KELLY AFB
TEXAS

ADMINISTRATIVE RECORD
COVER SHEET

AR File Number 3288

KELLY RESTORATION ADVISORY BOARD
TECHNICAL REVIEW SUBCOMMITTEE
MEETING AGENDA
Tuesday, 26 September 2000, 6:45 P.M.
St. Mary's University, Garni Science Hall

Prior to the TRS meeting TRS Community members are encouraged to attend a TAPP Contractor Pre-Performance Review. The Review will start at 6:30 P.M.
Note the TRS meeting will start at 6:45 P.M.

I. Introduction A. Agenda Review and Handouts	6:45 - 6:55	Dr Lené
II. Relative Risk Rating Review	6:55 -7:30	Mr. Ryan
III. Administrative A. BCT Update B. Spill Summary Report C. Documents to TRS/RAB D. Action Items E. Agenda/Location/Time of Next TRS Meeting	7:30 - 7:50	Dr Lené
IV. Adjournment	7:50	

MEETING MINUTES

KELLY AFB TECHNICAL REVIEW SUBCOMMITTEE (TRS)
TO THE RESTORATION ADVISORY BOARD (RAB)

26 September 2000, St. Mary's University, Garni Science Hall
Dr. Lené, TRS Chairman

I. **Introduction:** The TRS meeting began at 7 p.m. Attachment 1 is the attendance report.

II. **Relative Risk Rating Review:** Mr. William Ryan, Air Force Base Conversion Agency, asked the committee if they had any questions on those sites rated High. The committee agreed the sites were correctly rated High. The sites rated Medium were discussed individually. Most questions focused on what activities were conducted at each and where it was located. The committee agreed the sites rated Medium were correctly rated. The committee also agreed not to vote on or consider those sites transferring to Lackland.

A. Discussion

Q. Mr. Quintanilla asked why the low-level radioactive material and waste storage sites were not on the Relative Risk Rating chart.

A. Mr. Ryan explained that the Relative Risk Rating listing is only for Installation Restoration Program sites.

Comment: Mr. Quintanilla stated he was concerned that low-level radioactive sites with little risk to the neighborhoods would be cleaned up before the neighborhoods. Money should be spent on the neighborhoods first.

Q. Mr. Mark Weegar, Texas Natural Resource Conservation Commission, asked what the problem was with cleaning up all the sites at the same time.

A. Mr. Quintanilla replied the worst sites should be cleaned first and should receive all the monies.

Q. Mr. Quintanilla asked if BRAC funds were being used to clean the low-level radioactive sites.

A. Mr. Ryan said yes.

Comment: Mr. Weegar pointed out the relative risk rating was a budget tool used only when there was a shortfall of funds.

Q. Mr. Lampright asked if the cleanup at other sites would speed up if the funds used on the low-level radioactive sites were shifted to other sites.

A. Mr. Ryan told him that we have the funds to ensure that each site stayed on track and on the regulated cleanup sequence.

B. The committee voted to recommend that the RAB accept the Relative Risk Ratings as listed in Attachment 2.

1. Mr. Quintanilla will present a dissenting opinion.

III. **Administrative**

A. Base Conversion Team (BCT) handouts were presented to Dr. Lené. (See Attachment 3) Mr. Ryan told the committee the BCT meeting had four highlights.

1. Delivery of the Zone 4 Remedial Investigation (RI) for off-base and on-base contamination is expected to be delivered late in October 2000 to the Texas Natural Resource Conservation Commission.

2. The TRS discussed the methodology used to close and abandon fuel hydrant systems.
   Q. Mr. Quintanilla asked how aircraft would be fueled with the systems shut down.
   A. Mr. Ryan said the system on the west side of the runway would continue to be in-use and the east side of the runway would be serviced by a new system installed by GKDA tenants. Everyone was reminded that the new owners/tenants could not use the old Air Force system.
3. The combined Zones 2 and 3 RI on soil and groundwater is expected to be delivered in November.
4. The additional investigation data of possible contamination sources north of the base may be ready as early as two weeks. Mr. Ryan stated it would be released to the regulators and the public as soon as it was available.

B. Spill Summary Report: There were no spills during the month of August 2000. (See Attachment 4)

C. Documents to TRS/RAB: There were five new documents. (See Attachment 5)

D. Action Items: The Air Force will check on the appropriateness of listing and rating the Low Level Radioactive Material and Waste Storage Sites on the relative risk rating chart.

E. Next TRS meeting: The next TRS meeting will be held 14 November 2000 at 6:30 p.m. in St. Mary's Garni Science Hall. *Note: The Committee agreed not to hold a TRS meeting in October in lieu of the RAB workshop.*

IV. Adjournment: The TRS adjourned at 8:30 p.m.

Attachments:

1. Attendance Report
2. Updated Relative Risk Rating Chart (Provided at the meeting to each member.)
3. BCT Minutes and Handouts, September 2000 (Handouts will be mailed separately.)
4. Spill Summary Report
5. Documents List

16S
MINUTAS DE LA JUNTA

SUBCOMITÉ DE REVISIÓN TÉCNICA (TRS, por sus siglas en inglés) DE LA BASE DE LA FUERZA AÉREA KELLY

PARA LA JUNTA ASESORA DE RESTAURACIÓN DE KELLY (RAB, por sus siglas en ingles)
26 de septiembre de 2000, Universidad de St. Mary's, Garni Science Hall
Dr. Gene Lené, Copresidente del TRS

I. Introducción: La junta del TRS se inició a las 7:00 p.m. El Documento Adjunto # 1 es el informe de asistencia. **[NOTA DEL TRADUCTOR: El documento original en inglés no tenia documentos adjuntos].**

II. Revisión de la Calificación del Riesgo Relativo: El Sr. William Ryan, de La Agencia de Conversión de Bases de la Fuerza Aérea (AFBCA por sus siglas en inglés), le preguntó al Comité si tenían alguna pregunta sobre aquellos sitios que se habían clasificado como Altos. El Comité estuvo de acuerdo que se habían clasificado correctamente como Altos. Se empezó a hablar de los sitios clasificados como Medios de manera individual. La mayoría de las preguntas se enfocaron en las actividades que se estaban realizando en cada uno de ellos y el lugar donde se encontraban los mismos. El Comité estuvo de acuerdo que se habían clasificado correctamente como Medios. El Comité también estuvo de acuerdo en no votar ni considerar a los sitios que se estaban transfiriendo a Lackland.

A. Discusión:

P. El Sr. Quintanilla preguntó por qué el material radioactivo de bajo nivel y los sitios de almacenamiento de desperdicios no se encontraban en la gráfica de Calificación del Riesgo Relativo.

R. EL Sr. Ryan explicó que la Calificación del Riesgo Relativo era únicamente para los sitios del Programa de Restauración de Instalaciones.

Comentario: El Sr. Quintanilla expresó que le preocupaba que los sitios de radioactividad de bajo nivel con un bajo riesgo para los vecindarios se limpiaran antes que los mismos vecindarios. El dinero se debe gastar en los vecindarios primero.

P. El Sr. Mark Weegar, de la Comisión para la Conservación de Recursos Naturales de Texas (TNRCC por sus siglas en inglés), preguntó que cuál era el problema de limpiar los sitios al mismo tiempo.

R. El Sr. Quintanilla contestó que el peor sitio se debe limpiar primero y debe recibir todo el dinero necesario.

P. El Sr. Quintanilla preguntó si el dinero de la Realineación y Cierre de Bases (BRAC, por sus siglas en inglés) se está usando para limpiar los sitios de bajos niveles de radioactividad.

R. El Sr. Ryan dijo que sí.

Comentario: El Sr. Weegar dijo que la calificación del riesgo relativo era una herramienta de presupuesto que únicamente se usaba cuando había algún faltante de fondos.

P. El Sr. Lampright preguntó si la limpieza en otros sitios se aceleraría si se cambiaran los fondos que se usan para limpiar los sitios de baja radioactividad a otros sitios.

R. El Sr. Ryan le dijo que tenemos los fondos para asegurar que cada sitio continúe en la secuencia reglamentada para su limpieza.

B. El Comité votó para recomendar que el RAB aceptara las Calificaciones del Riesgo Relativo como se listaban en el Documento Adjunto # 2.

1. El Sr. Quintanilla expresó una opinión en contra.

III. Puntos administrativos:

A. Se presentaron los folletos del Equipo de Conversión de la Base (BCT, por sus siglas en inglés) al Dr. Lené. (Ver Documento Adjunto # 3). El Sr. Ryan le dijo al Comité que las juntas del BCT tenían 4 puntos sobresalientes.
   1. La entrega de la Investigación de Remedios (RI, por sus siglas en inglés) de la Zona 4 para la contaminación dentro y fuera de la base que se espera que se entregue a finales del mes de octubre del 2000 a la Comisión para la Conservación de Recursos Naturales de Texas.
   2. El TRS habló de la metodología que se utiliza para cerrar y abandonar sistemas de distribución de combustibles.

      P. El Sr. Quintanilla preguntó cómo se iban a cargar de combustible los aeroplanos si los sistemas estaban cerrados.

      R. El Sr. Ryan dijo que el sistema al poniente de la pista de aterrizaje se iba a seguir utilizando y que el del lado oriente de la pista iba a proporcionar servicio a través de un sistema nuevo instalado por los inquilinos de GKDA. Se les recordó a los presentes que los nuevos dueños / inquilinos no podían usar el antiguo sistema de la Fuerza Aérea.
   3. Se espera que el RI de las Zonas 2 y 3 combinadas sobre el suelo y el agua subterránea se entregue en noviembre.
   4. La investigación adicional de las posibles fuentes de contaminación al norte de la base puede estar lista a más tardar en dos semanas. El Sr. Ryan dijo que se les iba a entregar a las agencias reguladoras y al público tan pronto como estuviera disponible.

B. Reporte del Resumen de Derrames: No hubo derrames en el mes de agosto de 2000. (Ver el Documento Adjunto).
C. Documentos proporcionados al TRS / RAB: Hubo cinco documentos nuevos. (Ver Documento Adjunto # 5).
D. Puntos de Acción: La Fuerza Aérea revisará la exactitud de las listas y calificaciones del Material de Bajo Nivel de Radioactividad y los Lugares de Almacenamiento de Desperdicios en la gráfica de calificación del riesgo relativo.
E. La siguiente junta del TRS: La siguiente reunión del TRS será a las 6:30 p.m. del 14 de noviembre de 2000 en el Garni Science Hall, de la Universidad de St. Mary. *Nota: El Comité decidió no tener una junta en el mes de octubre porque se va realizar la mesa de trabajo del RAB.*

IV. Cierre de la Sesión: Se cerró la sesión a las 8:30 p.m.

Documentos Adjuntos:

1. Informe de asistencia
2. Gráfica de Calificaciones del Riesgo Relativo (Entregado a cada uno de los miembros en la junta)
3. Minutas y folletos de septiembre de 2000 (los folletos se van a enviar por correo, por separado).
4. Informe del Resumen de Derrames
5. Lista de documentos

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

26 SEP 2000

MEMORANDUM FOR: REMEDIAL ACTION BOARD/TECHNICAL REVIEW SUBCOMMITTEE (RAB/TRS)

FROM: SA-ALC/EMC
307 Tinker Drive, Bldg. 306
Kelly AFB, TX 78241-5917

SUBJECT: Monthly Spill Report for August 2000

There have been no reportable quantity or otherwise notable spills for the month of August 2000. Should you have any further questions or require additional information, please contact Mr. Jerry Pantoja at 925-3100 ext. 310 or email jerrypantoja@kelly.af.mil.

Sincerely

SEAN O'BRIEN,Capt, USAF
Director, Environmental Management

ATTACHMENT 4

Kelly AFB

Integrity - Service - Excellence

TRS Briefing
26 Sep 01
Radiation Sites

U.S. AIR FORCE

U.S. AIR FORCE

3 Priority Sites

- B326 Former Instrument Dept/Radium Paint Shop (1942-52)
  - Investigation completed - 21 Sep
- B375-2LM Former Flight Controls Shop (1977-94)
  - Remediation complete - 28 Sep
- B324 Former Instrument Dept/Radium Paint Shop (1934-42)
  - Investigation contract to be awarded Dec 01

U.S. AIR FORCE

B326 Radium Paint Shop (1942-52)

- Current Status - Radium contamination above action levels has been found both inside B326 and exterior to the bldg in sewer lines and Former South Kelly WWTP
- Interior - Delineation is complete as of 21 Sep. Most of the 1st and 2nd floors are impacted above action levels.
  - Highest Readings - Crawlspace under former shop locker room - 1M counts/100cm^2, BG = 5000 counts (200x BG) (Not accessible to public)

200 x background

U.S. AIR FORCE

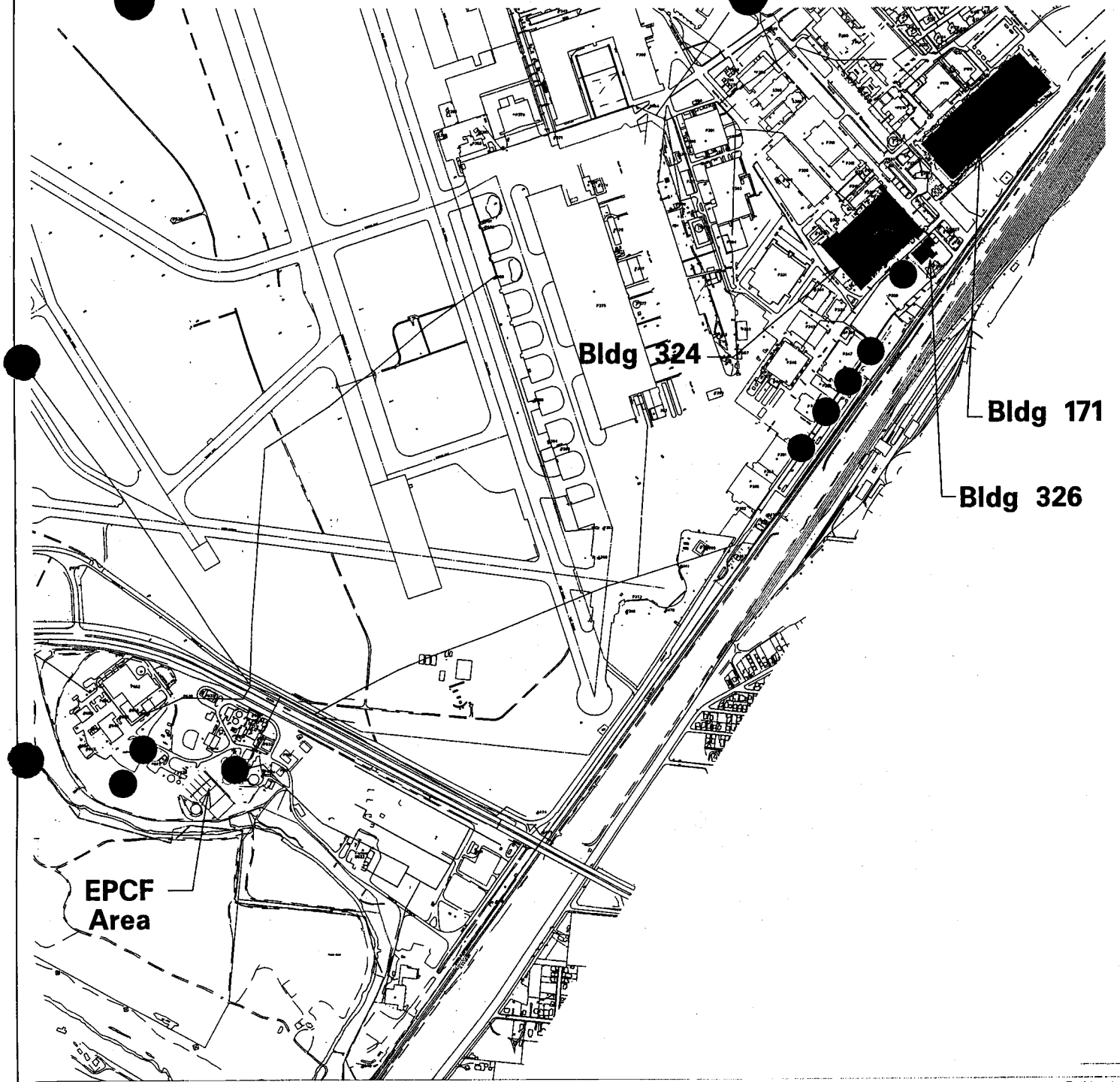
B326 Radium Paint Shop (Cont)

- Exterior - Investigated 80+ Sanitary/Storm Sewer, Water and Electric manholes
  - 2 impacted sanitary manholes (8X BG) (Are accessible to SAWS workers)
    - 100 mrem/yr dosage to SAWS worker if he stayed in this manhole for 40hrsX50wks = 2000 hrs/yr
  - 1 impacted water valve manhole
  - Several locations along UG sanitary line mains along Berman Rd. near 326 and 329 are elevated
  - Stormwater UG lines and concrete lined ditch to outfall 002 - not impacted
- Shallow GW analysis from wells near perimeter of B326 - not impacted

U.S. AIR FORCE

B326 Radium Paint Shop (Cont)

- Former Kelly WWTP sludge drying beds (1940s-50s) - are impacted
  - 3 elevated areas of surface soil in IRP sites SD-2 & FC-2, & near B620
- Off-base City of SA WWTPs (Dos Rios and Leon Creek) surveyed and soil sampled - not impacted
- Characterization Report due ~ 1 Oct
  - Sewerline options will be included:
    - Complete removal/replacement, or Leave in place/Deed Record
  - Comment period, decision meetings will include AF, EPA, TDH, TNRCC, GKDA, SAWS, etc. (9 Oct - 9 Nov)
- Remediation projected to begin in ~ 3 months (Jan 02)



LEGEND

Sanitary Sewer Line

Impacted With Radiation

600 0 1200

SCALE IN FEET

KELLY AFB RADIUM PAINT SHOP, BLDG 326, RADIATION INVESTIGATION

SEPTEMBER 26, 2001

AIR FORCE
BASE CONVERSION AGENCY
KELLY AFB, TX

File: KELLY-USAFB\UTIL-SAN-SEWER\LOC-SS-IMPACTED.DGN

Edited By: AFBCA/RPortales SEPT 26 2001

Relative Risk Chart Special Instructions

TRS Members

Please review the attached Relative Risk Ratings and mark whether you agree or disagree with the rating. Please return your marked chart in the enclosed envelope by 22 Sept. 00.

Those site ratings that you disagree with will be the focus of our discussions.

Thank you

Relative Risk Evaluation Table

Site Name	Site ID	Category Rating						Overall	Site Closed or	Agree or Disagree with rating	
		Groundwater	Surface Water (Human)	Surface Water (Ecological)	Soil	Sediment (Human)	Sediment (Ecological)	Relative Risk	Awaiting Closure	YES	NO
Spill Site S-1	SS003	High	NE	NE	High	NE	NE	**High**			
Site S-4	ST006	High	NE	NE	High	NE	NE	**High**			
D-1 Landfill	LF011	High	High	High	High	NE	NE	**High**			
D-3 Landfill	LF013	Medium	Medium	High	Medium	NE	NE	**High**			
D-5 Landfill	LF015	Medium	High	High	High	NE	NE	**High**			
D-6 Landfill	LF016	High	NE	NE	High	NE	NE	**High**			
D-7 Landfill	LF017	High	NE	NE	High	NE	NE	**High**			
D-10 Landfill	LF019	NE	High	High	Medium	NE	NE	**High**			
Evaporation Pit E-3	WP022	High	NE	NE	High	NE	NE	**High**			
Sludge Drying Lagoon (SA-8)	SS030	High	High	High	NE	NE	NE	**High**			
Sludge Spreading Area (SA-4)	SS032	Medium	NE	NE	High	NE	NE	**High**			
GW Contamination Zone – Leon Creek	SS035	High	High	High	NE	NE	NE	**High**			
GW Contamination Zone –2	SS036	High	High	High	NE	NE	NE	**High**			
Zone 3 Groundwater	SS037	High	NE	NE	NE	NE	NE	**High**			
Metal Plating Shops (OT-2)	SS040	High	NE	NE	High	NE	NE	**High**			

NE = Not Evaluated

Site Name	Site ID	Category Rating						Overall	Site Closed or	Agree or Disagree with rating	
		Groundwater	Surface Water (Human)	Surface Water (Ecological)	Soil	Sediment (Human)	Sediment (Ecological)	Relative Risk	Awaiting Closure	YES	NO
Combined Site 2	SS042	High	High	High	High	NE	NE	**High**			
Combined Site (CS-3) Ravine	SS043	High	High	High	Low	NE	NE	**High**			
Zone 3, IWCS	SS044	High	NE	NE	High	NE	NE	**High**			
Groundwater Zone 5	SS050	High	NE	NE	NE	NE	NE	**High**			
Zone 4 Groundwater	SS052	High	NE	NE	NE	NE	NE	**High**			
Security Hill Area	LF001	Medium	Low	Low	Medium	NE	NE	**Medium**			
Site S-3	SS005	Medium	Low	Low	Medium	NE	NE	**Medium**			
D-2 Landfill	LF012	Medium	Low	Low	Medium	NE	NE	**Medium**			
D-4 Landfill	LF014	Medium	Low	Low	Medium	NE	NE	**Medium**			
S-10 Spill Site	SS045	Medium	NE	NE	Low	NE	NE	**Medium**			
IWCS Site	SS051	Medium	Low	Low	Medium	Low	Low	**Medium**			
RD-1 RAD Disposal Area	RW026	Low	Low	NE	Low	NE	NE	**Low**			
SA-1 Sludge Spreading Area	WP029	NE	NE	NE	Low	NE	NE	**Low**			
Former IWTP	SS002								♦		
S-2 Storage Yard	SS004								♦		
S-5 UST/Spill Site	ST007								♦		
S-6 UST/Spill Site	ST008								♦		

NE = Not Evaluated

Site Name	Site ID	Category Rating						Overall	Site Closed or	Agree or Disagree with rating	
		Groundwater	Surface Water (Human)	Surface Water (Ecological)	Soil	Sediment (Human)	Sediment (Ecological)	Relative Risk	Awaiting Closure	YES	NO
S-7 UST/Spill Site	ST009								♦		
S-9 Fuel Site	ST010								♦		
D-8 Landfill	LF018								♦		
E-2 Evaporation Pit	WP020								♦		
E-1 Evaporation Pit	WP021								♦		
FC-1 Fire Training Area	FT023								♦		
FC-2 Fire Training Area	FT024								♦		
IS-1 Spill Site	SS025								♦		
RD-2 Radioactive Disposal Area	RW027								♦		
S4-A Hazwaste Storage	SS028								♦		
SA-4 Sludge Spreading Area	SS031								♦		
SD-1 Sludge Drying Beds	WP033								♦		
SD-2 Sludge Drying Beds	WP034								♦		
OT-1 Liquid Waste Incinerator	SS039								♦		

NE = Not Evaluated

Site Name	Site ID	Category Rating						Overall	Site Closed or	Agree or Disagree with rating	
		Groundwater	Surface Water (Human)	Surface Water (Ecological)	Soil	Sediment (Human)	Sediment (Ecological)	Relative Risk	Awaiting Closure	YES	NO
B-1 Salvage Lumber Burn Area	SS041								♦		
Bldg. 182 UST Site	ST046								♦		
Bldg. 386 UST Site	ST047								♦		
Bldg. 308 UST Site	ST048								♦		
Bldg. 38 UST Site	ST049								♦		

NE = Not Evaluated

Relative Risk Evaluation Summaries

Kelly Air Force Base, TX

April 2000

Relative Risk Evaluation Summary

Site Name: Security Hill Area
Date Entered: 10/13/1997
Site Type: Landfill

Site ID: LF001

Agreement type: RCRA Permits with Corrective Action Requirements

Overall Relative Risk	Medium

Site Summary

Site Description

Site D-9, designated as MAP Site Number 11, covers approximately 10 acres at the southwestern end of Zone 1, immediately west of Site D-7. The landfill was not delineated during the Phase I Records Search, but was discovered in 1986 when construction activity in the area revealed landfill material. The area was presumably an active landfill from 1945 to 1970 and was the repository for a variety of domestic, industrial, and commercial wastes.

Description of Pathways

The topography of Site D-9 slopes gently from west to east and is grass-covered with small, patchy areas of concrete rubble, asphalt, and gravel exposed at the surface. The subsurface stratigraphy of the site consists of up to 20 feet of fill and landfill overlying the Navarro Group clay. Fill thickness ranges from 2 to 20 feet and landfill thickness ranges from 8 to 19 feet. One boring at the southern end of the site encountered 3 feet of alluvium above the Navarro clay. This clay was encountered at depths of 2 to 20 feet below ground level throughout the site. Groundwater was encountered at depths of approximately 10 to 15 feet below the ground surface within horizontal silt seams in the Navarro clay. Groundwater was determined to flow east-northeast towards Sites D-7, D-6, and CS-3.

Description of Receptors

Human receptors include maintenance and construction workers, golfers, base employees working near the site, local residents who live downwind of the site, and adolescents at the golf course. Ecological receptors include aquatic life in Leon Creak as well as livestock downstream.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	▲	▲	▼	Medium
Surface Water (Human)	▲	▼	▼	Low
Surface Water (Ecological)	▲	▼	▼	Low
Soil	▼	▲	◆	Medium
Sediment (Human)		▼	▼	NE
Sediment (Ecological)		▼	▼	NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

Relative Risk Evaluation Summary

Site Name: Site D-1 Landfill
Site ID: LF011
Date Entered: 10/13/1997
Site Type: Landfill
Agreement type: RCRA Permits with Corrective Action Requirements

Overall Relative Risk	High

Site Summary

Site Description

Site D-1, designated as MAP Site Number 3, is located along the western base boundary, within the Leon Creek flood plain. The site is separated by Leon Creek into a northern area that extends north from Leon Creek at least 100 feet northeast of Westover Road under Building P962, and a southern area that stretches from the base boundary northeastward towards Leon Creek. From 1917 to 1942 the site was used as a bombing target and a landfill for general refuse, construction debris, World War I munitions, and scrap metal. The majority of the site lies within the boundaries of the base golf course constructed in 1969. Aerial photographs taken in the early 1960s and the presence of concrete rubble at the surface both indicate that the landfill extends into current Lackland AFB property.

Description of Pathways

The site is well vegetated with a sod cover. A 15 foot deep drainage ditch extends northwest across the southern area adjacent to the base boundary, while Westover Road bisects the northern area from the southeast to the northwest. The thickness of landfill and fill material at the site ranges from approximately 5 to 18 feet and, in most places, directly overlies the Navarro Group clay. The top of the Navarro clay has only 5 feet of relief at Site D-1. Groundwater conditions at the site vary from a dry zone in the northern area under normal conditions to a saturated zone approximately 5 feet in thickness flowing towards Leon Creek in the southern area.

Description of Receptors

Human receptors include maintenance and construction workers, golfers, base employees working near the site, local residents who live downwind of the site, and adolescents at the golf course. Ecological receptors include aquatic life in Leon Creak as well as livestock downstream.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	◆	▲	◆	High
Surface Water (Human)	▲	▲	▲	High
Surface Water (Ecological)	▲	▲	▲	High
Soil	◆	▲	▲	High
Sediment (Human)		▲	▲	NE
Sediment (Ecological)		▲	▲	NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not evaluated

Relative Risk Evaluation Summary

Site Name: D-2 Landfill
Date Entered: 10/13/1997
Site Type: Landfill

Site ID: LF012

Agreement type: RCRA Permits with Corrective Action Requirements

Overall Relative Risk	Medium

Site Summary

Site Description

Site D-2, designated as MAP Site Number 4, occupies approximately 45 acres and is located adjacent to the western base boundary. The site is bounded by Westover Road to the east and Hall Avenue to the north and west, and lies almost entirely within the confines of the base golf course. Leon Creek bisects the former landfill into eastern and western sections. In active operation from 1942 to 1957, the landfill received primarily construction rubble, general refuse, scrap metal, and garbage. Historical data indicate that mixed solvents and/or drummed wastes may have been landfilled in the western site area. The landfill was closed in 1957 by grading and capping with several feet of soil cover.

Description of Pathways

The surface topography of Site D-2 is undulating, and elevations across the site vary by as much as 33 feet, with the lower elevations existing along Leon Creek. In general, the terrain of the western area slopes to the southeast while the eastern area slopes towards the west. Fill at the site ranges in thickness from 2 to 15 feet, landfill material ranges from 3 to 12 feet, and alluvial sediments range from 0 to 13 feet. Underlying the alluvial and disturbed material is Navarro Group clay. The depth to groundwater varies from 2.4 feet BGL along Leon Creek to over 18 feet BGL in the northwest portion of the western area. The saturated thickness of the groundwater ranges from 3.4 to over 13 feet. A slight groundwater gradient is present towards Leon Creek from both the east and west landfill areas.

Description of Receptors

Human receptors include maintenance and construction workers, golfers, base employees working near the site, local residents who live downwind of the site, and adolescents at the golf course. Ecological receptors include aquatic life in Leon Creak as well as livestock downstream.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	▲	▼	◆	Medium
Surface Water (Human)	▼	▼	▲	Low
Surface Water (Ecological)	▼	▼	▲	Low
Soil	◆	◆	◆	Medium
Sediment (Human)		▲	▲	NE
Sediment (Ecological)		▲	◆	NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

Relative Risk Evaluation Summary

Site Name: Site D-3 Landfill
Site ID: LF013
Date Entered: 10/13/1997
Site Type: Landfill
Agreement type: RCRA Permits with Corrective Action Requirements

Overall Relative Risk	High

Site Summary

Site Description

Site D-3, designated as MAP Site Number 5, occupies approximately 6 acres within the Leon Creek flood plain and lies south of the Leon Creek dam at the southern end of Zone 1. In active operation from 1945 through at least the mid-1950s, the landfill received a variety of wastes including hardfill, general refuse, electroplating sludge, solvents, pesticides, phenols, waste petroleum, oil and lubrication, and 1,2-dichlorobenzene. Following closure, the surface of Site D-3 was regraded once prior to 1966 and again in 1969 during construction of the base golf course.

Description of Pathways

The surface topography of Site D-3 slopes gently eastward and is grass-covered. The landfill area is approximately 150 to 350 feet wide, 1000 feet long, and up to 20 feet deep. The fill consists of reworked silty clay and gravels, with occasional nails and other metal fragments. Beneath the fill material, alluvial sediment ranging from gravel to silty clay is present over much of the site. There are two buried alluvial channels at the site, one along the western boundary and one adjacent to Leon Creek on the northeastern side, which have scoured deeply into the Navarro Group clay that underlies the entire site. Depth from the ground surface to the Navarro clay ranges from 6.5 to at least 40 feet. Groundwater elevations indicate an average gradient of 0.090 ft/ft. In the central and eastern parts of Site D-3, east of a Navarro high, groundwater flow is to the southeast. Groundwater in the western part of the site appears to flow within the alluvial channel off base to the south.

Description of Receptors

Human receptors include maintenance and construction workers, golfers, base employees working near the site, local residents who live downwind of the site, and adolescents at the golf course. Ecological receptors include aquatic life in Leon Creak as well as livestock downstream.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	▼	▲	◆	Medium
Surface Water (Human)	▼	▲	◆	Medium
Surface Water (Ecological)	◆	▲	▲	High
Soil	◆	◆	◆	Medium
Sediment (Human)		▲	▲	NE
Sediment (Ecological)		▲	◆	NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not evaluated

Relative Risk Evaluation Summary

Site Name: D-4 Landfill
Date Entered: 10/13/0997
Site Type: Landfill

Site ID: LF014
Agreement type: Permits with Corrective Action Requirements

Overall Relative Risk	Medium

Site Summary

Site Description

The Site D-4 Landfill, designated MAP Site Number 6, comprises approximately 14 acres in an area between Westover Road and Leon Creek at the southeastern end of Zone 1. In active operation during the early 1940s and from 1950 through 1958, the landfill received a variety of wastes including hardfill, general refuse, drums of electroplating sludge, mixed solvents, pesticides, and waste petroleum, oil, and lubrication. Landfill trenches, identified by surface depressions due to settling, are visible at the surface in the northwest and central portions of the site. Ten northwest trenches 80 feet long and 15 to 18 feet wide run perpendicular to Leon Creek, while the central trenches run parallel to Leon Creek and are approximately 15 feet wide by 800 feet long. Following closure, the landfill trenches were covered with two feet of local soil and seeded with grass. Partially intact empty drums were observed at the surface at the northeast end of the central trenches. Landfill trenches are not visible at the southern end of the site; however, concrete rubble is present at the surface..

Description of Pathways

The surface topography of Site D-4 slopes gently to Leon Creek and is grass-covered, with occasional trees along Leon Creek. The site stratigraphy consists of approximately 5 to 24 feet of fill material and alluvial sediments overlying the Navarro Group clay. The depth to the landfill ranges from 2 to 12 feet, and the landfill material itself ranges in thickness from 2 to 10 feet. The surface of the Navarro Group clay generally slopes towards Leon Creek. Groundwater was encountered in the alluvial sediments at depths of approximately 5 to 20 feet below the ground surface. The saturated thickness above the Navarro Group clay ranges from approximately 0.5 to 13 feet. Water level measurements indicate a southerly direction of groundwater flow towards Leon Creek.

Description of Receptors

Receptors could be CE workers digging in the area or golf course maintenance crews. Water from Leon creek that passes through the site could be encountered by golfers

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	▲	▼	◆	Medium
Surface Water (Human)	▼	▼	▲	Low
Surface Water (Ecological)	◆	▼	▲	Low
Soil	◆	◆	◆	Medium
Sediment (Human)		▲	▲	NE
Sediment (Ecological)		▲	◆	NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not evaulated

Relative Risk Evaluation Summary

Site Name: Site D-5 Landfill
Site ID: LF015
Date Entered: 10/13/1997
Site Type: Landfill
Agreement type: RCRA Permits with corrective action requirements

Overall Relative Risk	High

Site Summary

Site Description

Site D-5, designated as MAP Site Number 7, is a 2 to 3 acre site located along the west bank of Leon Creek. The site, lying within the sixth fairway of the base golf course, is surrounded by Site D-6 to west, Site RD-1 to the north, Site D-4 to the east, and Site D-3 to the south. The date of operation for the landfill and oil burning pit is unknown; however, records indicate the landfill received electroplating sludges, solvents, pesticides, waste petroleum, oil, and lubricant, aerosols, and 1,2-dichlorobenzene, which were disposed of in trenches 8 to 12 feet deep. The location of the oil burning pit is based on a notation made on a City of San Antonio sewer line map.

Description of Pathways

The surface of Site D-5 slopes gently to the northeast towards Leon Creek. Grass covers most of the ground surface, with a few trees scattered around the site. The stratigraphy at the site consists of 4 to 15 feet of fill and landfill material overlying either alluvial sediments or the Navarro Group clay. The Navarro Group clay was encountered at depths ranging from 4 to 25 feet below the ground surface. A topographic high in the Navarro surface across the center precludes the presence of shallow groundwater underneath most of the site. Some groundwater is present in the Navarro, but it is limited to thin silt seams. Water levels measured in wells surrounding the Navarro high indicate groundwater flow in the northern part of the site is to the northeast towards Leon Creek. In the southern portion of the site, groundwater, where present, flows to the southeast toward Site D-3.

Description of Receptors

Human receptors include maintenance and construction workers, golfers, base employees working near the site, local residents who live downwind of the site, and adolescents at the golf course. Ecological receptors include aquatic life in Leon Creek as well as livestock downstream.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	▲	▼	◆	Medium
Surface Water (Human)	▼	▲	▲	High
Surface Water (Ecological)	▲	▲	▲	High
Soil	◆	▲	◆	High
Sediment (Human)		▲	▲	NE
Sediment (Ecological)		▲	◆	NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not evaulated

Relative Risk Evaluation Summary

Site Name: D-6 Landfill
Date Entered: 10/13/1997
Site Type: Landfill

Site ID: LF016
Agreement type: RCRA permit with corrective action requirements

Overall Relative Risk	High

Site Summary

Site Description

The Site D-6 Landfill, designated as MAP Site Number 8, covers approximately 6 acres and is located within the base golf course, immediately northeast of site D-7 and approximately 500 feet southwest of the Leon Creek dam. The landfill was active from 1959 through at least 1966 and was used for the disposal of a variety of wastes including electroplating sludge, pesticides, solvents, waste petroleum, oil, and lubricant, cresols, and 1,2-dichlorobenzene. Surface undulations, which reflect landfill trenching, are visible over a large portion of the site. Regrading during golf course construction apparently affected only the westernmost portion of the site.

Description of Pathways

The southwestern area of Site D-6 occupies relatively high, flat ground, whereas the northeastern half of the site slopes steeply towards Leon Creek. The subsurface stratigraphy consists primarily of fill, landfill, and Navarro Group clay. This stratigraphy reflects the site's history of trenching and excavation associated with landfill activities, as well as the grading and filling associated with construction of the golf course. In general, the thickness of fill and landfill material ranges from 5 to 20 feet, and the depth below the ground surface to the Navarro clay ranges from 10 to 20 feet. The topography of the Navarro clay mimics the ground-surface topography. Groundwater at the site occurs within the fill and landfill material and in laterally continuous silt seams within the Navarro clay. Groundwater flow at the site is generally towards Leon Creek..

Description of Receptors

Human receptors include maintenance and construction workers, golfers, base employees working near the site, local residents who live downwind of the site, and adolescents at the golf course. Ecological receptors include aquatic life in Leon Creek as well as livestock downstream.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	◆	▲	◆	High
Surface Water (Human)		▼	▲	NE
Surface Water (Ecological)		▼	◆	NE
Soil	◆	▲	◆	High
Sediment (Human)		▼	▲	NE
Sediment (Ecological)		▼	▼	NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not evaulated

Relative Risk Evaluation Summary

Site Name: Site D-7 Landfill
Site ID: LF017
Date Entered: 10/13/0997
Site Type: Landfill
Agreement type: RCRA permit with corrective action requirements

Overall Relative Risk	High

Site Summary

Site Description

The Site D-7 Landfill, designated as MAP Site Number 9, covers approximately 20 acres and lies within the southwestern section of the base golf course. The site is located immediately north of Military Drive and the installation boundary, 1500 feet west of Leon Creek. The landfill was in active use from 1961 to 1970 and was used for the disposal of a variety of wastes including hardfill, general refuse, electroplating sludge, pesticides, solvents, waste petroleum, oil, and lubricant, empty containers, phenol, and 1,4-dichlorobenzene. Surface signs of east-west oriented trenches are apparent over portions of the site. Two additional IRP sites, Site E-2 and Site FC-1 (MAP Site Numbers 12 and 13, respectively), lie within the boundaries of Site D-7.

Description of Pathways

The surface of the site is predominately grass-covered and slopes downward from west to east. The upper surface soil horizon generally consists of fill and landfill material extending to depths of 3 to 24 feet, directly overlying the Navarro Group clay. Isolated units of alluvial sediment exist at the site, ranging in thickness from 3.5 to 12.3 feet. A saturated zone within the landfill material was encountered at a depth of approximately 6 feet. This near-surface water table is perched in the landfill material and appears to be ponded within the trenches excavated into the underlying Navarro clay. The Navarro clay contains thin discontinuous silt and sand lenses and appears to be hydraulically connected to the alluvial water table. Groundwater at the site flows in an southeasterly direction. Two seepage areas occur at the eastern end of the site where leachate seeps from the trenches at the landfill and ground surface contact.

Description of Receptors

Human receptors include maintenance and construction workers, golfers, base employees working near the site, local residents who live downwind of the site, and adolescents at the golf course. Ecological receptors include aquatic life in Leon Creek as well as livestock downstream.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	◆	▲	◆	High
Surface Water (Human)		◆	▼	NE
Surface Water (Ecological)		◆	▼	NE
Soil	◆	▲	◆	High
Sediment (Human)		◆	▲	NE
Sediment (Ecological)		◆	◆	NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not Evaluated

Relative Risk Evaluation Summary

Site Name: Site D-10
Site ID: LF019
Date Entered:
Site Type: Landfill
Agreement type: RCRA agreements with corrective action requirements

Overall Relative Risk	High

Site Summary

Site Description

Site D-10 is located at the southwest corner of the base adjacent to the CE storage yard. It was identified by TNRCC as a repository of some hydrocarbon residue containing low-pH liquids. The site covers approximately 3 acres.

Description of Pathways

Pathways include groundwater, surface water, soil and sediment.

Description of Receptors

Human receptors include maintenance and construction workers, base employees working near the site, and local residents who live downwind of the site. Ecological receptors include aquatic life in Leon Creek as well as livestock downstream.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater		▲	◆	NE
Surface Water (Human)	▼	▲	▲	High
Surface Water (Ecological)	▼	▲	◆	High
Soil	◆	▲	◆	Medium
Sediment (Human)		▲	▲	NE
Sediment (Ecological)		◆	◆	NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not Evaluated

Relative Risk Evaluation Summary

Site Name: Site RD-1 RAD Disposal Area Site ID: RW026
Date Entered:
Site Type: Radioactive waste area Agreement type: RCRA permits with corrective action requirements

Overall Relative Risk	Low

Site Summary

Site Description

Designated MAP site #14; located NW of site D05; 250 ft west of Leon Creek; within 6th fairway of base golf course. Used during the 1950s for disposal of low-level rad wastes and contains electron tubes, oxygen equipment, dials marked with radio-luminescent paints, calibration sources for rad measurement instruments and parts from voltage regulators that contained small amounts of radioactive isotopes. The wastes were sealed in reinforced concrete pipes, buried vertically in the ground and covered with fill mateiral. Burials were conducted in accordance with AF TO 00-110A-1, the controlling directive at the time. The site is listed with the State of Texas as a radioactive burial site and state personnel peiodically inspect the site. The base Radiation Safety Officer monitors the site annually in accordance with AF TO 00-011-0N-2, AFR 161-16 and supplements from the AF Office of Medical Support

Description of Pathways

The surface of Site RD-1 is grass covered and slopes gently to the NE toward Leon Creek. The subsurface stratigraphy at Site RD-1 consists of an approximately 2 ft thick layer of fill material overlaying the Navarro Group clay. The water bearing alluvium for the regional shallow aquifer that typically lies directly above the Navarro clay is absent at the site. The absence of the shallow aquifer precludes a detailed groundwater characterization. A saturated Zone does exist approximately 18 ft below ground level within the Navarro clay. Based on well water levels in the surrounding area, it appears that groundwater flows in a northeast direction toward Leon Creek.

Description of Receptors

Receptors include only contractors and/or CE who would be required to drill into the shallow aquifer.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	▼	▼	▼	Low
Surface Water (Human)	▼	▼	▼	Low
Surface Water (Ecological)	▼	▼		NE
Soil	▼	▼	▼	Low
Sediment (Human)				NE
Sediment (Ecological)				NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not Evaluated

Relative Risk Evaluation Summary

Site Name: Spill Site S-1
Site ID: SS003
Date Entered: 05/05/95
Site Type: Spill site
Agreement type: RCRA agreements with corrective action requirements

Overall Relative Risk	High

Site Summary

Site Description

Spill site S-1 was the former location of an intermediate storage area for petroleum, carbon cleaning solvents and transformer wastes on their way to off-base recycling or disposal facilities. This location was used for this purpose from 1960 until 1973. An interim cleanup action was constructed in 1995 and cleanup efforts continue. The primary contaminant of concern is Chlorobenzene.

Description of Pathways

Main pathways are groundwater and soil. Site is not near a water body, so surface water and sediment pathways are negligble.

Description of Receptors

Human receptors include maintenance and construction workers, base employees working near the site, and local residents who live downwind of the site. There are limited ecological receptors since the site is in an industrial area and not near a water body.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	▲	▲	◆	High
Surface Water (Human)		▼	▼	NE
Surface Water (Ecological)		▼	▼	NE
Soil	◆	▲	◆	High
Sediment (Human)		▼	▼	NE
Sediment (Ecological)		▼	▼	NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not Evaluated

Relative Risk Evaluation Summary

Site Name: Site S-3
Date Entered: 6/29/95
Site Type: Spill site

Site ID: SS005
Agreement type: RCRA agreements with corrective action requirements

Overall Relative Risk	Medium

Site Summary

Site Description

Maintenance storage area, site S-3, is located in the east corner of zone 2 adjacent to the SW Military drive overpass. The site was placed in service in 19## and was recently used as a hazardous waste and drum staging area to facilitate logistic center operations. The site is now inactive and is under investigation to determine site closure options. The site is composed primarily of a 4 acre fenced area with two loading docks.

Description of Pathways

Potential pathways include groundwater, surface water, soil and sediment.

Description of Receptors

Human receptors include maintenance and construction workers, base employees working near the site, and local residents who live downwind of the site. Ecological receptors include aquatic life in Leon Creek as well as livestock downstream.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	◆	◆	◆	Medium
Surface Water (Human)		◆	▲	Low
Surface Water (Ecological)		◆	◆	Low
Soil	◆	◆	◆	Medium
Sediment (Human)		◆	▲	NE
Sediment (Ecological)		◆	◆	NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not Evaluated

Relative Risk Evaluation Summary

Site Name: Sludge drying lagoon (SA-8) Site ID: SS030
Date Entered: 5/5/95
Site Type: Spill site Agreement type: RCRA agreements with corrective action requirements

Overall Relative Risk	High

Site Summary

Site Description

Sludge-drying lagoon (SA-2) was used between 1962 and 1980 for drying and containing IWTP sludges when the sludge-drying beds at Site WP033 (E-3) were not operating. Monitoring activities indicate this site does not significantly impact ground water. A closure plan has been completed for this site. Closure activities include continued monitoring, and administrative control of the site area.

Description of Pathways

Potential pathways include groundwater, surface water, soil and sediment.

Description of Receptors

Human receptors include maintenance and construction workers, base employees working near the site, and local residents who live downwind of the site. Ecological receptors include aquatic life in Leon Creek as well as livestock downstream.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	◆	▲	◆	High
Surface Water (Human)	◆	▲	▲	High
Surface Water (Ecological)	◆	▲	◆	High
Soil		▲	◆	NE
Sediment (Human)		▲	▲	NE
Sediment (Ecological)		▲	◆	NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not Evaluated

Relative Risk Evaluation Summary

Site Name: Sludge spreading area (SA-4) Site ID: SS032
Date Entered: 5/5/95
Site Type: Spill site Agreement type: RCRA agreements with corrective action requirements

Overall Relative Risk	High

Site Summary

Site Description

Sludge spreading area SA-4 is located in zone 2 along the northern boundary mid way between the jet engine test cells and the Industrial Waste Treatment Facility. Study findings indicate the presence of chlorinated solvents, fuel by products and metals, but the contaminant levels were below health risk assessment thresholds of concern. This site is recommended for closure.

Description of Pathways

Main pathways are groundwater and soil, with potential pathways for surface water and sediment.

Description of Receptors

Human receptors include maintenance and construction workers, base employees working near the site, and local residents who live downwind of the site. Ecological receptors include aquatic life in Leon Creek as well as livestock downstream.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	▼	▲	◆	Medium
Surface Water (Human)		◆	▲	NE
Surface Water (Ecological)		◆	◆	NE
Soil	◆	▲	◆	High
Sediment (Human)		◆	▲	NE
Sediment (Ecological)		◆	◆	NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not Evaluated

Relative Risk Evaluation Summary

Site Name:	GW Contamination Zone-Leon Creek	Site ID:	SS035
Date Entered:	10/13/1997		
Site Type:	Spill site area	Agreement type:	RCRA permits with corrective action requirements

Overall Relative Risk	High

Site Summary

Site Description

The groundwater associated with Zone 1, designated as MAP Site Number 17, is related to an area of 16 individual IRP sites (MAP Sites 1 through 16) and 3 non-IRP sites located on the western end of the base, bounded by Westover Road and the southern and western base boundaries. The groundwater at the 19 sites is addressed collectively as Zone 1 because of the close proximity of the sites and to optimize the groundwater remediation of the entire area. A large portion of the Zone 1 area has historically been used for waste disposal through landfills, sludge beds, an oil evaporation pit, an oil burning pit, a lumber burning area, and a low-level radioactive waste disposal area. Periods of active operation at Zone 1 sites range from the early 1900s through the early 1970s. The majority of the Zone 1 area now coincides with the present-day base golf course, which was constructed in 1969.

Description of Pathways

Over much of Zone 1, alluvial sediments and shallow unconfined groundwater overlie a tight clay of the Navarro Group. An approximately 75 foot high escarpment extends north-south through Zone 1. On top of the escarpment to the west, the Navarro clay is exposed at the surface and contains limited groundwater that is under confined conditions within thin silt seams. Many sites in Zone 1 are located on top of the escarpment and, therefore, have little or no impact on shallow groundwater quality. Below the escarpment, the shallow groundwater generally flows towards Leon Creek

Description of Receptors

Human receptors include maintenance and construction workers, golfers, base employees working near the site, local residents who live downwind of the site, and adolescents at the golf course. Ecological receptors include aquatic life in Leon Creak as well as livestock downstream.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	▲	▲	◆	High
Surface Water (Human)	◆	◆	▲	High
Surface Water (Ecological)	◆	◆	▲	High
Soil		▼	▼	NE
Sediment (Human)		▼	▲	NE
Sediment (Ecological)		▼	▲	NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not Evaluated

Relative Risk Evaluation Summary

Site Name: GW Contamination Zone 2 Site ID: SS036
Date Entered: 10/13/1997
Site Type: Spill site area Agreement type: RCRA permits with corrective action requirements

Overall Relative Risk	High

Site Summary

Site Description

Zone 2, designated as MAP Site Number 33, is located in the southernmost corner of Kelly AFB along Leon Creek, bounded by Military Drive, the Union Pacific Railroad yards, and the southern base boundary along its western, southern, and eastern sides. The Zone 2 area comprises approximately 174 acres and contains several industrial facilities, including the Jet Engine Test Cell facility and the present EPCF. The Zone includes 16 IRP sites. Because of these sites' close proximity to one another and the need to optimize groundwater remediation of the entire area, groundwater is addressed collectively in Zone 2.

Description of Pathways

The ground around most of the Zone 2 facilities is predominantly grass-covered. The land surface generally slopes towards Leon Creek, with elevations ranging from 610 to 650 feet above NGVD. Surface water from Zone 2 flows into Leon Creek, either directly or through the Berman Road Ditch. In general, Zone 2 is underlain by three main stratigraphic units: Quaternary alluvial sediments; the Cretaceous Navarro Group and Taylor Group clays and marls; and the Cretaceous Edwards Group limestones and dolomites. Contamination associated with surface spills, waste transport lines, and past disposal practices is confined to the near-surface alluvial sediments and its associated aquifer. Comprehensive and detailed discussions of the Kelly AFB regional geology and hydrogeology are presented in the Hydrogeology of Kelly Air Force Base, Report of Findings (1989) and the Basewide Hydrogeologic Assessment (1990).

Description of Receptors

Human receptors include maintenance and construction workers, base employees working near the site, local residents who live downwind of the site, and adolescents at the golf course. Ecological receptors include aquatic life in Leon Creek as well as livestock downstream.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	▲	▲	◆	High
Surface Water (Human)	▼	▲	▲	High
Surface Water (Ecological)	◆	▲	◆	High
Soil		▼	▼	NE
Sediment (Human)		▲	▲	NE
Sediment (Ecological)		▲	◆	NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not Evaluated

Relative Risk Evaluation Summary

Site Name: Zone 3 Groundwater
Site ID: SS037
Date Entered: 5/5/95
Site Type: Spill site
Agreement type: RCRA agreements with corrective action requirements

Overall Relative Risk	High

Site Summary

Site Description

This site represents the shallow groundwater located approximately 15-20 below land surface in Zone 3, the primary industrial area. This site was created to provide a comprehensive management perspective to monitor groundwater cleanup under Zone 3. The constituents of primary concern include chlorinated solvents, fuel byproducts, PCBs, and metals. Three primary groundwater extraction and ultraviolet oxidation treatment system are currently in operation throughout the zone to remove and limit further spread of contaminants. Final remedies will be implemented as required for each site.

Description of Pathways

Main pathway is groundwater since this is a groundwater site.

Description of Receptors

Human receptors include maintenance and construction workers, base employees working near the site, and local residents who live downwind of the site. Ecological receptors include aquatic life in Leon Creek as well as livestock downstream.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	▲	▲	▲	High
Surface Water (Human)		▼	▲	NE
Surface Water (Ecological)		▼	◆	NE
Soil		▼	▼	NE
Sediment (Human)		▼	▲	NE
Sediment (Ecological)		▼	◆	NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not Evaluated

Relative Risk Evaluation Summary

Site Name: Metal plating shops (OT-2) Site ID: SS040
Date Entered: 5/5/95
Site Type: Spill site Agreement type: RCRA agreements with corrective action requirements

Overall Relative Risk	High

Site Summary

Site Description

This site is the former metal plating shops (OT-2) and was the majority contributor to shallow groundwater contamination. The primary contaminants of concern include chlorinated solvents and benzene, and metals. A groundwater recovery system has been in place and operating since early 1996 and a slurry wall was installed in 1998 to contain the contaminants and preclude further impact to the environment. Ground water impacts from this site remain under investigation as part of the zone wide groundwater site.

Description of Pathways

Main pathways are groundwater and soil, with potential pathways of surface water and sediment.

Description of Receptors

Human receptors include maintenance and construction workers, base employees working near the site, and local residents who live downwind of the site. There is a potential for groundwater to reach surface water, so ecological receptors include aquatic life and livestock downstream.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	▲	▲	▲	High
Surface Water (Human)		◆	▲	NE
Surface Water (Ecological)		◆	◆	NE
Soil	◆	▲	▲	High
Sediment (Human)		◆	▲	NE
Sediment (Ecological)		◆	◆	NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not Evaluated

Relative Risk Evaluation Summary

Site Name: Combined Site 2
Site ID: SS042
Date Entered: 5/5/95
Site Type: Spill site
Agreement type: RCRA agreements with corrective action requirements

Overall Relative Risk	High

Site Summary

Site Description

Combined Site number 2 (CS-2) is located in a southwest section of zone 2 across Leon creek. Little is know of the site history, however monitoring indicated the presence of groundwater contaminants; consequently a groundwater recovery and treatment system has been in operation at the site since the fall of 1993. Analysis indicates chlorinated hydrocarbons, nickel, and chromium in the groundwater at the site. This site is currently recommended for closure.

Description of Pathways

Pathways include groundwater, surface water, soil and sediment

Description of Receptors

Human receptors include maintenance and construction workers, base employees working near the site, and local residents who live downwind of the site. Ecological receptors include aquatic life in Leon Creek as well as livestock downstream.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	▲	▲	◆	High
Surface Water (Human)	◆	▲	▲	High
Surface Water (Ecological)	◆	▲	◆	High
Soil	◆	▲	◆	High
Sediment (Human)		▲	▲	NE
Sediment (Ecological)		▲	◆	NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not Evaluated

Relative Risk Evaluation Summary

Site Name: Combined Site (CS-3) Ravine
Site ID: SS043
Date Entered: 10/13/1997
Site Type: Spill site area
Agreement type: RCRA permits with corrective action requirements

Overall Relative Risk	High

Site Summary

Site Description

Combined Site Number 3 (Site CS-3), designated as MAP Site Number 2, is contained primarily within the boundaries of a natural draw that extends from Leon Creek at its northern end approximately 1800 feet to the southwest. The western portion of the site, currently occupied by softball fields, is bounded by buildings and parking lots of the Electronic Security Command area. The eastern portion of the site lies within the base golf course. An additional landfill area, referred to as the northern trench area, located north of the eastern end of the draw was incorporated into the Site CS-3 area because of its close proximity. Site CS-3 was formerly used as a landfill for construction rubble and other materials; however, Site RD-2 (Radioactive Disposal Site), lies within the site boundaries.

Description of Pathways

The surface topography at Site CS-3 varies from a relatively flat area in the western portion of the site to a steeply sloping natural draw in the eastern portion of the site. The site stratigraphy consists almost entirely of fill and landfill lying directly atop hard, dense Navarro Group clay. The fill thickness is quite variable and locally increases to nearly 30 feet, generally consisting of silty clay that often contains concrete or brick rubble. Landfill material ranging up to 20 feet in thickness is distributed unevenly throughout the site and generally consists of paper, wood, and plastic refuse. The topography at the site drains surface runoff northeast into Leon Creek. Groundwater at the site flows primarily within fill material and mimics surface water drainage.

Description of Receptors

Human receptors include maintenance and construction workers, golfers, base employees working near the site, local residents who live downwind of the site, and adolescents at the golf course. Ecological receptors include aquatic life in Leon Creek as well as livestock downstream.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	▲	▲	◆	High
Surface Water (Human)	▼	▲	▲	High
Surface Water (Ecological)	◆	▲	▲	High
Soil	◆	▼	◆	Low
Sediment (Human)		▲	▲	NE
Sediment (Ecological)		▲	◆	NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not Evaluated

Relative Risk Evaluation Summary

Site Name:
Date Entered: 5/5/95
Site Type: Spill site

Site ID: SS044

Agreement type: RCRA agreements with corrective action requirements

Overall Relative Risk	High

Site Summary

Site Description

The Industrial Waste Collection System lies predominantly in zone 3, but transits zone 5 into the Environmental Process Control Facility in zone 2. Additionally, a service line extends to zone 4. This collection system was an adapted storm water and domestic sewer line composed primarily of clay pipes. This collection system serviced the industrial area from the early 1950s until late 1995. Releases from the IWCS include chlorinated solvents, chlorinated hydrocarbons and metals.

Description of Pathways

Main pathways are groundwater and soil, with potential pathways of surface water and sediment.

Description of Receptors

Human receptors include maintenance and construction workers, base employees working near the site, and local residents who live downwind of the site. There is a potential for groundwater to reach surface water. Therefore, ecological receptors include aquatic life in Leon Creek as well as livestock downstream.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	▲	▲	▲	High
Surface Water (Human)		◆	▲	NE
Surface Water (Ecological)		◆	◆	NE
Soil	◆	▲	▲	High
Sediment (Human)		◆	▲	NE
Sediment (Ecological)		◆	◆	NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not Evaluated

Relative Risk Evaluation Summary

Site Name:	Site S-10 spill site	Site ID:	SS045
Date Entered:	10/13/1997		
Site Type:	UST	Agreement type:	RCRA permit with corrective action requirements

Overall Relative Risk	Medium

Site Summary

Site Description

Site S-10, designated as MAP Site Number 50, is an area of soil and groundwater contamination that was discovered during the RI for Site S-5. Site S-10 is located directly south of Building 1610 at the location of a former wash rack and directly north of Building 1600. Site S-10 previously contained 3 ASTs comprising of one 200 gal and two 500 gal tanks containing mogas and diesel. The S-10 area has been used primarily as an alternate power unit maintenance area. The area has also served as a small aircraft maintenance area. Typr I PD680 and gasoline were used to clean equipment engine parts and pavement areas.

Description of Pathways

Groundwater lies at a depth of approximately 20 feet below ground. The saturated thickness of the shallow aquifer in the silty gravel varies between 0 to 10 feet. Groundwater flow is generally to the south and southwest, and the water table gradient is approximately 0.003 ft/ft.

Description of Receptors

Infrastructure and contracted personnel could be potentially exposed to contaminated soils during construction projects.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	◆	◆	◆	Medium
Surface Water (Human)		▼	▼	NE
Surface Water (Ecological)		▼	▼	NE
Soil	▼	◆	◆	Low
Sediment (Human)		▼	▼	NE
Sediment (Ecological)		▼	▼	NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not Evaluated

Relative Risk Evaluation Summary

Site Name: Groundwater Zone 5 Site ID: SS050
Date Entered: 10/13/1997
Site Type: Spill site area Agreement type: RCRA permits with corrective action requirements

Overall Relative Risk	High

Site Summary

Site Description

The former still was used for the recycling and recovery of spent solvents associated with degreasing/cleaning activities. It is estimated that the still was operated between the years 1955 and 1972, but there are no present physical remains of the operation. Base employees suggest that the primary solvent at the site was trichloroethylene. The area is currently used for industrial activities. The SS050 has been expanded to include all groundwater in Zone 5.

Description of Pathways

Groundwater is common in the alluvium, but may be absent in some areas. The site is located along the eastern margin of a relatively large dry Zone caused by the upper surface of the Navarro clay being higher than the water table elevation. The saturated thickness of the alluvial aquifer ranges between 0 to 4.5 feet. Groundwater flow is generally to the east and east-southeast, and the water table gradient is relatively flat.

Description of Receptors

Potential receptors are local residents. Off base plume in shallow groundwater. Groundwater has impacted aquifer which is listed by the state as potential drinking water source.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	◆	▲	◆	High
Surface Water (Human)		▼	▼	NE
Surface Water (Ecological)		▼	▼	NE
Soil		▼	▼	NE
Sediment (Human)		▼	▼	NE
Sediment (Ecological)		▼	◆	NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not Evaluated

Relative Risk Evaluation Summary

Site Name: IWCS Site
Date Entered: 6/29/95
Site Type: Spill site

Site ID: SS051
Agreement type: RCRA agreements with corrective action requirements

Overall Relative Risk	Medium

Site Summary

Site Description

This is the Zone 4 Industrial Waste Collection System site, which serviced engine repair facilities from the 1940s to the mid 1970s. The lines were abandoned in place in the 1970s. This site is currently under evaluation as a component of a zone wide facility investigation.

Description of Pathways

Potential pathways include groundwater, surface water, soil and sediment.

Description of Receptors

Human receptors include maintenance and construction workers, base employees working near the site, and local residents who live downwind of the site. There is a potential for groundwater and storm runoff to reach surface water. Therefore, ecological receptors include aquatic life in Leon Creek as well as livestock downstream.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	◆	◆	◆	Medium
Surface Water (Human)		◆	▲	Low
Surface Water (Ecological)		◆	◆	Low
Soil	◆	◆	◆	Medium
Sediment (Human)		◆	▲	Low
Sediment (Ecological)		◆	◆	Low

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not Evaluated

Relative Risk Evaluation Summary

Site Name: Zone 4 Groundwater
Site ID: SS052
Date Entered: 5/5/95
Site Type: Spill site
Agreement type: RCRA agreements with corrective action requirements

Overall Relative Risk	High

Site Summary

Site Description

This site comprises the Zone 4 ground water assessment. The Facility Investigation addendum is currently being written to determine the final corrective measures necessary to clean up the ground water to appropriate levels. A series of horizontal wells and an ultraviolet oxidation treatment plant were installed in late 1999 and early 2000 as an interim measure to halt further impact to the environment. The treatment plant is anticipated to commence operations in May 2000.

Description of Pathways

Main pathway is groundwater since this is a groundwater site.

Description of Receptors

Human receptors include maintenance and construction workers, base employees working near the site, and local residents who live downwind of the site. There is a potential for groundwater and to reach surface water, so ecological receptors include aquatic life and livestock downstream.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	◆	▲	▲	High
Surface Water (Human)		▼	▲	NE
Surface Water (Ecological)		▼	◆	NE
Soil		▼	▼	NE
Sediment (Human)		▼	▲	NE
Sediment (Ecological)		▼	◆	NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not Evaluated

Relative Risk Evaluation Summary

Site Name: Site S-4
Site ID: ST006
Date Entered: 5/5/95
Site Type: Fuel Spill Site
Agreement type: RCRA agreements with corrective action requirements

Overall Relative Risk	High

Site Summary

Site Description

Fuel Spill area S-4 resulted from fuel hydrant system leaks at the south end of the runway. A ground water extraction and treatment system has been in place and operating since December 1989. This site extends from the south end of the runway to beneath the community immediately adjacent to the perimeter fence. Additionally, the old Industrial Waste Collection System lines pass through this area and contribute some chlorinated hydrocarbon contamination to the plume. The primary constituent of primary concern is jet fuel.

Description of Pathways

Main pathways are groundwater and soil, with potential pathways for surface water and sediment.

Description of Receptors

Human receptors include maintenance and construction workers, base employees working near the site, and local residents who live downwind of the site. There is a potential for groundwater and to reach surface water, so ecological receptors include aquatic life and livestock downstream.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	▲	▲	▲	High
Surface Water (Human)		◆	▲	NE
Surface Water (Ecological)		◆	◆	NE
Soil	◆	▲	◆	High
Sediment (Human)		◆	▲	NE
Sediment (Ecological)		◆	◆	NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not Evaluated

Relative Risk Evaluation Summary

Site Name:	Evaporation Pit E-3	Site ID:	WP022
Date Entered:	5/5/95		
Site Type:	Disposal Pit	Agreement type:	RCRA agreements with corrective action requirements

Overall Relative Risk	High

Site Summary

Site Description

Evaporation pit E-3 is on the west side of the Environmental Process Control Facility. Operations began in 1966. From the early 1970s to 1980, this pit received sludge, insecticides, spent solvents, fuels and oils, pesticides, herbicides, waste POL, and wastes containing PCBs and metals. Parameters found in the groundwater include chlorinated hydrocarbons, PAHs, nickel, and arsenic. Soil and sludge were excavated from this site around 1982. Today, the site has ceased operation and has been re-vegetated. A groundwater recovery system has been operating at this site since October 1993.

Description of Pathways

Main pathways are groundwater and soil, with potential pathways for surface water and sediment.

Description of Receptors

Human receptors include maintenance and construction workers, base employees working near the site, and local residents who live downwind of the site. Ecological receptors include aquatic life in Leon Creek as well as livestock downstream.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater	▲	▲	◆	High
Surface Water (Human)		◆	▲	NE
Surface Water (Ecological)		◆	◆	NE
Soil	◆	▲	◆	High
Sediment (Human)		◆	▲	NE
Sediment (Ecological)		◆	◆	NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not Evaluated

Relative Risk Evaluation Summary

Site Name:	Site SA-1 Sludge Spreading Area	Site ID:	WP029
Date Entered:	10/20/1998		
Site Type:	Disposal pit/Dry well	Agreement type:	RCRA permits with corrective action requirements

Overall Relative Risk	Low

Site Summary

Site Description

The SA-1 sludge spreading area covers approximately 1 acre and lies within the southwestern section of the base Golf Course. The site is located 500 ft north of Military Drive and the installation boundary, and 1000 feet west of Leon Creek. The site was in active use in the 1960s and consisted of a settling pond and a sludge drying area. By 1970 the settling pond and drying bed were removed by excavation. Cut and fill trenches were excavated in part of the area and became part of LF017 (D-7). The only contaminant found during monitoring was tricholoroethylene.

Description of Pathways

The surface of the site is predominately grass covered and slopes downward from west to east. The upper surface soil horizon generally consists of fill and landfill material extending to depths of 3 to 24 feet, directly overlaying the Navarro Group clay. Isolated units of alluvial sediment exist at the site, ranging in thickness from 3.5 to 12.3 feet. The Navarro clay contains thin discontinuous sand and silt lenses and appears to be hydraulically connected to the alluvial water table. Groundwater at the site flows in a southeasterly direction

Description of Receptors

Human receptors include maintenance and construction workers, golfers, and base employees working near the site. Ecological receptors include aquatic life in Leon Creek, as well as livestock downstream.

See reverse side for medium-specific information.

	Contaminant Hazard Factor (CHF)	Migration Pathway Factor (MPF)	Receptor Factor (RF)	Category Rating
Groundwater				NE
Surface Water (Human)				NE
Surface Water (Ecological)				NE
Soil	◆	▼	◆	Low
Sediment (Human)				NE
Sediment (Ecological)				NE

CHF ▲ Significant
◆ Moderate
▼ Minimal

MPF ▲ Evident
◆ Potential
▼ Contained

RF ▲ Identified
◆ Potential
▼ Limited

NE = Not Evaluated

ATTACHMENT 3

BCT Meeting
26 September 2000

The meeting was held on Tuesday, 26 September 2000 at 9:00 am in the WPI Office, 12th floor conference room.

Members Present and Support Personnel:

Name	Organization	Present	Absent
Brown, Leslie	AFBCA/DK		X
Buelter, Don	AFBCA/DK	X	
Callaway, Laurie	BCA (KPMG)		X
Carrillo, Mike	EPA	X	
Farrell, Philip	GKDA	X	
Landez, Norma	AFBCA/DK	X	
Meshako, Chuck	AFBCA/DK	X	
Neff, Richelle	UNITEC	X	
Power, Abigail	TNRCC	X	
Price, Lisa Marie	EPA		X
Rohne, Russell	AFBCA/DK	X	
Ryan, William	AFBCA/DK	X	
Stankosky, Laura	EPA	X	
Underwood, Tim	BCA (KPMG)	X	
Weegar, Mark	TNRCC	X	
Wehner, Ellie	TNRCC		X

Dates for upcoming meetings:

November 14, 2000
December 12, 2000
January 9, 2001
February 13, 2001

BCT MINUTES
26 September 2000

Item #	Lead	Support	Discussion Topic	Comments	How will we know it's done?	Disposition
1.	Underwood, T.	BCT Members	Redevelopment Update	Update the BCT regarding redevelopment status at Kelly AFB.	Team receives update.	Closed. Construction of the Administration Building is progressing. The Greater Kelly Development Authority (GKDA) will start leasing space within 60 days. An independent evaluation of the Environmental Process Control Facility (EPCF) was completed in mid-September. GKDA is considering transfer of the EPCF. East Kelly is being used as a prototype for facility leaseback. The leaseback date for the East Kelly facilities is 1 November 2000. Additional leasebacks are expected to start in April 2001. Twelve housing units have been found on base in a non-contaminated area. GKDA will transfer the clean parcel to the City of San Antonio.
2.	Hampton, R.	SAIC	Zone 3 RFI Screening Methodology Presentation/ 300 Area RFI	Review screening methodology that was submitted to and approved by the TNRCC and EPA. Provide overview of the 300 Area RFI.	Discussion is complete.	Open. The Air Force reviewed the screening methodology to be used for the Zone 3 RCRA Facility Investigation (RFI) which includes a discussion regarding the areas of investigation, the screening criteria for chemicals of concern, and water level information. The Zone 3 RFI database has been updated to include historical IRPIMS data, new IRPIMS data and redevelopment data. The draft final RFI is scheduled to be submitted in January 2001.
3.	Hampton, R.	SAIC	Site E-1 RFI	Provide overview of the RFI report. Present interim remedial action data.	Discussion is complete.	Closed. The Air Force presented information from data gap sampling conducted at Site E-1. Through data gap sampling and review of past boring logs, the Air Force has identified the Midway/Navarro contact and has established vertical extent in the Midway formation. The Air Force proposed 3 additional borings to delineate horizontal extent in the Midway formation. Mark Weegar stated that the current data delineated vertical and lateral extent, so the 3 soil borings will be used to supplement the E-1 Corrective Measures Study (CMS). The Site E-1 RFI will be submitted to TNRCC and EPA in October 2000.
4.	Buelter, D.	Chapa, M.	Hydrant System Update	Discuss possible options for the closure of the hydrant system.	Team determines how to proceed with closure.	Close. The Air Force proposed different strategies for closure of the fuel hydrant system. The Air Force also proposed release determination sampling methods and a format for the release determination report. The Air Force will schedule a meeting with TNRCC petroleum storage tank (PST) section and Corrective Action section representatives in Austin to further discuss the hydrant system closure process.
5.	Meshako, C.		Sanitary Sewer System	Discuss status of sanitary sewer system.	Discussion is complete.	Closed. The Air Force presented a brief history of the sanitary sewer system and inquired as to the requirements for transfer of the system. An assessment of the sanitary sewer system is required for transfer. Mark Weegar stated that existing data can be used for the assessment, however the Air Force will need to investigate areas where existing data is not sufficient. The investigation will focus on areas that handled industrial wastewater and areas where structural defects or connections would indicate a potential release.
6.	Rohne, R.		Zone 5 Off Base Investigation	Provide update on the status of the off base investigation and present preliminary data.	Presentation is complete.	Open. Samples were collected from the new off base wells in August. Three wells located north of the base were dry and will be re-sampled. Validated analytical results from the groundwater sampling area expected in a couple of weeks.

Item #	Lead	Support	Discussion Topic	Comments	How will we know it's done?	Disposition
7.	Rohne, R.	CH2M Hill	Ecological Risk Assessment Tier 2	Provide update on status of the Tier 2 Ecological Risk Assessment.	Team receives update.	Closed. The Air Force will submit their response to comments during the week of 25 September. A teleconference to discuss the responses will be scheduled during October. The Tier II report is scheduled to be submitted in December. A meeting will be held prior to submittal of the Tier II report to discuss the report.
8.	Peck, W.	Courtney, S.	Zone 4 RFI/CMS	Provide an update of the status of the RFI/CMS reports.	Team receives update.	Closed. The human health risk assessment is currently underway. The RFI report is scheduled for submittal by the end of October. The Air Force presented the format of the OU-1 and OU-2 RFI and the BCT agreed to the format.
9.	Ryan, W.	Buelter, D. Peck, W. Rohne, R.	Zone Updates	Provide team with update of current activities in Zones 2, 3, 4 and 5.	Team receives updates.	Closed. Handouts were distributed for Zones 2, 3 and 4. The Zone 5 handout will be sent out with the minutes. The Air Force provided a brief presentation on the removal and closure of three oil water separators located in Zone 4. The removal has been completed and the three sites will be closed under RRS1.
10.	Ryan, W.	Weegar, M. Carrillo, M.	List of Future Deliverables (Regulators/RAB)	Each month, provide a list of upcoming documents for review.	Team receives list of upcoming documents for review.	Open. The list will be e-mailed to the BCT members.
11.	Ryan, W.	BCT Members	Begin October Agenda	Each month, begin to establish the next month's agenda at the end of the BCT meeting.	Team approves agenda items.	Closed. The October BCT meeting has been cancelled. The next BCT meeting will be 14 November. Agenda items for the November BCT include: • 300 Area RFI • Zone 2 & 3 CMS • Site S-4 Interim System • B/522 Interim Systems • Zone 4 RFI/CMS
12.	Ryan, W.	BCT Members	Public Meetings	Discuss recent public meetings.	Discussion is complete.	Closed. Air Force, EPA and TNRCC community involvement staff will establish regular communication regarding timing and content of public meetings.

	REPORTS LISTED BELOW WERE TAKEN TO THE ST. MARY'S LIBRARY & BCT ON 26 Sept 2000	Date	Status	ADM
	Zone 1 Soils Corrective Measures Study Volume 1	Aug 00	Final	
	Zone 1 IRP Site SS041 Decision Document	Aug 00	Final	
	Zone 1 IRP Site WP020 Decision Document	Aug 00	Final	
	Zone 1 IRP Site LF018 Decision Document	Aug 00	Final	
	RCRA Facility Investigatrion Former Building 522	Sep 00	Final	
	Date: 26 Sept 00			
	Signature:			

ATTACHMENT 5

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE