KELLY AFB
TEXAS

ADMINISTRATIVE RECORD
COVER SHEET

AR File Number 3368

AGENDA
Kelly Air Force Base
Restoration Advisory Board

Date: June 18, 1996
Time: 6 p.m.
Location: St. John Berchmans Catholic Church
1147 Cupples Road (3 blocks south of Highway 90)

6:00-6:15	**Meeting Called to Order**	**Mr. Solis**
	— RAB Member Introductions	
	— Conflict of Interest Disclosure	
	— New Members/Departing Members	
6:15-6:20	**Discussion/Approval of May 8 Minutes**	**Mr. Solis**
6:20-6:35	**Base Property Reuse Update**	**Mr. Roberson**
6:35-6:55	**Zone 5 Discussion**	**Mr. Patterson**
6:55-7:05	**Installation Restoration Program Update**	**Mr. Medina**
7:05-7:20	**Break/Poster Stations Discussion**	**Staff**
7:20-7:30	**Subcommittee Reports**	
	— Newsletter Subcommittee	**Mr. Sanchez**
	— Charter Subcommittee	**Mr. Hagelthorn**
7:30-7:40	**New Business**	**Mr. Solis**
7:40-7:45	**Next Meeting**	**Mr. Solis**
	— Date and location	
	— Items for agenda	
7:45-8:00	**Community Discussion**	**Mr. Solis**
8:00	**RAB Meeting Adjourns**	
8:00-8:20	**Poster Stations Discussion**	**Staff**

Minutes of the June 18, 1996 meeting

of the

KELLY AIR FORCE BASE

Restoration Advisory Board

held at
St. John Berchman's School
1147 Cupples Road

Kelly Air Force Base Restoration Advisory Board Meeting
June 18, 1996 6 p.m.
St. John Berchmans School

Members/Alternates present:

Mr. Juan Solis,Sr., RAB Community Co-Chair
Mr. Allan Hagelthorn
Dr. Gene Lene
Mr. Nicholas Rodriguez, Jr.
Mr. Edward Weinstein
Mr. Paul Roberson
Ms. Annalisa Peace
Mr. Paul Person
Mr. Larry Bailey, RAB Base Co-Chair
Mr. Tom Culbertson
Mr. Sam Sanchez
Mr. Armando Quintanilla
Mr. George Rice
Mr. Gary Beyer
Mrs. Yolanda Johnson

Members absent without Alternate:

Mr. Richard Ehrhart (future Member)
Mr. Carl Mixon
Mr. Sam Murrah
Mr. Thomas Moore

Kelly Air Force Base Staff present:

Mr. Michael Estrada
Mr. Mike Patterson
Capt. Ed Von Dran
Mr. Glenn Whiton
Mr. Dick Walters
Mr. Stan Pehl
Ms. Adrienne Williams
Ms. Sonia Gallegos

Item I: Call to Order

The meeting began at 6:10 p.m. with Mr. Juan Solis, Community Co-chair conducting.

A. RAB Member Introductions

RAB members introduced themselves to the public attendees. Mr. Paul Person, representing Union Pacific Railroad, was introduced as a new RAB member replacing Mr. Tom Smith's alternate and nominee to assume his place on the Board.

B. Conflict of Interest—Disclosure/Reminder

Mr. Armando Quintanilla, Mr. George Rice, and Ms. Yolanda Johnson, identified themselves as having a conflict of interest at the present time.

Item II: Discussion/Approval of Minutes

The minutes from the 8 May RAB meeting were approved without change.

Item III: Zone 5 Update

A. Update on Zone 5

Mr. Mike Patterson, Kelly AFB, gave a presentation on the status of the Zone 5 cleanup (see attached slides). He reviewed site S-1 and spill sites in the 1100 and 1500 areas. The main focus was on site S-1 because it affects groundwater off base. His presentation outlined the current areas of contamination and current measures in place to clean up these sites. He said that, to the Air Force's knowledge, no one is being exposed to any contamination from site S-1. He concluded by saying the Air Force will be required to clean up the contaminated soil and groundwater to regulatory standards.

B. Questions and Comments

Mr. Rice asked how the contaminants at S-1 got there. Mr. Patterson explained that storage tanks were once located at the site. They stored used fuels and solvents that were being taken off base for recycling. Over the years, spills occurred during filling and emptying operations. Mr. Rice asked if the high concentrations of metals came from the solvents. Mr. Patterson said that was probably the case.

Mr. Sam Sanchez, asked Mr. Gary Beyer, about the nature of the permit the Texas Natural Resource Conservation Commission (TNRCC) is granting for basewide cleanup. Mr. Beyer said it is a Post-closure Care Permit and ensures the base meets the cleanup requirements set by the Resource Conservation and Recovery Act (RCRA).

Mr. Quintanilla asked how many acres have been contaminated in Zone 5. Mr. Patterson said he did not know how many total acres, but about 32 acres off base have contaminated groundwater that requires cleanup.

Mrs. Johnson said rain would often flood the S-1 area and run into the North Kelly Gardens neighborhood. She asked if that water was contaminated? Mr. Patterson said the on base area of contamination is in a depression, making off-base impact unlikely.

Ms. Annalisa Peace, asked how much water is in the shallow aquifer. Mr. Patterson responded that it was difficult to estimate, but over the last couple of years, the treatment system at S-1 has pumped between 400 and 2,500 gallons of water per day from the shallow aquifer.

Ms. Peace asked if the pipeline in the 1500 area is still being used. Mr. Patterson said it is, and that the base has replaced the leaking valve responsible for the spill.

Ms. Peace asked to what standards the base Industrial Wastewater Treatment Plant treats water. Mr. Patterson replied the water is treated to surface water standards. Mr. Larry Bailey, added that the plant discharges about 1.2 million gallons per day. The base is working on a plan to reuse that water, reducing its draw from the Edwards Aquifer.

Mr. Ruben Solis, asked if the public was notified when the spill in the 1500 area took place. Mr. Bailey responded that since it happened before he came to Kelly, he didn't know. But he does know TNRCC was notified of the spill. Mr. R. Solis also asked why the public was not included on the agenda. He was told the public is invited to speak after the presentations are completed.

Mr. Quintanilla asked if any soil contamination could reach the neighborhoods. Mr. Patterson said only in the event of a major flood. The water would have to cross Growden Drive, which is several feet above the contaminated soil.

Mr. Tom Culbertson, said it would be a good idea for the public and the RAB members to see the sites in person. Mr. Bailey replied there is a standing invitation for anyone who wishes a tour.

Mr. Sanchez asked if S-1 will be one of the sites looked at by Agency for Toxic Substance and Disease Registry (ATSDR). Mr. Bailey said he does not know. The RAB had only asked for ATSDR to look at the areas south of the base, but they may choose to look at the north area.

Mr. Rice said he collected soil samples in the area and discovered elevated levels of lead, arsenic, and barium. He did not know the source of the contaminants. He suggested cooperating with Kelly AFB to determine the source of the contamination.

Several members of the RAB suggested the City of San Antonio host a separate public meeting to discuss the issues in more detail. Members of the public indicated they wanted a chance to tell their side of the story. Mr. Bailey agreed this meeting was a good idea. Mr. Paul Roberson, said he supported the meeting, but the city should have a lesser role, such as that of a facilitator. The RAB requested the Air Force and community representatives meet together to determine a meeting agenda, location, and time.

Item IV: BRAC Update

A. Greater Kelly Development Corporation (GKDC)

Mr. Roberson gave a brief update on property reuse at Kelly. He said the GKDC was formed to help move Kelly AFB towards privatization and commercialization. He said GKDC will submit a draft reuse plan. An Environmental Impact Study will be performed based on the proposed reuse. Once the EIS is complete, a final plan will be presented. Public comment will be taken on the draft and final reuse plans. Mr. Roberson said the reuse plan will determine the types of industries best suited to use the facilities at Kelly. Contractors doing work for the Air Force will be selected by the Air Force. The city will select the remaining contractors.

He added that all contamination which Kelly created will remain the Air Force's responsibility to clean up, and that no companies coming to Kelly have been offered any type of environmental exclusions. He said he believed the Air Force was doing its best to clean up the contamination and that the Air Force and the community are working for the same thing. He said the two sides must seek common ground and come to a solution.

B. Questions and Comments

Mr. R. Solis expressed a concern that the fuel storage tanks will be converted to gasoline storage tanks and the whole operation expanded. He also claimed that hazardous waste was going to be brought to Kelly from the outside. He was against any such actions. Mr. Roberson commented that a company is proposing a hazardous waste treatment facility, but that the GKDC plan had not yet progressed far enough to even consider it. Any decisions were a long way off and would not be made till after the public had a chance to comment.

Item V: Installation Restoration Program Update

A. Previous Action Items

Mr. Bailey gave a brief update on items from the previous RAB meeting.

Aquifer Pump Tests: The timing of the tests is still being negotiated.

ATSDR Visit: ATSDR personnel are coming in July. Kelly is trying to get them here as soon as possible.

Cleanup Strategies: A meeting with interested RAB members will be set in the next couple weeks to discuss new cleanup strategies and alternate methods of cleaning up the groundwater south of the base. As promised, RAB members will be brought in to participate in the discussions.

Mr. Rice said that, according to his discussions with Mr. Bailey and General Childress, the existing plan will be scrapped in favor of a new solution. Mr. Bailey added that parts of the existing plan may be retained, if they are found to be the best solution. If the plan changes significantly, it will be presented for public review and comment.

A short break was taken.

Item VI: Subcommittee Reports

Newsletter Subcommittee

Mr. Sanchez reported no new business. He said he would like to see more people join his committee.

Charter Subcommittee

Mr. Allan Hagelthorn asked for inputs on charter changes by July 25. He said there is new guidance on RABs that needs to be incorporated into the existing charter. Mr. Quintanilla asked for clarification on whether or not the RAB is a decision-making body. Mr. Hagelthorn said according to federal law, the RAB is not.

Mr. Quintanilla said the issue of conflict of interest needs to be addressed. He said since TNRCC is partially funded by the Air Force, they have a conflict of interest.

Item VII: New Business

A. Upcoming Documents

Mr. Bailey indicated two documents will be released soon—the Basewide Remedial Assessment and the Zone 5 Focused Feasibility Study for cleaning up groundwater in the off-base area.

No other new business was reported.

Item VIII: Summary and Closing

The next meeting date was set for August 26. Topics of discussion will be the Basewide Remedial Assessment and the Focused Feasibility Study for Zone 5. The RAB suggested the meeting be held in the same location.

Mr. Quintanilla asked that a copy of the letter sent by TNRCC to the County Judge regarding groundwater contamination be sent to all RAB members. Mr. J. Solis said it would be done.

Mr. Quintanilla suggested the Air Force/Community meeting be scheduled for the week of July 22.

Item IX: Community Concerns

Many members of the public in attendance expressed concerns to the RAB on the following topics:

Information: Some felt that not enough information was being provided, and that what information is provided is not given in a way people understand.

Health concerns: Several residents reported health problems in their families which they believed are related to the contamination and the fuel storage tanks. They asked for help in determining the source of the problems and in taking away what they believe is the cause.

Fuel Storage tanks: Several residents said they want the storage tanks to be removed. They complained of the odor and the potential health risk.

Information Repository: One person said the information in the public library is impossible to find. He would like to see that improved.

Compensation: Several people expressed concern that their property values have been irrevocably damaged by the contamination. The RAB voted to direct the Air Force to consider buying the contaminated property.

Community involvement: Some people expressed concern that the public is not given a chance to present its side of the story, and that the Air Force does not listen to what they have to say. They want more involvement in the process.

Changes in environmental regulations: One person expressed concern that changes in environmental laws may allow the Air Force to escape responsibility for cleanup. It was clarified by Mr. Pat McCullough, of the Air Force Base Conversion Agency, that the proposed changes would only give state governors the authority to waive the requirement to complete cleanup before a transfer of property can be made. This does not absolve the Air Force of its responsibility to clean up, it only allows the faster conversion of closing bases.

Mr. Quintanilla asked for the base to provide a person from the Judge Advocate's office to explain to the RAB the proposed changes in Superfund law. He also asked for Mr. R. Solis and Mr. Chavez Lopez to join the board. They declined.

The meeting was adjourned at 9:15 p.m.

Attachments
1. Agenda
2. Presentation slides of Zone 5 Update by Mike Patterson

Minutas de la Reunión #16 de la
Junta Consejera para la Restauración (RAB) de la Base Aérea Kelly
18 de junio de 1996, 6:00 p.m.
St. John Berchmans School

Miembros de la Junta y alternos presentes:

Sr. Larry Bailey, Presidente de la Junta representando la Fuerza Aérea
Sr. Gary Beyer
Sr. Tom Culbertson
Sr. Allan Hagelthorn
Sra. Yolanda Johnson
Dr. Gene Lene
Sr. Sam Sánchez
Ms. Annalisa Peace
Sr. Paul Person
Sr. Armando Quintanilla
Sr. George Rice
Sr. Paul Roberson
Sr. Nicholas Rodriguez, Jr.
Sr. Juan Solis Sr., Presidente de la Junta representando la Comunidad
Sr. Edward Weinstein

Miembros ausentes sin representación de alternos:

Sr. Richard Ehrhart (futuro miembro)
Sr. Carl Mixon
Sr. Thomas Moore
Sr. Sam Murrah

Representantes de la Base Aérea Kelly presente:

Sr. Michael Estrada
Ms. Sonia Gallegos
Sr. Mike Patterson
Sr. Stan Pehl
Capitán Edward Von Dran
Sr. Dick Walters
Sr. Glenn Whiton
Ms. Adrienne Williams

Minutas de la Reunión #16 de la
Junta Consejera para la Restauración (RAB) de la Base Aérea Kelly
18 de junio de 1996, St. John Berchmans School

TEMA I: Apertura de la Reunión

El Sr. Juan Solis Sr., Presidente de la Junta representando la Comunidad, llamó la reunión al orden a las 6:10 pm.

A. Presentación de los Miembros de la Junta

Los miembros de la Junta hicieron una autopresentación. El Sr. Paul Person, representando a Union Pacific Railroad, fue presentado como un nuevo miembro de la Junta reemplazando al alterno del Sr. Tom Smith.

B. Conflicto de Intereses - Revelaciones/Recordatorio

El Sr. Armando Quintanilla, el Sr. George Rice y la Sra. Yolanda Johnson indicaron que tienen conflicto de interés en este momento.

TEMA II: Discusión/Aprobación de las Minutas

Las minutas de la reunión del 8 de mayo fueron aprobadas sin cambio.

TEMA III: Reporte de la Zona 5

A. Informe sobre la Zona 5

El Sr. Mike Patterson, representante de la base Kelly, hizo una presentación sobre las areas de esfuerzos de limpieza de la Zona 5. Copia del material presentado se incluye con las minutas.
Explicó sobre el área S-1 y los derrames en las áreas 1100 y 1500. Concentró su presentación en el área S-1 ya que ésta afecta el agua subterranea fuera de la base. Hizo una presentación detallada de las áreas contaminadas y los sistemas de limpieza que están instalados para limpiar estas áreas. Comentó que la Fuerza Aérea no tiene conocimiento de persona alguna que esté expuesta a la contaminación del área S-1. Concluyó diciendo que a la Fuerza Aérea se le requerirá limpiar la contaminación en el terreno y en el agua subterranea hasta que su calidad satisfaga las normas establecidas por las regulaciones.

B. Preguntas y Comentarios

El Sr. Rice preguntó cómo llegaron los contaminates al área S-1. El Sr. Patterson explicó que hace algún tiempo existieron tanques de almacenaje en esta área. Se almacenaba combustibles y solventes usados que eran enviados fuera de la base para reciclaje. Al pasar

de los años ocurrieron derrames durante la operación de llenar y vaciar estos tanques. El Sr. Rice preguntó si la alta concentración de metales provino de los solventes. El Sr. Patterson contestó que es probable.

El Sr. Sam Sánchez le preguntó al Sr. Gary Beyer sobre la naturaleza del permiso que TNRCC está otorgando para la limpieza de la base. El Sr. Beyer contestó que es un permiso para el cuidado después del cierre la base (Post-closure Care Permit) que asegura que la limpieza cumple con los requisitos de limpieza establecidos por el Acta de Conservación y Recobro de los Recursos (RCRA).

El Sr. Quintanilla preguntó cuantos acres han sido contaminados en la Zona 5. El Sr. Patterson contestó que no está seguro del total de acres, pero hay 32 acres fuera de la base en que el agua subterranea está contaminada y necesitan limpiarse.

La Sra. Johnson indicó que en ocaciones la lluvia inunda el área S-1 y el agua llega al área residencial North Kelly Gardens. Preguntó si esta agua está contaminada. El Sr. Patterson dijo que el área contamina queda en una depresión y es muy poco probable que pueda impactar áreas fuera de la base.

Ms. Annalisa Peace preguntó cuánta agua hay en el aquífero llano. El Sr. Patterson respondió que es muy difícil de estimar, pero que durante los últimos años el sistema de tratamiento ha extraído entre 400 y 2,500 galones de agua por día del aquífero llano.

Ms. Peace preguntó si la tubería en el área 1500 está en uso todavía. El Sr. Patterson contestó que sí y que la válvula responsable de la filtración fue reemplazada.

Ms. Peace preguntó a qué normas la planta de tratamiento de desperdicios industriales trata el agua. El Sr. Patterson contestó que el agua es tratada siguiendo las normas para aguas de superficie. El Sr. Larry Bailey añadió que la planta descarga aproximadamente 1.2 millones de galones al día. La base está trabajando en un plan para reusar esta agua que reducirá el volumen de agua requerido del aquífero Edwards.

El Sr. Ruben Solis preguntó si el público fue informado cuando ocurrió el derrame en el área 1500. El Sr. Bailey contestó que el derrame ocurrió antes de él llegar a la base y no sabe si el público fue informado. Pero, sí sabe que TNRCC fue notificado. El Sr. Ruben Solis preguntó por qué el público no fue incluído en la agenda. Se le contestó que el público está invitado a hablar después de la presentación.

El Sr. Quintanilla preguntó si la contaminación del terreno puede llegar a la comunidad vecina. El Sr. Patterson contestó que sólo en caso de una inundación grande. La inundación tiene que cruzar Growden Drive que está a varios pies sobre el terreno contaminado.

El Sr. Tom Culbertson dijo que sería bueno que el público y los miembros de la Junta visitaran el área. El Sr. Bailey contestó que hay una invitación permanente para aquellos que deseen visitar el área.

El Sr. Sánchez preguntó si el área S1 estará incluída en la visita de la agencia "Toxic Substance and Disease Registry" (ATSDR). El Sr. Bailey indicó que él no sabe. La Junta le pidió a ATSDR visitar las áreas al sur de la base, pero ellos pueden vistar el área norte.

El Sr. Rice dijo que él tomó muestras del terreno y los resultados mostraron un nivel elevado de plomo, arsénico y bario. No tiene conocimiento de la procedencia de los contaminantes. El sugirió cooperar con la base Kelly para determinar la procedencia de los contaminantes.

Algunos miembros de la Junta sugirieron que la ciudad de San Antonio auspicie una reunión pública para discutir este tema con más detalles. Algunos asistentes del público indicaron que ellos querían la oportunidad de presentar su versión. El Sr. Bailey estuvo de acuerdo que ésta era una buena idea. El Sr. Roberson dijo que él estaba de acuerdo con la idea, pero que la ciudad debía servir solamente de coordinador. La Junta pidió que la Fuerza Aérea y los miembros de la comunidad se reunan y establezcan una agenda, lugar de reunión y la hora.

TEMA IV: Resumen sobre BRAC

A. Greater Kelly Development Corporation (GKDC)

El Sr. Roberson presentó un informe sobre el reuso de las propiedades de la base Kelly. Dijo que GKDC fue formada para ayudar a la base Kelly a moverse hacia la privatización y comercialización. Dijo que GKDC recomendará un plan para reusar la propiedad. Se hará un Estudio de Impacto Ambiental (EIS) sobre el reuso propuesto. Tan pronto se complete el estudio, el plan final será presentado para recibir comentarios del público. Estos comentarios serán considerados al presentar la propuesta y el plan final para el reuso de la propiedad. El Sr. Roberson dijo que los planes para reuso de la propiedad determinarán la clase de industria que mejor se amolda a las facilidades de Kelly. La Fuerza Aérea seleccionará los contratistas que harán trabajo para la base y la ciudad seleccionará los otros.

Indicó que la contaminación creada por Kelly continuará como responsabilidad de la Fuerza Aérea y que a ninguna compañía que considera establecerse en Kelly se le ha ofrecido una exclusión ambiental. Dijo que él cree que la Fuerza Aérea está haciendo todo lo posible para limpiar la contaminación y que la Fuerza Aérea y la comunidad están trabajando hacia el mismo objetivo y deben buscar una solución juntos.

B. Preguntas y Comentarios

El Sr. Ruben Solis expresó su preocupación de que los tanques de almacenaje de combustible serán usados para almacenar gasolina y que esta operación aumentará. Al mismo tiempo indicó que se consideraba traer a la base desperdicios peligrosos. El está en contra de que esto suceda. El Sr. Roberson comentó que una compañía está proponiendo una planta de tratamiento de desperdicios peligrosos, pero que este plan no ha progresado lo suficiente para GKDC considerarlo. Cualquier decisión tomará tiempo y no se hará hasta que el público haya presentado sus comentarios.

TEMA V: Resumen del Programa de Restauración de la Base

A. Temas pendientes de acción

El Sr. Bailey hizo un resumen de temas pendientes de reuniones previas de la Junta.

Pruebas del Aquífero: La fecha de estas pruebas está siendo negociada.

Visita de ATSDR: El personal de ATSDR visitará a Kelly en el mes de julio. Kelly está tratando de que visiten lo más pronto posible.

Estrategia para la limpieza: En las próximas semanas se llevará a cabo una reunión con asistencia de miembros interesados de la Junta para discutir estrategias y métodos alternos para limpiar el agua subterránea al sur de la base. Como se había prometido, los miembros de la Junta participarán en estas discusiones.

El Sr. Rice dijo que en conversaciones con el Sr. Bailey y el General Childress, se indicó que el plan existente será abadonado en favor de una nueva solución. El Sr. Bailey añadió que si se determina que partes del plan existente representan la mejor solución, estas serán retenidas. Si el plan cambia significativamente, éste será presentado al público para comentarios.

Se tomó un breve receso.

TEMA VI: Informe de Subcomités

A. Informe del Subcomité del Boletín

El Sr. Sánchez reportó que no había nada nuevo. Dijo que le gustaría ver más personas en el comité.

B. Informe del Subcomité de la Constitución

El Sr. Allan Hagelthorn pidió que le enviaran cambios a la Constitución antes del 25 de julio. Dijo que había unas nuevas guías sobre la Junta que deben incorporarse a la Constitución existente. El Sr. Quintanilla pidió que se le clarificara si la Junta es un cuerpo que hace decisiones. El Sr. Hagelthorn dijo que de acuerdo con la ley federal, la Junta no toma desiciones.

El Sr. Quintanilla dijo que el asunto sobre conflicto de interés necesita resolverse. Dijo que como TNRCC está parcialmente subsidiada por la Fuerza Aérea, tiene un conflicto de interés.

TEMA VII: Asuntos nuevos

A. Publicación de Documentos Nuevos

El Sr. Bailey indicó que muy pronto serán dados a la publicidad dos documentos nuevos. Estos son " Basewide Remedial Assessment" y "Zone 5 Focused Feasibility Study" para la limpieza del agua subterranea fuera de la base.

No hubo ningún otro asunto nuevo.

TEMA VIII: Resumen y Cierre

La próxima reunión se celebrará el 26 de agosto. Los temas a discutirse serán "Basewide Remedial Assessment" y "Zone 5 Focused Feasibility Study" La Junta sugirió que la reunión se celebre en el mismo lugar.

El Sr. Quintanilla pidió que se le envíe a los miembros de la Junta una copia de la carta relacionada con la contaminación del agua subterranea que fue enviada por TNRCC al Juez del Condado. El Sr. Solis dijo que así se hará.

El Sr. Quintanilla sugirió que la reunión entre la Fuerza Aérea y la comunidad sea programada para la semana del 22 de julio.

TEMA IX: Preocupación de la Comunidad

Muchos de los asistentes expresaron a la Junta su preocupación sobre los siguientes tópicos:

Información: Algunos piensan que no se provee suficiente información y la información que se provee se presenta en una forma difícil de comprender.
Salud: Algunos residentes reportaron problemas de salud en sus familiares, los cuales ellos creen que están relacionados con la contaminación y los tanques para almacenar combustible. Ellos pidieron ayuda para determinar la fuente de estos problemas y remover aquello que se considere que es la causa.

Tanques para almacenar combustible: Algunos residentes pidieron que los tanques de almacenaje sean removidos. Se quejaron del olor y los riesgos potenciales de salud.

Almacenaje de información: Una persona dijo que es imposible encontrar información en la biblioteca pública. Le gustaría que se mejorara esta situación.

Compensación: Varias personas expresaron su preocupación que el valor de sus propiedades ha sido afectado irrevocablemente por la contaminación. La Junta votó para encaminar a la Fuerza Aérea para que considere comprar la propiedad contaminada.

Participación de la comunidad: Algunas personas expresaron preocupación de que al público no se le da la oportunidad de presentar sus opiniones y que la Fuerza Aérea no presta atención a lo que ellos tienen que decir. Piden que se les dé más participación.

Cambios en las reglamentaciones ambientales: Una persona expresó preocupación de que cambios en las leyes ambientales pueden permitirle a la Fuerza Aérea escapar sus responsabilidades sobre la limpieza. El Sr. Pat McCullough, de la "Air Force Base Conversion Agency", clarificó que los cambios propuestos sólo darían a los gobernadores la autoridad para postergar los requisitos para limpiar la propiedad antes de ser transferida. Esto no releva a la Fuerza Aérea de su responsabilidad para la limpieza. Sólo permite una conversión más rápida de las bases que se están cerrando.

El Sr. Quintanilla pidió que la base provéa un representante legal para que le explique a la Junta los cambios propuestos a la ley de "Superfund". También pidió a los señores Ruben Solis y Chavez López para que se unan a la Junta. Ellos declinaron.

La reunión concluyó a las 9:15 p.m.

Anexos:
1. Agenda
2. Material presentado por el Sr. Mike Patterson -- Programa de Restauración-Zona 5

AGENDA
Kelly Air Force Base
Restoration Advisory Board

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1147 Cupples Road (3 blocks south of Highway 90)

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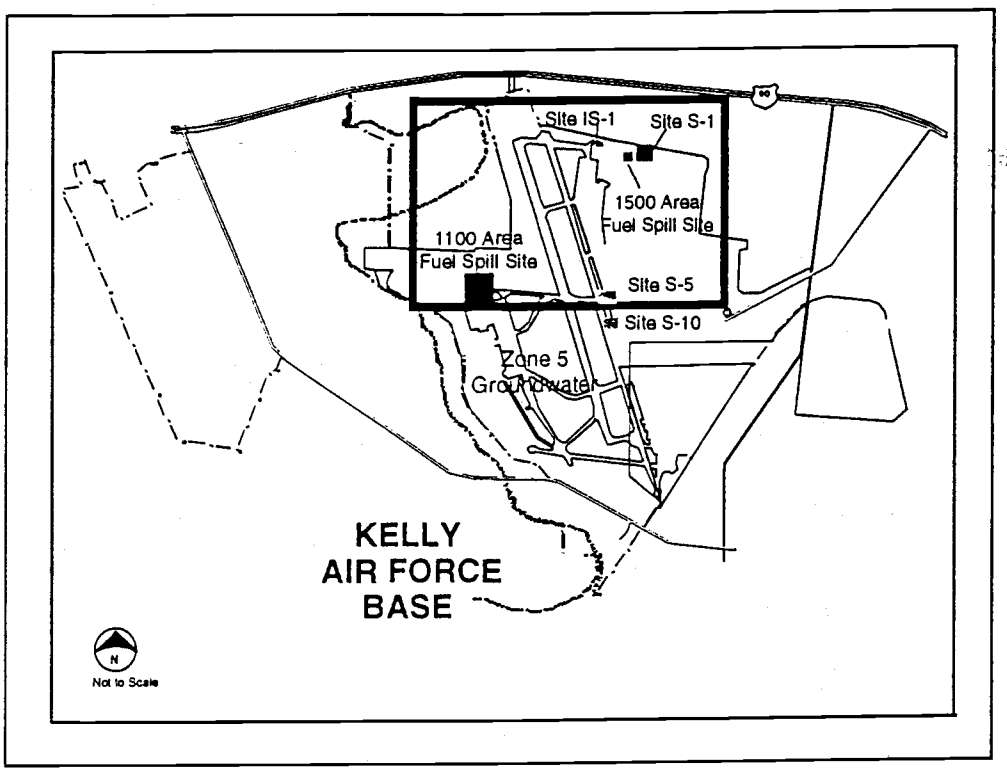
8:00-8:20	**Poster Stations Discussion**	**Staff**

Good Evening.

My name is Michael Patterson. I'm a geologist with the Kelly AFB Environmental Management Directorate.

Tonight I will be providing you an update on the Installation Restoration Program's Zone 5, the warehouse and flightline portion of the base.

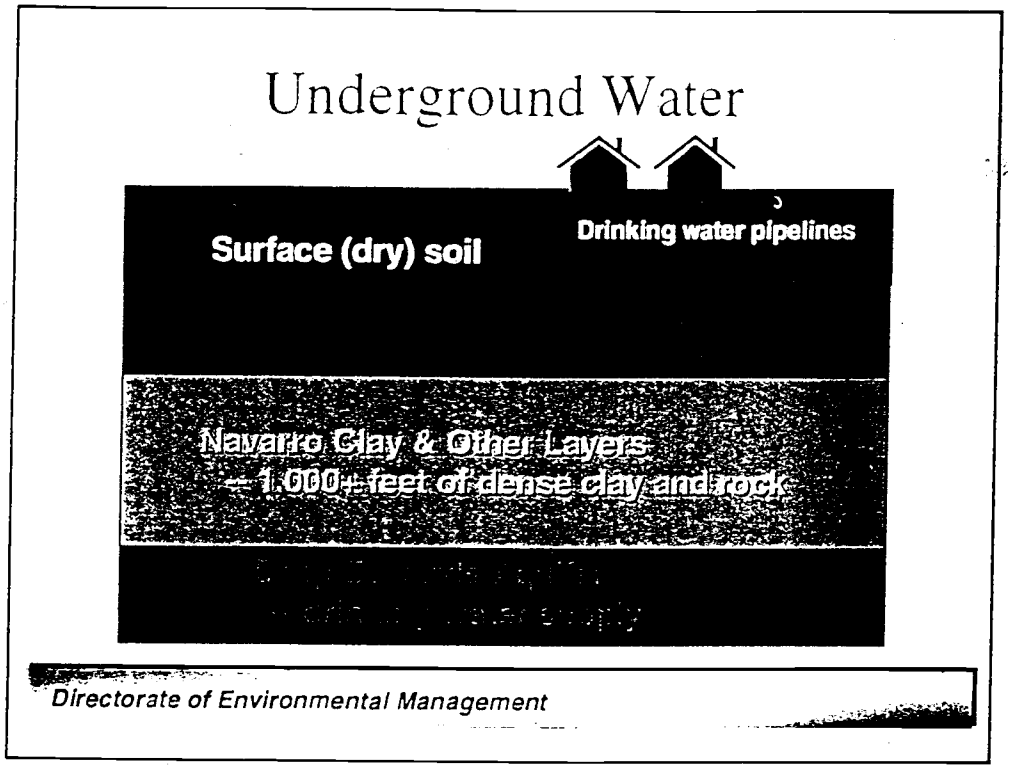


This is a general site diagram of Kelly AFB. The highlighted area is the topic of our discussion tonight.

Within this area, the soil contamination is generally restricted to the area of the sites themselves. The movement of contamination, especially its migration off the base, has been within the shallow groundwater.

Within Zone 5 we have seven locations that we are studying. Tonight we are focusing on 3 of these sites, IRP Site S-1 and the fuel spill sites in the 1100 Area and the 1500 Area. These areas are located in the northern and northwestern portions of the base.

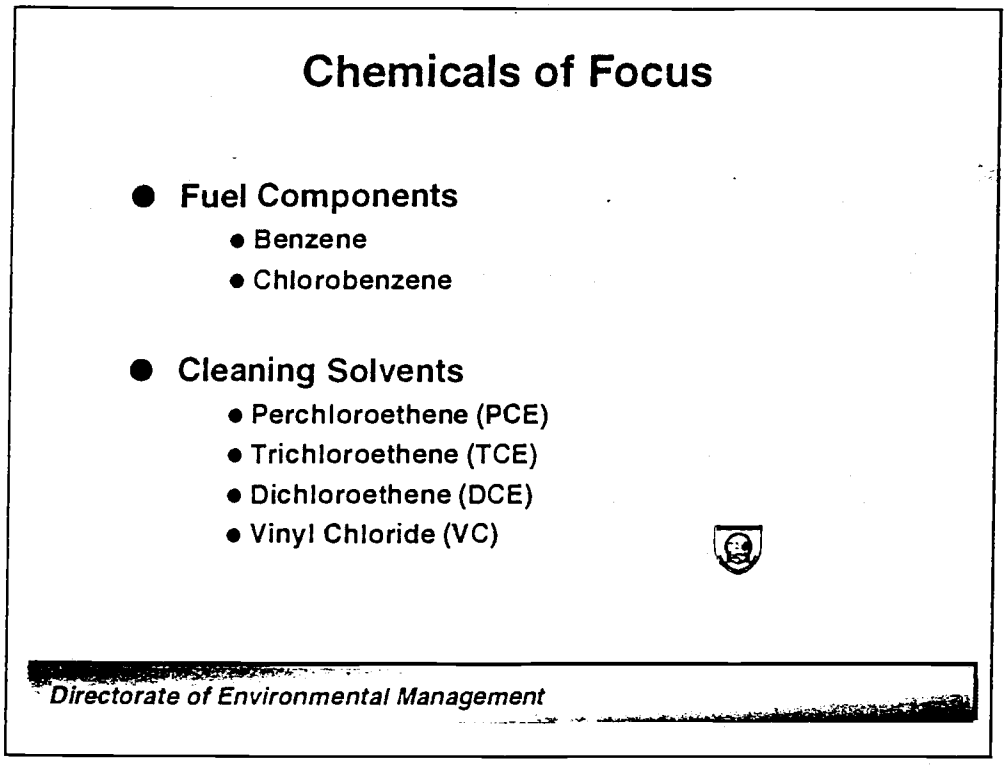
Of the approximate 2,500 acres called Zone 5, there are roughly 32 acres beneath the neighborhood areas which may require cleanup of the shallow underground water to meet existing regulatory standards.



Where is this impacted shallow underground water?

It is contained in the moist soil below the water table. The water moves slowly between the grains of sand and gravel or in the air space within the dirt itself. The pipes carrying drinking water to your home are in the dry soil above this layer. The impacted water cannot get into your drinking water. The tightly packed dry soil above the water table traps and filters any vapors or fumes that may exist. The very low level of cleaning solvents in this wet, moist soil means that the water probably would not give off a harmful level of vapors, even if it were exposed to the air. Because no one uses this water for cooking, drinking or bathing, it does not present a health risk. **If it cannot reach you, then it cannot affect you.**

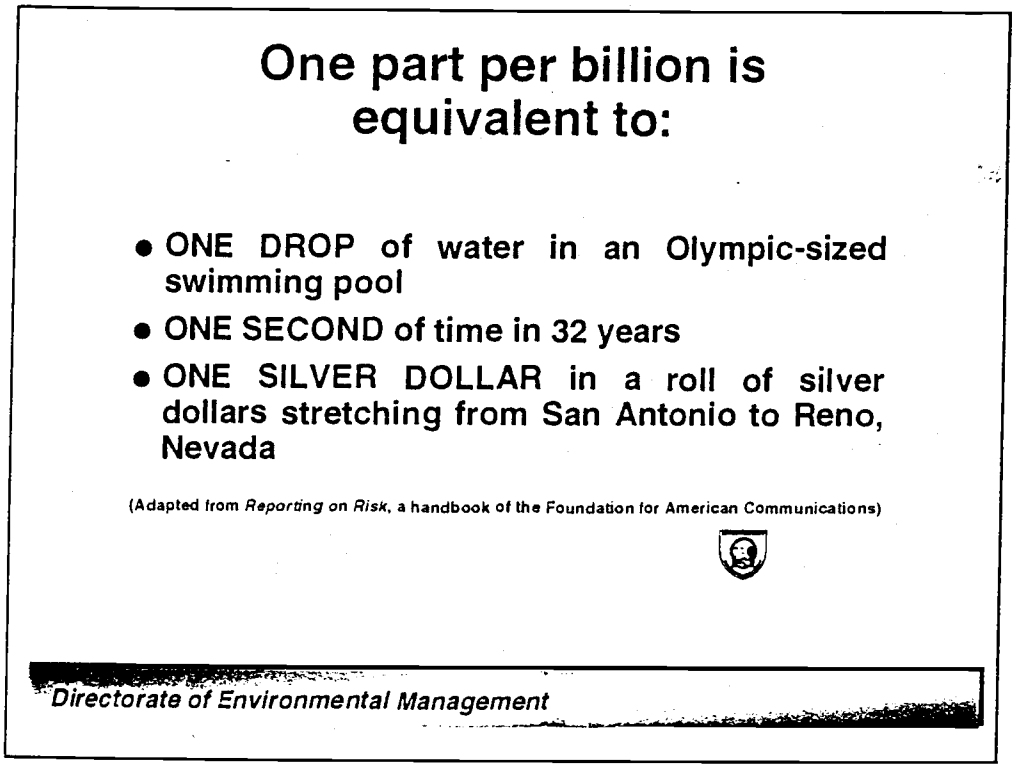
If it doesn't affect anyone, you might ask why we are spending so much time, money and effort to clean it up. The answer is simple. It's the law. Some shallow groundwater in Texas is considered a potential drinking water source. This layer of water must be cleaned to meet the Safe Drinking Water Act standards, which are the levels that the regulatory agencies require us to clean up to -- **even though no one is using it.**



What is in this underground water that we are treating?

Well, for example, at Site S-1, there was a storage area which operated from the early 60s to 1973. Drums of liquid waste were held there until a contractor could pick them up for recycling. Cleaning solvents, fuels and other industrial chemicals from the various workshops were sent there. Some drums leaked, sometimes spills occurred. The liquids soaked into the soil and got caught up in the tight clay and silt. Each time it rains, some of the chemicals wash out of the dry soil and into the wet soil below.

In a moment, I'll be showing you groundwater impact maps for the northern area of Zone 5. These charts represent the published data for areas off base which may have been reached by the impacted groundwater. The lines depicted on these charts represent the Maximum Concentration Limits or "MCLs." An MCL is the highest allowable level of a particular chemical in a drinking water under the Safe Drinking Water Act. Levels above the MCL usually require action to restore the environment. Levels below the MCL don't require any cleanup. These standards are set by the EPA and TNRCC.

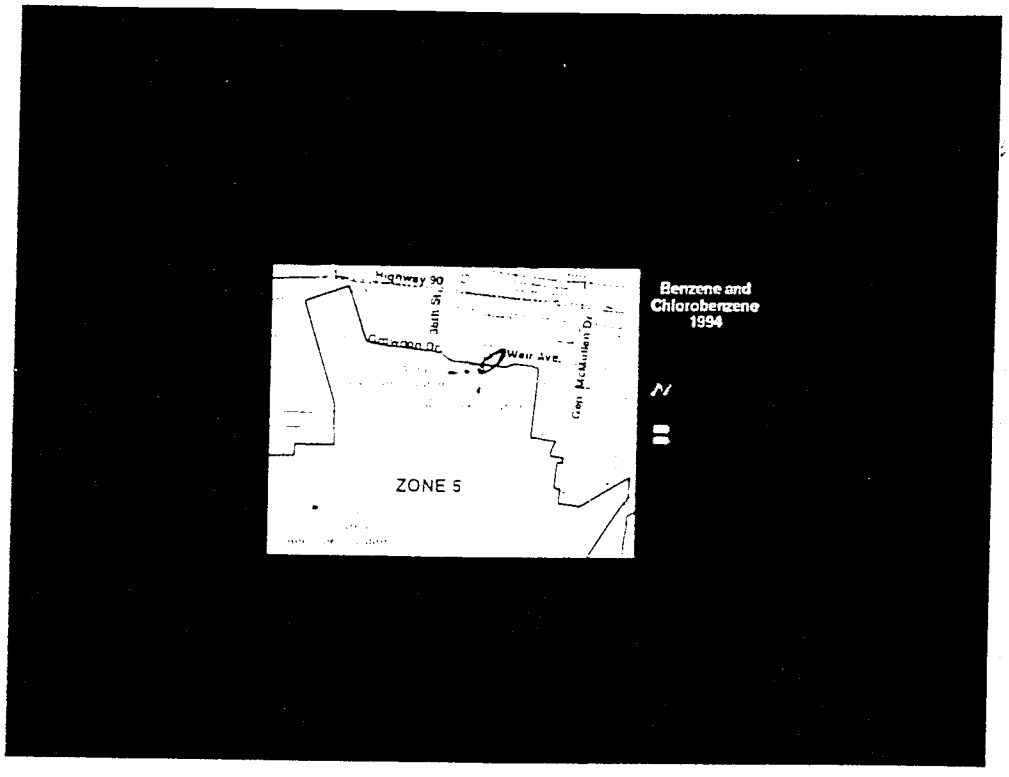


To help us visualize what an MCL is, we've included this slide. Here's how to visualize what a part per billion is. For example, a single part per billion is like ***one drop*** of water in an Olympic-sized swimming pool.

Keeping these examples in mind, I'll read some Maximum Concentration Limits from the Safe Drinking Water Act which establish our cleanup goals:

Benzene - 5 ppb	Chlorobenzene - 100 ppb
Perchloroethene - 5 ppb	Trichloroethene - 5 ppb
1,2 Dichloroethene - 70 ppb	Vinyl Chloride - 2 ppb

The standards (called the MCL or Maximum Concentration Limit) are set well below the point at which research predicts that any health effects may be seen.

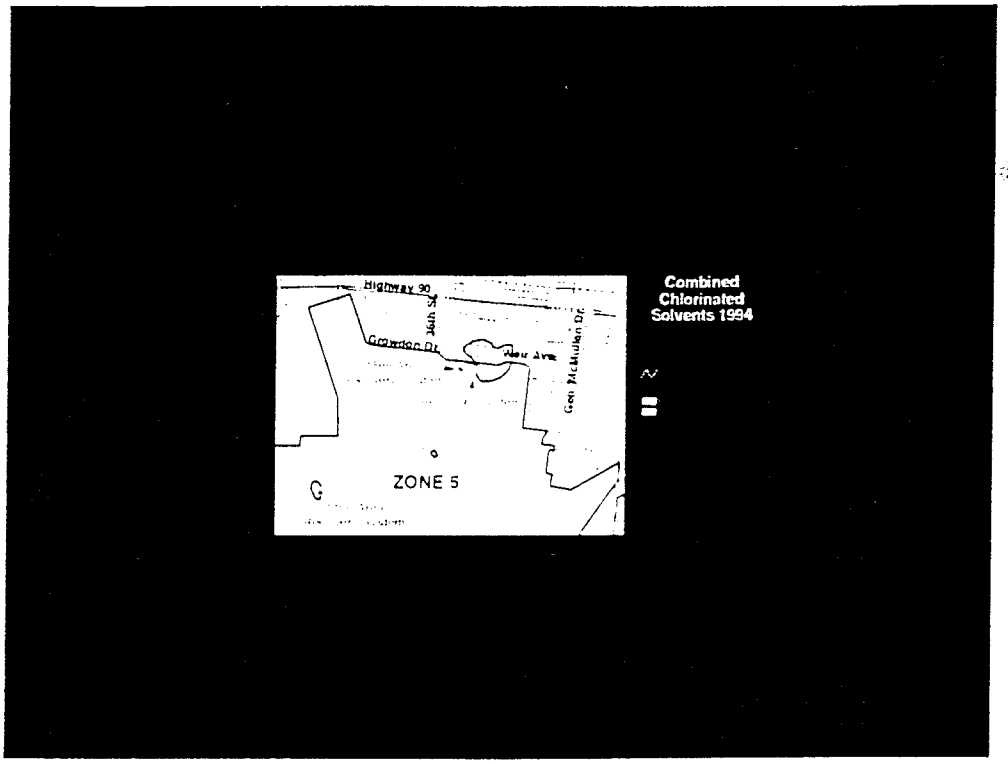


Here's our first slide from the comprehensive groundwater monitoring done in June 1994.

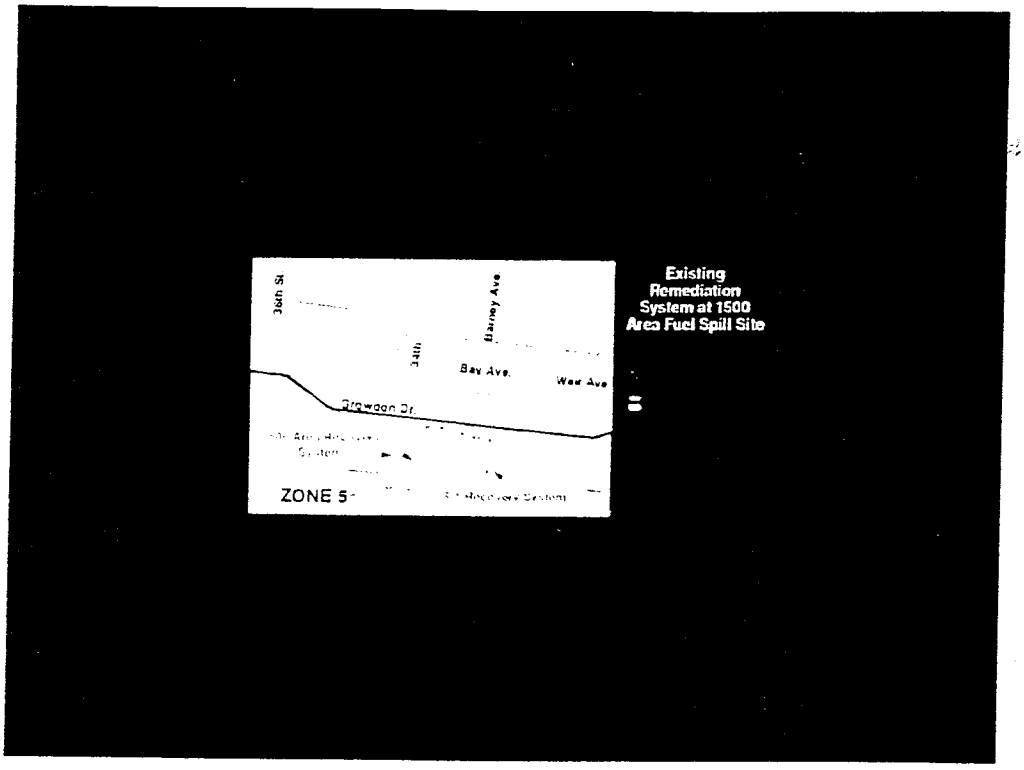
This simple map shows the limits of Benzene and Chlorobenzene that exceed the standard. (Benzene - 5 parts per billion, Chlorobenzene - 100 parts per billion)

You can see how the contours are aligned with the location of the recovery system currently in place at Site S-1. Remember, this system was not there when this data was collected.

You can see the extent of the impacted water.



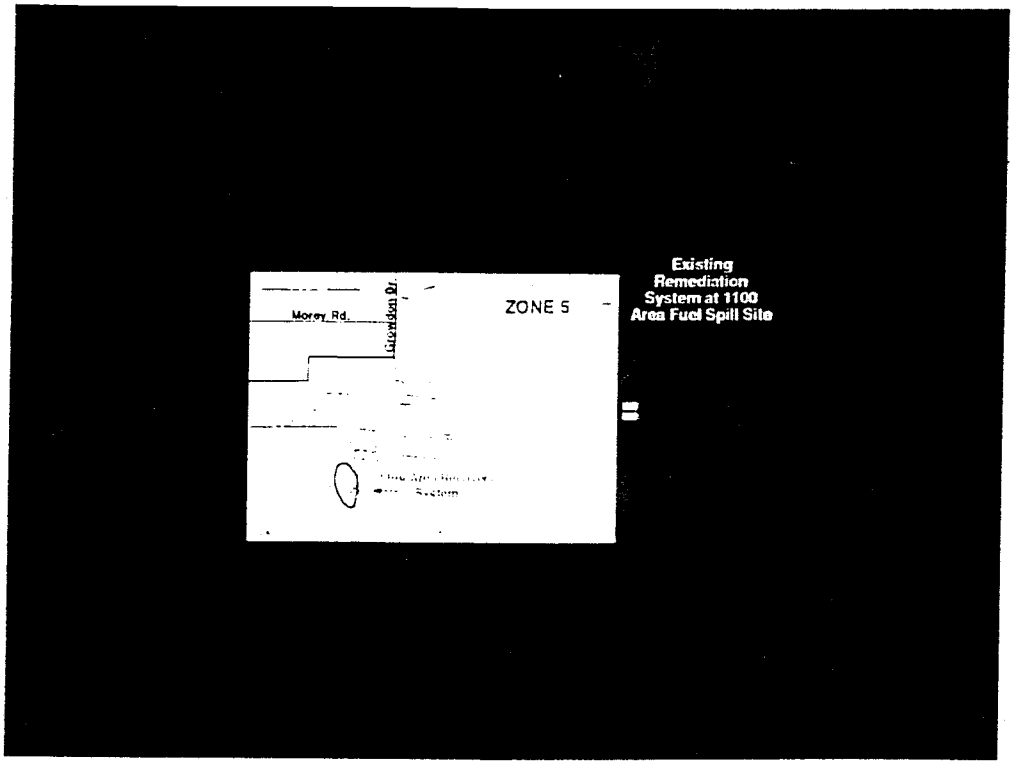
On this diagram, the contour lines are a composite of chlorinated solvents plotted out to the Maximum Concentration Limits.



And now I'd like to show you the location of the 1500 Area fuel spill site with respect to the S-1 Site.

This slide shows our current bioventing cleanup system in the 1500 Area. By providing the oxygen to stimulate the naturally occurring microbes, we help them to consume and digest the jet fuel that leaked from an underground fuel pipeline.

This bioremediation technology has proven itself to be an effective and low cost solution to soil cleanup problems. The biggest investment is time. The microbes that eat the fuel take years to do so. In the process of cleaning up, they leave only water and carbon dioxide gas.

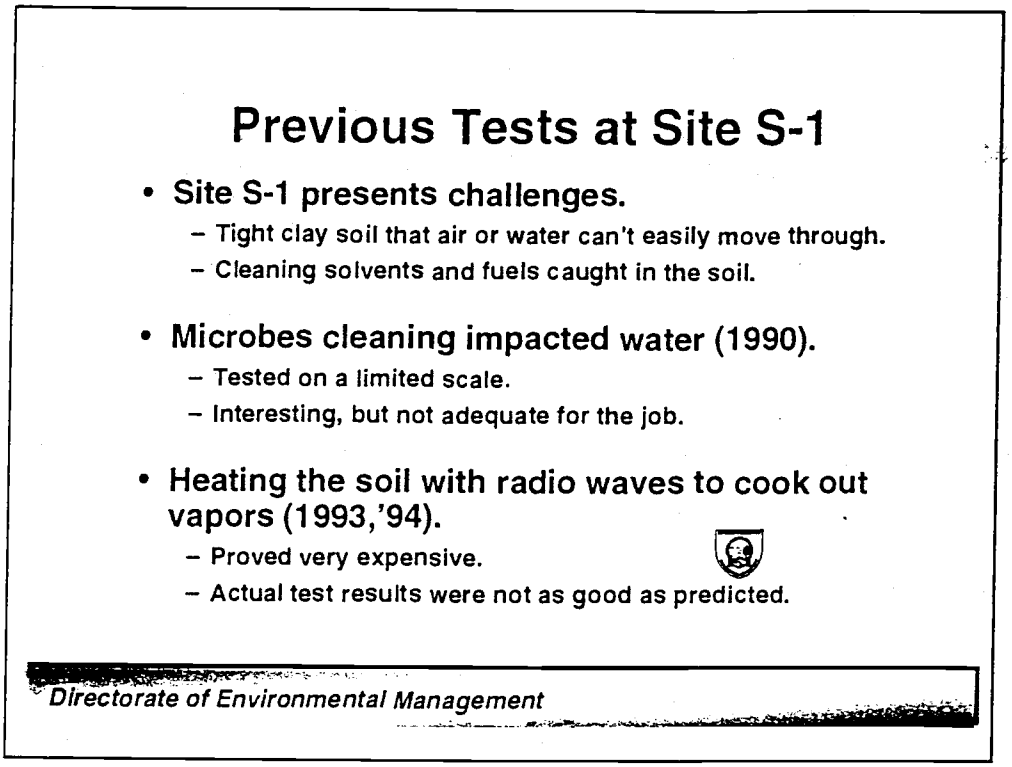


This slide shows our current cleanup system at the fuel spill site in the 1100 area.

Here, too, we are relying on the natural microbes to eat the fuel constituents in the soil. Instead of sending the air down, however, we are using a vacuum to pull the vapors up out of the soil -- and this also pulls air through the soil, supplying the microbes with oxygen.

These slides with the maps are also on the walls as posters tonight. During the break or after the meeting, we invite you and the members of the public here tonight to view these slides and other data we've prepared.

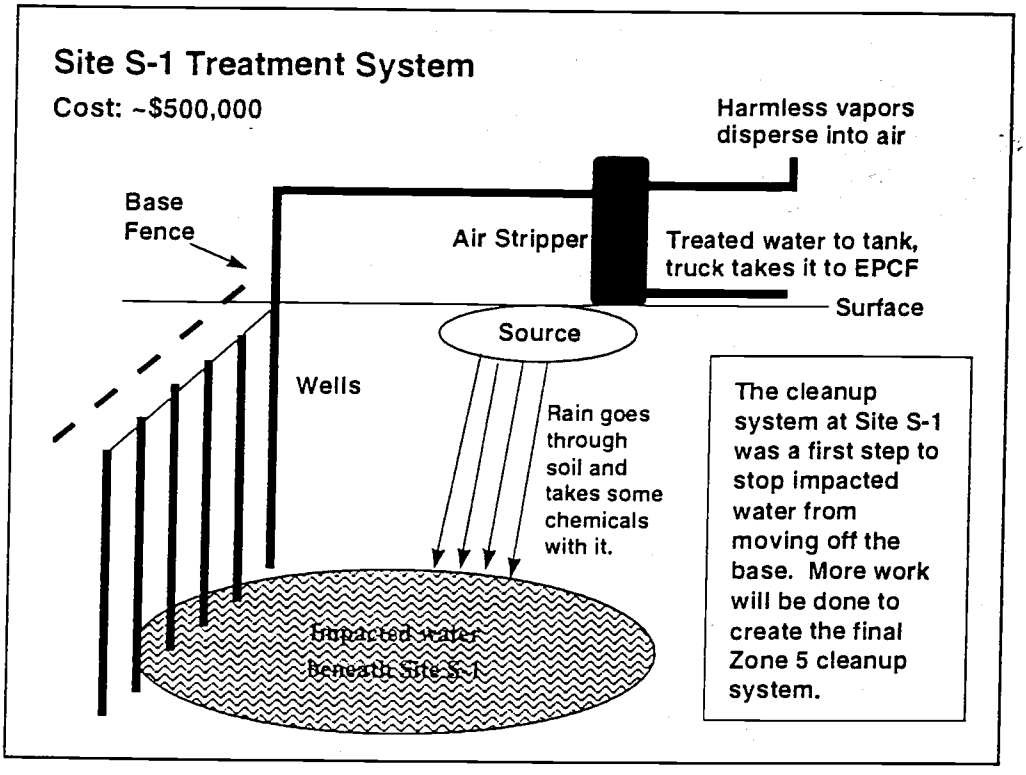
Members of the EM staff will be available at the posters to answer your questions.



Let's talk specifically about Site S-1 now. You don't see much activity at Site S-1, so it may give the impression that not much cleanup is going on. This is not the case at all.

Three separate demonstrations of new cleanup techniques were carried out at Site S-1. We had hoped to find a way to get cleanup results faster than traditional methods. Unfortunately, the tests showed that Site S-1 was a tough challenge. The tight clays and silt of the soil don't easily let go of the chemicals that have been caught in them.

This is good news because it means that vapors or fumes don't slip through the soil to reach the surface. But it also means that we must go back to more traditional, costly and long term ways of doing the cleanup.

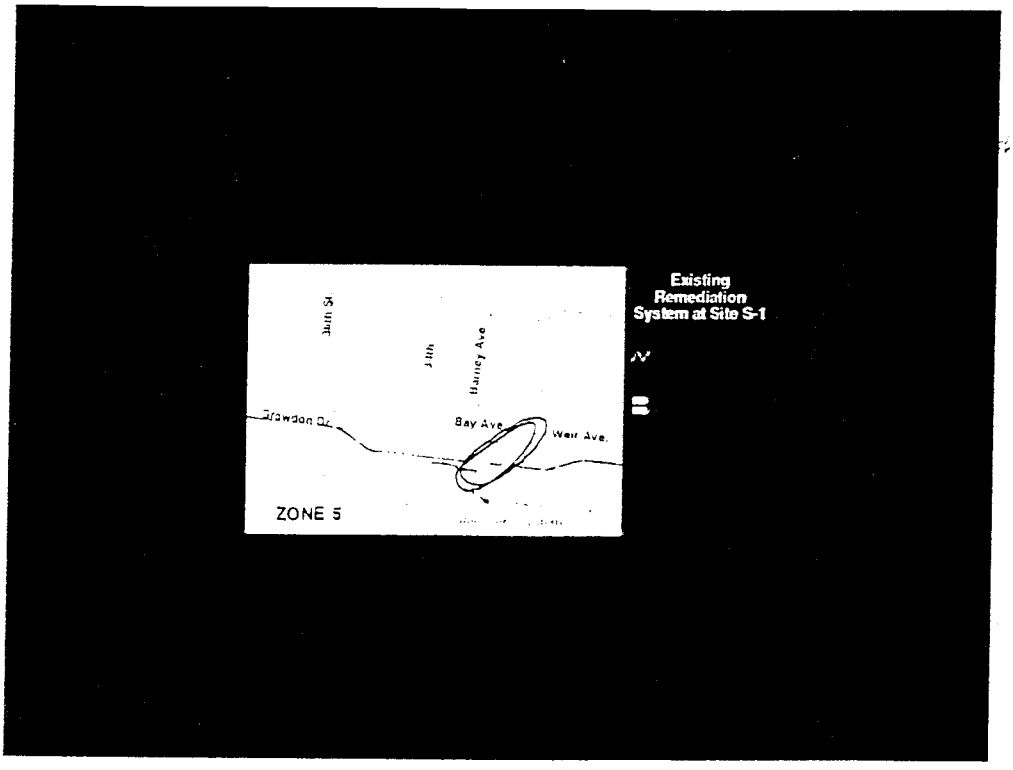


When our data showed us that water was slowly moving off base and under Growdon Drive, we designed a system to cut off that slow flow and isolate the source from the neighborhood.

Here is a diagram of the S-1 interim system. Six wells along the base fenceline capture the water and send it back to a treatment unit on the S-1 Site.

The water cleaned by this system is pumped to a tank. The treated water is stored at the site and then taken by truck to the Base's Industrial Wastewater Treatment Plant.

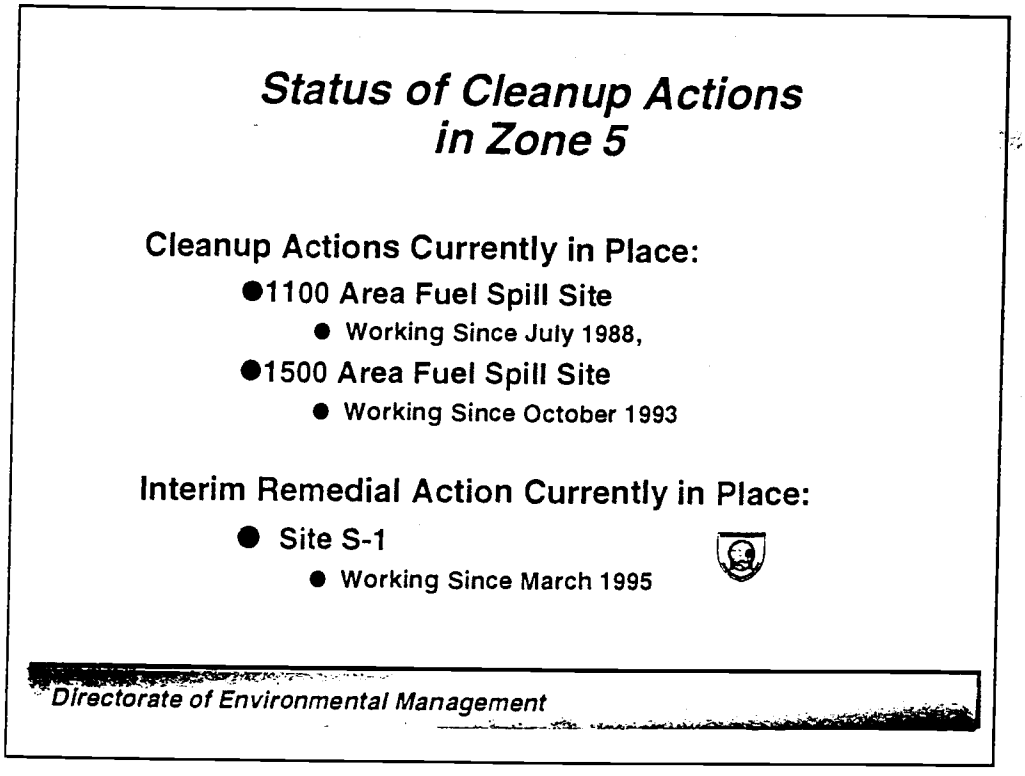
We spent about half a million dollars <u>just</u> on the Site S-1 interim system. It began operating in March of 1995.



Here we see a sketch of the Zone 5 area in the main warehouse portion of Kelly AFB and a portion of the neighborhood off base. It also shows the approximate location of the Site S-1 interim recovery system.

This system was not designed to be the final, complete answer for this site. It was a timely response that cut through the red tape to stop the water from moving off base.

Remember, the system shown here is an interim measure. We are currently doing a study of the shallow groundwater in this northern and northeastern area of the base. The purpose of this study is to determine what areas need additional cleanup. A companion study is examining ways to augment this interim measure by removing the on-base source of the contamination and capturing any affected groundwater that the interim system doesn't reach.

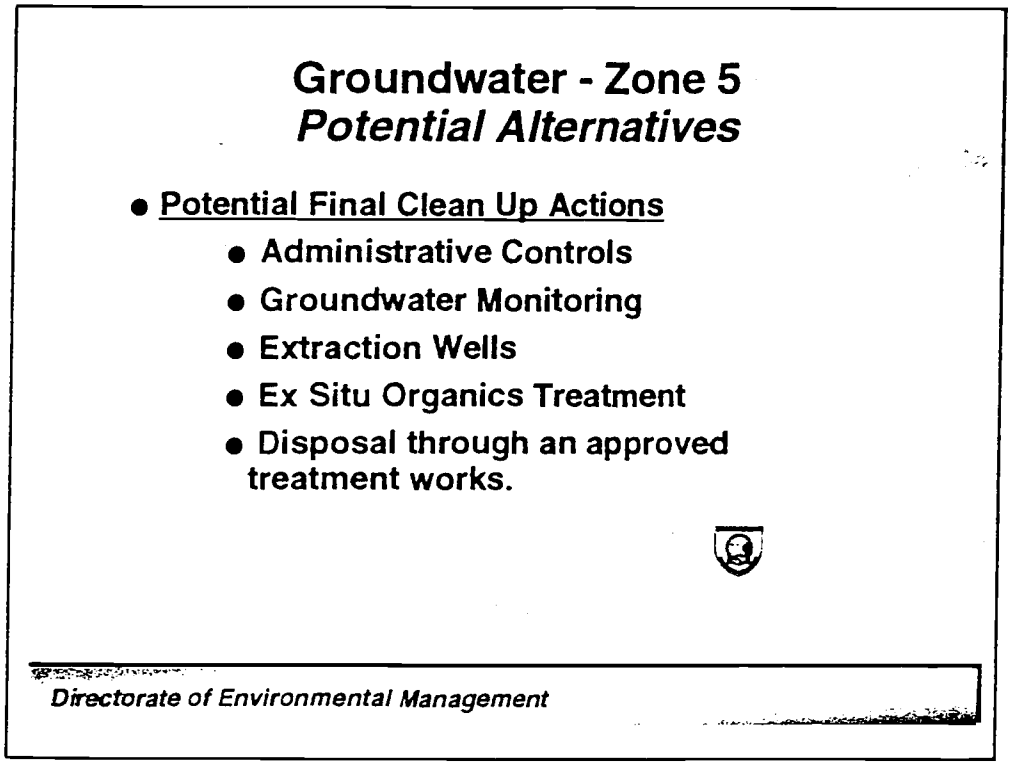


To summarize the status of our cleanup systems in Zone 5, let me say that we now have two groundwater recovery systems in place.

One is at the 1100 Area and the second is at IRP Site S-1. The system at the 1100 Area uses an air stripper to treat water.

The system at Site S-1 is a line of six wells designed to halt off-base movement of impacted shallow groundwater and treat the collected water. Our most recent data indicates it is performing as designed.

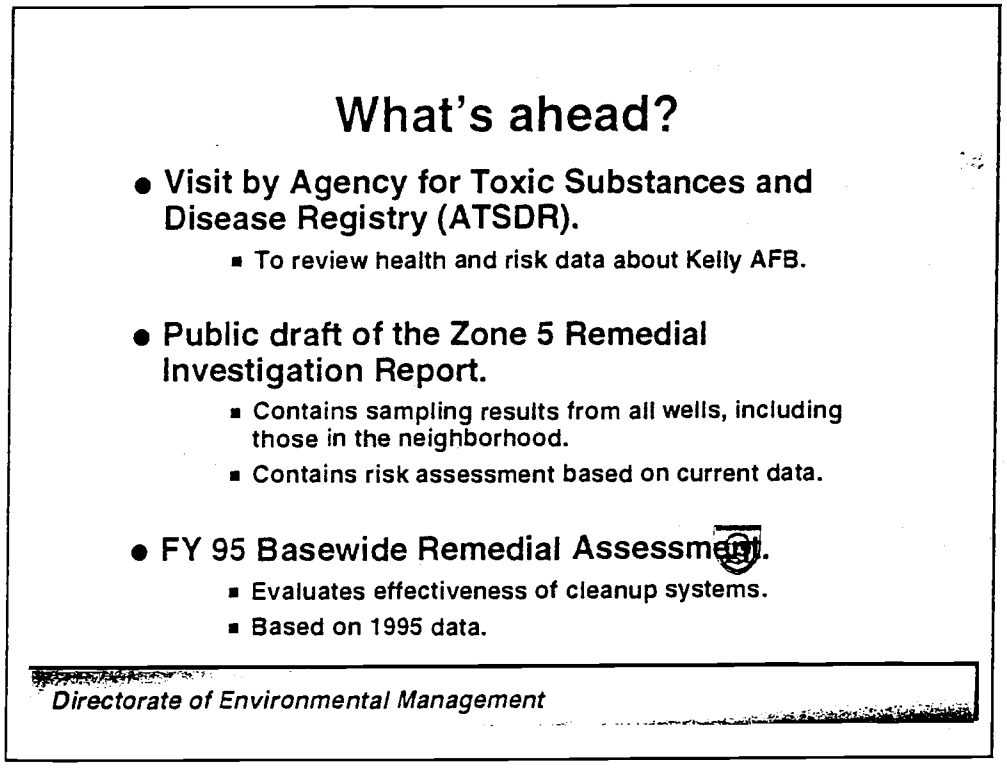
Soil in both the 1100 and 1500 areas is being treated by providing air to the natural bacteria, which digest the jet fuel that is clinging to the soil. Our data show that this process is working well.



We are not stopping with only interim measures!

We are currently finishing our study of the Zone 5 area and are aggressively seeking the most effective clean up methods to expedite the clean up of impacted shallow groundwater.

This list of potential cleanup actions summarizes the type of cleanup activities that you may see in the studies that will be completed later this year. They follow the general direction Kelly AFB is currently taking to address the impacts on shallow groundwater.

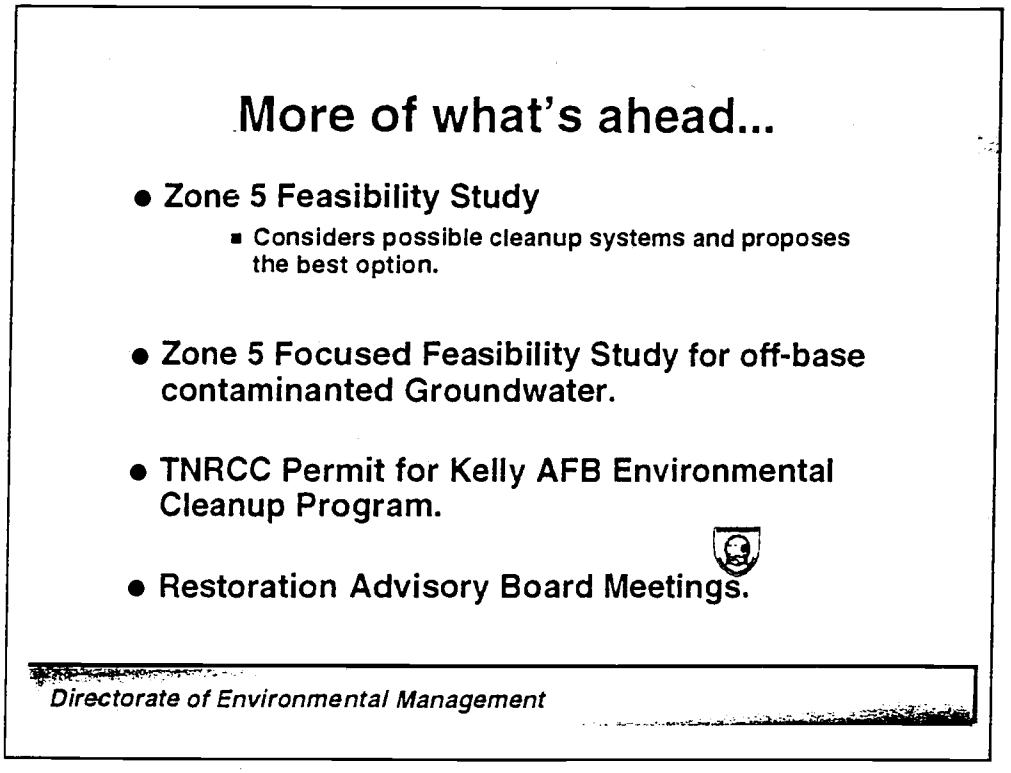


What's ahead for Zone 5?

Here are some activities that are coming up:

The ATSDR -- a separate federal agency that is part of the Department of Health and Human Services -- will be sending specialists to perform interviews and cross-check our assessments of health risk. They are already reviewing health and risk data from our reports.

The *Remedial Investigation Report* for Zone 5 and the *Basewide Remedial Assessment* are reports that will be released this summer.

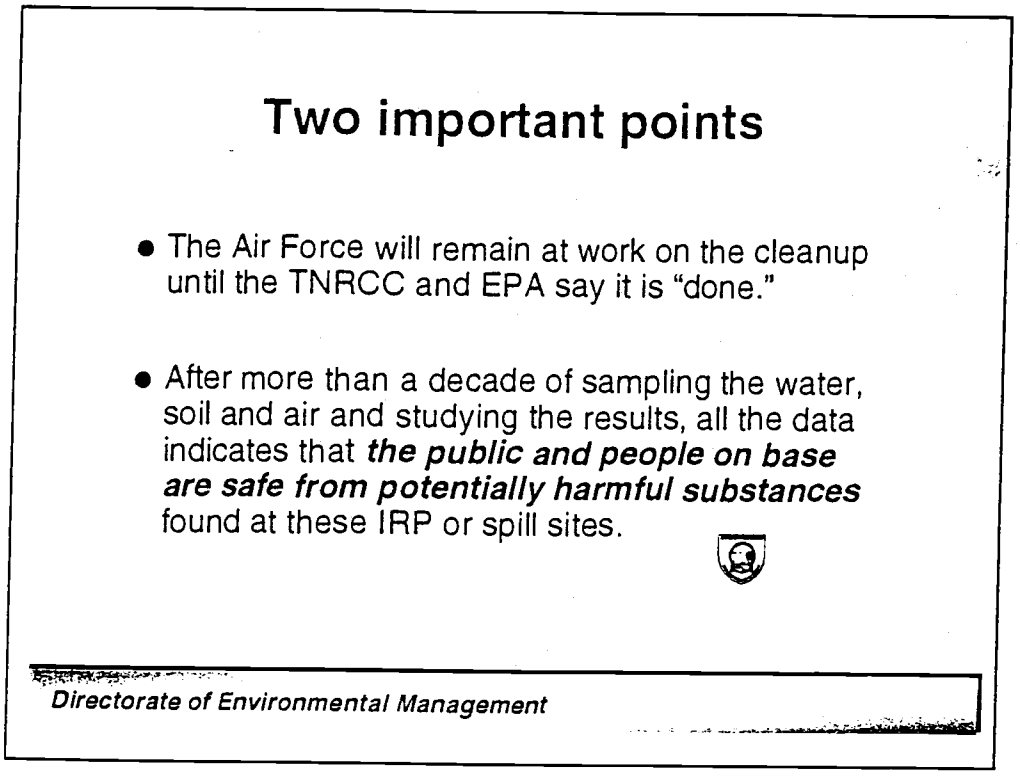


The *Zone 5 Feasibility Study* is the next step in the cleanup process. It opens to the door to the designing and installation of a final cleanup system.

We will also release a study that looks specifically at the shallow groundwater in the North Kelly Gardens and Jamar Village neighborhoods that will identify what is required for cleanup.

The TNRCC is also issuing Kelly AFB a permit that will govern all future cleanup activities on the base.

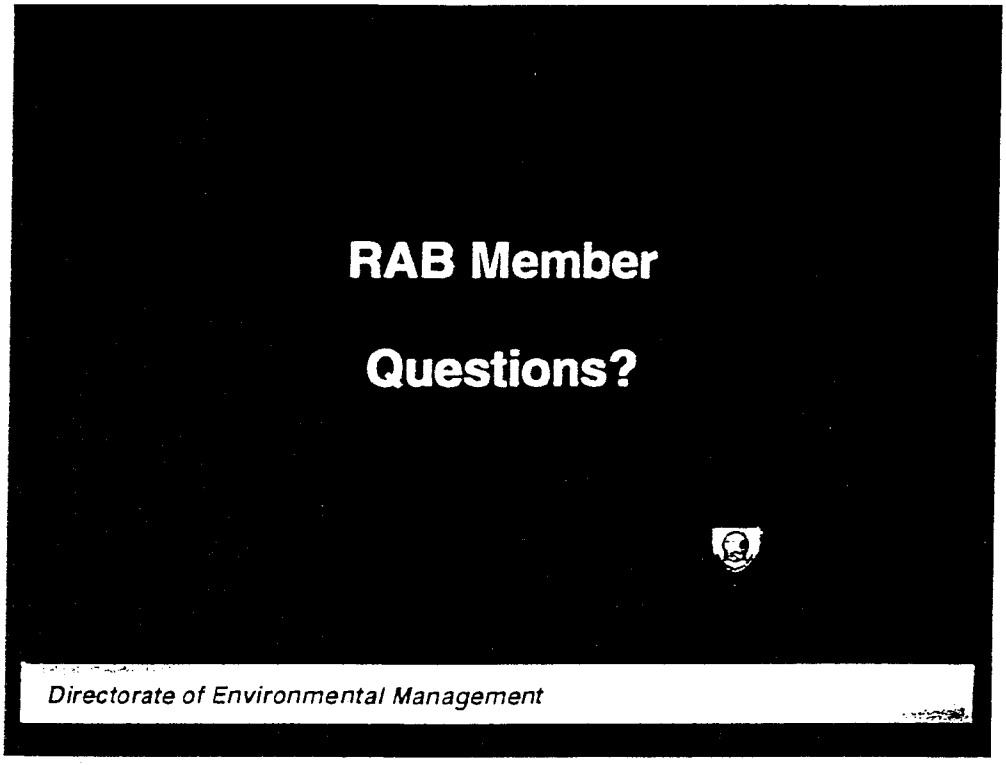
We will continue to update you board members at future RAB meetings of the progress of the Zone 5 cleanup efforts.



I'd like to leave you with two very important points.

First, the Air Force and the Department of Defense will be here to do the cleanup job until the Texas Natural Recource Conservation Commission and the Environmental Protection Agency say that the cleanup goals have been met.

And the second point is that - based on our data from more than a decade of sampling and studying the situation - no one is coming into contact with harmful substances from any of our cleanup sites.



This concludes my briefing. Thank you for your attention.

I'm now open to any questions from the RAB members about this presentation.

Kelly Air Force Base — San Antonio Air Logistics Center
Installation Restoration Program
Progress Report
Office of Public Affairs, 807 Buckner, Kelly AFB TX 78241-5842 (210) 925-7951 DSN 945-7951

Kelly awards environmental contract to small business

KELLY AIR FORCE BASE, San Antonio — Kelly and the Small Business Administration have teamed to award a contract to a local firm, a first for the environmental program at the base.

Operational Technologies Inc. of San Antonio has been awarded a one-year firm, fixed-price, indefinite quantity contract with four one-year options. Operational Technologies joins four other firms that were awarded identical architect and engineering contracts last September. Total potential value of the contracts is $75 million.

Architect and engineering contractors provide technical expertise not available within the environmental staff at Kelly. Contract support will cover all facets of testing air, soil and water to ensure the base complies with environmental laws and Air Force policies.

Mr. Larry Bailey, Kelly's director of Environmental Management, said the base saw an opportunity to find a small local firm to support environmental requirements. The contract was awarded by the Small Business Administration under section 8A of the Small Business Act.

"We are pleased that Operational Technologies has joined our team of environmental contractors," Bailey said. "Award of this additional contract further demonstrates the Air Force's continuing commitment, not only to the cleanup program at Kelly AFB, but also to the Small Business Administration 8A program."

The five contractors will be selected for specific tasks based upon their individual areas of expertise, their availability and the amount of work already assigned. The other four contractors are CH2M Hill, Montgomery Watson Americas Inc., Roy F. Weston, and Science Applications International Corp.

"Award of this additional contract further demonstrates the Air Force's continuing commitment, not only to the cleanup program at Kelly AFB, but also to the Small Business Administration 8A program."

Kelly's Installation Restoration Program identifies, investigates and, when necessary, cleans up past waste disposal and spill sites.

For more information...

about the Installation Restoration Program, visit the information repositories at the San Antonio Central Library government documents section or the Kelly AFB Library; or call or write Michael Estrada, SA-ALC/PAE, 807 Buckner, Suite 1, Kelly AFB TX 78241-5842; telephone (210) 925-7951; Internet: mestrada@sadis01.kelly.af.mil.

WHAT DO THE FUNNY-LOOKING NUMBERS MEAN?

Kelly's reports frequently use a kind of number shorthand to avoid writing out strings of very long numbers.

For example, a potential risk may be written as $1x10^{-6}$.

- **This is a short way of writing "one divided by one million" (1÷1,000,000).**
- **What this means is that there is a one in a million chance of something happening.**

Using this number shorthand makes it easy to write about the very small potential risks found at some of the cleanup sites on Kelly AFB. If you read our reports, you will frequently see numbers between one in ten thousand and one in a million. This is the human health risk range considered to be acceptable by the U.S. Environmental Protection Agency. Any cleanup action must reduce the potential risk to this range, or to an even smaller number if possible. At many of the sites on Kelly AFB, the risk numbers are already much smaller -- one in a billion or even one in a trillion.

Other examples:

- $1x10^{-4}$ = one in ten thousand (10,000)
- $1x10^{-5}$ = one in 100 thousand (100,000)
- $1x10^{-6}$ = one in one million (1,000,000)
- $1x10^{-7}$ = one in ten million (10,000,000)
- $1x10^{-8}$ = one in one hundred million (100,000,000)

WHAT IS RISK?

Risk is the chance of some "unwanted" happening.

Risk can be used to describe many different things:

- The risk of your water heater leaking
- The risk of an earthquake striking California
- The risk of contracting a disease

In every case, however, risk requires the presence of three elements:

- **A receptor (such as a person)**
- **A hazard**
- **A pathway**

Receptor + Hazard + Pathway = Risk

If one or more of these elements is missing , there is no risk!

For example:

- A person living in North Kelly Gardens is a potential receptor.
- The hazard could be fuel and solvents in a shallow layer of water 25 feet underneath the person's yard.
- The pathway could be a shallow well in the person's backyard that is used for drinking water.

If all three of these elements are present, then that person would be at risk of potentially developing health problems if the water was used for a lifetime.

However, Kelly has surveyed the North Kelly Gardens neighborhood for shallow wells. No drinking water wells were found. Therefore, the pathway is missing and no risk is present. The person does not come into contact with the underground water and is not at risk.

RESULT: Receptor + Hazard + <u>No Pathway</u> = NO RISK

HOW MUCH IS THERE?

The easiest way to measure how much fuel, solvents or metals are in the environment is to use:

- **parts per million**
- **parts per billion**

Both are used to give an accurate, but simple measurement of how much of a substance is contained in water, soil or air.

For instance:

- one drop of oil in a million drops of water
- one ounce of a metal in a billion ounces of soil

Or to put it another way:

One Part Per Million

- one pancake in a stack four miles high
- one inch in 16 miles
- one needle in 50,000 haystacks
- one penny in $10,000

One Part Per Billion

- one second of time in 32 years
- one drop of water in an Olympic-size swimming pool
- one silver dollar in a roll of silver dollars stretching from San Antonio to Reno, Nevada
- one inch on a 24-hour journey at the speed of light

Environmental Management

Fact Sheet

Kelly Air Force Base -- San Antonio Air Logistics Center

Office of Public Affairs, 807 Buckner, Kelly AFB TX 78241-5842 (210) 925-7951 AV 945-7951

Kelly shares data from air study of Growdon Drive fuel tank area

In November 1994, the Committee for Environmental Justice — Action met with Kelly Air Force Base officials to express concern about the fuel storage tanks along Growdon Drive. Occupational health specialists from Kelly's Bioenvironmental Engineering branch conducted air sampling and other tests in an assessment of any vapors or fumes coming from the tanks. Copies of the report were provided to CEJ-A, the Texas Natural Resources Conservation Commission's air quality staff, and to the San Antonio Metropolitan Health District. Recently, we realized that we had not shared this information with home owners and other residents of the North Kelly Gardens and Jamar Village areas. This Fact Sheet gives brief highlights of that assessment.

BACKGROUND: Kelly Air Force Base has three large fuel storage tanks at the northern boundary of the base. Two 420,000 gallon tanks were installed around June 1965. A 2,100,000 gallon tank was installed around December 1988. The fuel storage area is 13 acres and has concrete basins around the tanks. These basins could hold more than the entire contents of the tank, if a leak occurred. The tanks are constructed of quarter-inch steel and have an inside and outside roof. The outside roof keeps rain from forming puddles on the inside roof. The inside roof "floats" on top of the fuel, so that no vapors can build up between the fuel and the roof of the tank.

Tanker trucks bring jet fuel to the storage tanks. Drip pans catch any spills and the normal delivery only releases an ounce or two of fuel as drips when the hose is being hooked up or disconnected. The lid of the tanker truck — usually about 18 inches across — is opened during the delivery and some vapors escape into the air.

THE STUDY: To find out if the fuel storage tanks could be causing health problems, the Kelly staff first set up air monitoring devices near the fuel tanks at eight spots along the fence and across Growdon Drive. The devices took 202 air samples in a 24-hour period. Several trucks delivered fuel at two times during the day of the tests.

The samples were taken to identify the possibly harmful contents of fuel. These are substances known as Benzene, Toluene, Ethylbenzene and Xylene and commonly called BTEX. *Only 3 of the 202 samples found enough BTEX to measure.* The highest level recorded in the air was 10.4 parts per million. This is one fifth of the safe exposure level for workers, which is 50 parts per million. To allow for the fact that residents may be at home 24 hours a day, a safe level for residents was set at 12 parts per million to protect health. *The highest of the three readings was still well within this safe limit.*

THE FUEL: To determine if the BTEX came from the fuel tanks, the staff looked at the Material Safety Data Sheets that accompany the fuel. Every manufacturer whose products contain potentially hazardous ma-

terials is required by law to provide an MSDS that lists each hazardous substance and the amount the product contains. *The MSDS sheets provided by the refinery listed no BTEX levels for the JP-8 jet fuel.*

To confirm this fact, a sample of the JP-8 jet fuel was taken to the Armstrong Laboratory at Brooks AFB for analysis. *The laboratory staff could find no measurable amount of BTEX in the jet fuel.*

CHECK IT AGAIN: To check this information, the Kelly staff then figured the highest level of BTEX that could be in the fuel without showing up in the laboratory test. They then used this number to compute how many gallons of jet fuel would have to spill before a 10.4 ppm reading could be measured. *Their arithmetic found that 64 thousand gallons of jet fuel would have to spill to reach that level.*

THE CULPRIT: BTEX is a common component of many motor fuels. Automobiles, lawn mowers, weed trimmers and many other gasoline engines burn fuel containing the BTEX substances. The Kelly staff used the BTEX content for unleaded gasoline and calculated that the same levels of BTEX could be put into the air by burning 31 gallons of gasoline.

Based on this study, the major impact on air quality in the North Kelly Gardens or Jamar Village area is most likely the traffic on roads and streets. Fumes or vapors from the fuel storage tanks exist at a level that meets air quality standards for protecting human health and the environment.

ODORS: The study also confirmed that the human nose is more sensitive than the most modern electronic devices. Many substances are detectable by the human sense of smell at levels far below hazardous levels (for example, ammonia); other dangerous substances are completely undetectable (for example, carbon monoxide). Substances with strong odors are said to have a low odor threshold and good warning properties. JP-4 and JP-8 fuel vapors are detectable at 0.09 parts per million -- far, far below any safe exposure limits. *While occasional faint odors may be unwelcome, they do not indicate a dangerous or unhealthy level of air pollution.*

WHAT ABOUT FIRE? The study also considered the potential for a fire at the fuel tanks. The JP-8 fuel has a "flash point" of 160 degrees. This is the heat it takes to cause fumes that would burn. The fuel tank farm and its safety procedures were designed to accomodate JP-4 jet fuel, with a "flash point" below freezing (32 degrees).

The safety standards that allowed safe use of JP-4 are even more effective since the change to JP-8 jet fuel in 1994. Before 1994, the possibility of an accidental fire was very small and well within the legal range for safe operation of the facility. Today, that possibility is even more remote.

A SMALL STEP: While the fuel and the tanks present no evidence of possible health effects, the researchers did see that the trucks kept their engines running while waiting in line to deliver fuel. *All the fuel suppliers were asked to tell their drivers to turn off the motor while in line.* This stopped the exhaust smoke from up to six diesel trucks, twice a day. Although it is a small step, it is one effort to be a good neighbor to the North Kelly Gardens and Jamar Village areas.

HOW CAN I LEARN MORE: For more information about thehealth assessment for vapor emissions or other matters involving the environment, contact Mr. Mike Estrada at 925-7951 or Mr. Dick Walters at 925-1812.

For more information...

Copies of Kelly Air Force Base Installation Restoration Program documents and other environmental records are available in the government documents section of the San Antonio Central Library. They also are available in the Kelly AFB Library. For more information or to be added to the mailing list for Progress Reports and Fact Sheets, contact:

Dick Walters
Environmental Coordinator
Office of Public Affairs
807 Buckner
Kelly AFB, TX 78241-5842
tel: (210) 925-1812

Finding of the study: While the contents of motor fuel — Benzene, Toluene, Ethylbenzene and Xylene — are in the air near the fuel tanks, the level is well within the limits for health and safety.

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE