakening some of the bonds between atoms in the organic compounds causing the contamination, making them more vulnerable to the hydroxyl radicals and speeding their destruction. What is left is carbon dioxide and water.

The carbon dioxide is released harmlessly into the air, and the water is transferred to the Environmental Pollution Control Facility, where it gets additional treatment before being released into Leon Creek at an outfall under a discharge permit from the Texas Natural Resource Conservation Commission.

KELLY AIR FORCE BASE, TEXAS

Environmental UPDATE

Environmental Management web site - www.empub.kelly.af.mil/ Winter 1999

Contents

RAB MEETING
Jan. 11, 2000

SOUTH SAN HIGH SCHOOL
2515 Navajo

INFO FAIR
5:30 p.m

RAB MEETING
6:30 p.m.

AFBCA To Take Over Kelly BRAC Cleanup Operations in December

When Kelly AFB closes in 2001, an Air Force group few San Antonians have heard of will gain full responsibility for continuing the management of environmental cleanup of the parts of the 82-year-old base being transferred to the Greater Kelly Development Corporation (GKDC).

The Air Force Base Conversion Agency or AFBCA is a field operating agency of the Secretary of the Air Force and is attached to the Office of the Assistant Secretary of the Air Force for Manpower, Reserve Affairs, Installations, and Environment. The agency is responsible for the final execution of the environmental programs and real and personal property disposal while protecting human health and the environment at Kelly.

"The AFBCA's work will continue long after Kelly closes because the Air Force remains responsible for the contamination it caused even after the property is transferred to its new owners and users," said Kelly commander Major General Paul L. Bielowicz.

"We did a lot of careful planning for this transition and we don't expect any disruptions when the Logistics Center hands off responsibility to the Base Conversion Agency," Bielowicz stressed.

The planning began in December 1995 when AFBCA assigned Patrick McCullough to establish an operating location at Kelly AFB.

McCullough, a 28-year Air Force veteran with an extensive background in environmental issues and property disposal, is the "senior representative" at the base. He came to San Antonio after working at base locations and serving three years as program manager responsible for environmental restoration and property disposal in the AFBCA's southeast region.

Joining him in 1996 were Adam Antwine and Indar Schabra. Antwine, a San Antonio native, heads the BRAC environmental cleanup and compliance section. Schabra is responsible for property management.

Additional experts in environmental and real estate law, real and personal property, environmental cleanup and compliance, and several other professional areas work together as a team to prepare the military facilities and property at Kelly for civilian use.

AFBCA employees have been included in Kelly's decision-making processes along with the base's environmental engineers and the state and federal regulators.

Many of the workers selected for employment by the AFBCA are currently engaged in the cleanup and compliance issues at Kelly. They bring along their professional experience and their familiarity with the base.

To get the job done, McCullough and his staff work closely with their counterparts on both the Kelly staff and the Greater Kelly Development Corporation (GKDC). The GKDC, organized by the city of San Antonio, is the local redevelopment agency responsible for planning the reuse of portions of the base. While GKDC is charged with devising and implementing a comprehensive redevelopment plan, AFBCA is responsible for supporting that plan through environmental cleanup and property transfers.

"Redevelopment, particularly at Kelly, relies on a working relationship built on the respect and understanding between GKDC, the Air Force and the community," McCullough said.

See "AFBCA" on Page 3

ATSDR Releases Health Study

Editors Note. The following is a verbatim reproduction of the Summary of the Phase I Public Health Assessment of Kelly Air Force Base released for public comment by the Agency for Toxic Substances and Disease Registry (ATSDR) on August 24, 1999. References to figures, tables and page numbers have been omitted. For complete report information, refer to the ATSDR website or the Kelly Environmental Management website at:

http://www.atsdr.cdc.gov/HAC/PHA/kelly/kel_toc.html

http:// empub.kelly.af. mil/atsdr.htm.

SUMMARY

ATSDR was petitioned by the late congressman Frank Tejeda to perform a public health assessment of neighborhoods north and southeast of Kelly Air Force Base (AFB). Residents in these areas had concerns that their health may have been affected by releases of hazardous substances from the base. This document is a report of Phase I of the public health assessment process and provides ATSDR's evaluation of potential releases of hazardous substances from Kelly AFB.

During the time that ATSDR was conducting this assessment, concern was also expressed by residents of the East Kelly area. Because of this concern, ATSDR will evaluate the East Kelly area and the results will be provided in Phase III of the public health assessment.

CURRENT EXPOSURE

The community *is not currently exposed* to levels of contaminants from Kelly AFB that would cause people to become sick.

ATSDR evaluated the possible ways that community members could come into contact with contaminants that may be in the air, groundwater, surface water, and soil. ATSDR concluded that it is NOT likely there will be noncancer health effects (like liver or kidney injury) because of current exposure to contaminants from Kelly AFB.

The amounts of contaminants are *too low* to cause residents to get sick. ATSDR also looked at the projection of cancer cases in areas surrounding Kelly AFB. The locations of highest estimated risk are either on base or in unpopulated areas off base. It is unlikely that exposure to current air emissions would result in a significant increase in the risk of developing cancer.

Although unlikely linked to base contamination, ATSDR is recommending health education about lead exposures, blood lead testing and subsequent environmental investigation under existing programs to address potential lead exposures. Other environmental pathways do not currently appear to play a role in making residents sick.

PAST EXPOSURES

The community may have been exposed to higher levels of contaminants in the past. ATSDR will investigate further.

There is not enough information about past levels of contamination to make conclusions about past levels of exposure. Past air emissions represent a pathway requiring additional evaluation because of the potential for higher levels of chemical exposure on and off base. ATSDR will evaluate air emissions that may have occurred in the past. The results will be presented in Phase II of the public health assessment.

HEALTH DATA

ATSDR is further investigating reports of elevated cancers and adverse birth outcomes. ATSDR will continue health education activities and health outcome evaluation.

ATSDR found elevations in certain health data at some locations around the base. Cancers that were elevated in at least one zip code included leukemia, liver, kidney, lung, bladder, and cervical cancers. Birth outcomes that were elevated included low birth weight and certain birth defects. ATSDR's preliminary evaluation indicates that some of the elevated health data may be due to expected fluctuation, some may be due to general public health problems, and some may be associated with environmental exposures.

Further investigation is necessary to clarify these issues; additional health data as well as environmental data is being collected. ATSDR has concluded that follow-up activities are needed and results will be presented in Phase II of the public health assessment.

CONCLUSIONS

- ➢Current levels of exposure are not expected to make people sick.
- ➢Past levels may have been high enough to cause some health concern. ATSDR is still investigating.
- ➢Follow-up activities are needed involving health education and health outcome evaluation.

Professional public health representatives at these locations are available to provide information.

San Antonio Metropolitan Health District, 210-207-8853

ATSDR, 1-888-42-ATSDR

Texas Department of Health, 512-458-7269

Air Force Base Conversion Agency Profiles

Patrick McCullough

Patrick McCullough is the senior representative for the Air Force Base Conversion Agency (AFBCA) at Kelly AFB. He is charged with supporting Air Force Materiel Command's efforts to ensure a smooth transition of the privatization and redevelopment of Kelly.

McCullough assumed his present position in December 1995. Prior to his assignment at Kelly, he was an AFBCA program manager with regional responsibility for the environmental restoration and disposal of bases being closed or realigned, and guidance for operating locations at each base within his region.

Originally from Bartlesville, Okla., McCullough spent over 20 years as an Air Force pilot in various assignments around the world. He logged over 3,000 hours in tactical and training aircraft, including over 600 hours in combat.

His final assignment was in the Pentagon as the head programmer for the Air Force base closure account and has worked closely with base closure issues for ten years.

Adam G. Antwine

Adam G. Antwine, is an environmental engineer serving as chief of environmental programs for AFBCA, Kelly AFB. He is responsible for environmental activities at Kelly AFB under the Base Realignment and Closure Commission.

Antwine is a native of San Antonio and in 1981 entered federal civil service as an engineer in the technology repair division of the directorate of maintenance, San Antonio Air Logistics Center (SA-ALC) at Kelly. He later managed several departments where he was responsible for fuel accessories repair and test facilities, laboratory facilities, and process improvement programs.

In 1992, Antwine was selected for assignment to the office of the deputy chief of staff for logistics, HQ USAF in Washington, D.C. and served as as the focal point for pollution prevention programs and the Air Force corrosion control program. Prior to assuming his current position he was part of the environmental programs division, AFBCA in Roslyn, VA.

AFBCA To Take Over...

Continued from Page 1

The Kelly closure is the most complex yet under the authority of the Base Closure and Realignment Act of 1988 and the Defense Base Closure and Realignment Act of 1990, since it involves both closure and realignment, along with uninterrupted use of many key facilities.

"At Kelly, unlike other base closures, land and buildings are turned over to GKDC for reuse as they become available, even before the operational mission at the base is complete," McCullough added.

"Because Kelly is different, we often are confronted with situations not experienced at other locations. This is where the relationship becomes critical to completing the process," McCullough stressed.

Although Kelly is scheduled to close and realign by July 13, 2001, plans are for the management of the BRAC environmental cleanup and compliance programs to shift to AFBCA on December 1, 1999. This will ensure continuity of the program as Logistics Center personnel transfer to other locations.

Indar S. Schabra

Indar S. Schabra is chief of property management of the AFBCA, Kelly AFB. Schabra is responsible for transferring surplus Air Force property to the Greater Kelly Development Corporation once all remedial action has been taken to protect human health and the environment.

Schabra has been a member of the AFBCA Kelly team and has resided in San Antonio since July 1996. He was born in Pakistan and raised in Punjab, India.

He joined AFBCA in 1993 after completing special projects for the District of Columbia. During his tenure with the Agency, he has worked on several base closures including: Myrtle Beach, Homestead, Newark, Norton, George, Williams and Kelly AFB. Schabra's successful leadership has created a favorable working relationship with the local redevelopment authorities.

Combining his knowledge of real estate and San Antonio with his background in engineering, Schabra plays a key role in the innovative and unparalleled redevelopment of Kelly AFB.

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Horizontal Wells To Form Contamination Barrier Along East Kelly Perimeter

Leading-edge drilling technology borrowed from the oil and gas industry is being used to install horizontal extraction wells along the eastern and southern boundaries of East Kelly to keep contaminated shallow groundwater from moving off base.

The advantages of using the advanced methods include lower cost as well as reduced noise, dust and inconvenience for neighbors around East Kelly, compared to alternative proposals for confining the flow of contamination.

"Slant well" drilling has been used for years in the petroleum industry to meet unique oil field requirements, but the equipment needed to bore horizontal wells at a defined depth was not available until recently.

"Using this technology will save several million dollars over the cost of trenching or installing vertical wells," said Charlie Matthews, project manager.

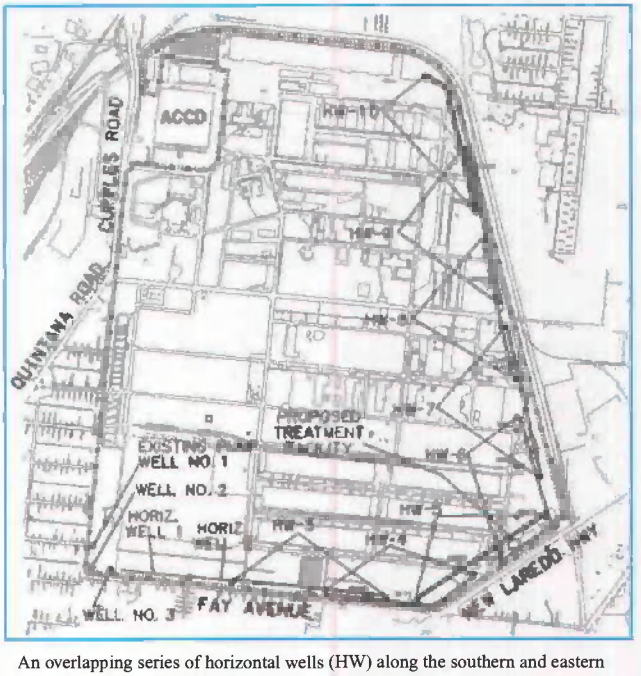
The first two horizontal wells were completed along the southern boundary of the annex in late April 1999, followed by a series of pump tests to evaluate their effectiveness. Following approval, eight more horizontal wells and two vertical wells are being drilled this fall, while construction is under way on the related collection and control systems and the groundwater treatment plant. All three parts of the project are to be completed and in operation by the end of April 2000.

A former aircraft maintenance facility in the northwest corner of East Kelly and a former metal plating shop on the main base are believed to be the sources of contamination in the shallow groundwater in this area. The contamination plume from these two sources is spreading slowly southeastward in a confined zone between 25 and 40 feet below ground surface. This shallow groundwater is not used as a source of drinking water and is separated from the Edwards Aquifer by several hundred feet of impervious shale and clay.

Earlier plans to contain the contaminated shallow groundwater within the installation boundary called for digging a series of long barrier trenches. Where buildings, railroad tracks and public utilities would have prevented digging such immense trenches, conventional vertical wells were planned. But evaluation of the first two horizontal wells confirmed that horizontal wells would be as effective as either the proposed trench system or a series of vertical wells.

Here's how it works. When the drilling starts, the drill enters the ground at an angle rather than boring straight down. As the drill reaches the water bearing layer, the new drill-head positioning technology controls the drill so that it stays within the groundwater zone - boring horizontally up to 1,200 feet from the drilling rig and beneath all the utilities and building foundations. Water enters through an 800-foot screened well casing, creating a very large capture area and extracting more water from the ground than would a single vertical well with a relatively limited capture area.

After treatment, the extracted groundwater will be reused or discharged at a permitted outfall. This project is one of several pump-and-treat systems at Kelly that may play a significant part in long-term remediation solutions.



An overlapping series of horizontal wells (HW) along the southern and eastern boundaries of East Kelly will form a barrier to prevent more contamination from spreading off base

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE