



KELLY AFB
TEXAS

ADMINISTRATIVE RECORD
COVER SHEET

AR File Number 3293

KELLY AIR FORCE BASE TECHNICAL REVIEW SUBCOMMITTEE
MEETING AGENDA

Tuesday, 9 March 1999, 6:30 P.M.

Garni Hall, Room 217, St. Mary's University

<u>Topic</u>	<u>Time</u>	<u>Presenter</u>
I. Introduction Agenda Review and Handouts	6:30 - 6:35	Dr Lene'
II. Document Reviews: a) Zone 4 Decision Document b) Zone 5 Remedial Investigation Report	6:35 - 7:45	KAFB
III. Break	7:45 - 8:00	All
IV. Administrative a) TRS Mission Statement: Review and Discuss b) BCT Update c) Spill Summary Report d) Documents to TRS/RAB. e) Location/Time of Next TRS Meeting	8:00 - 8:30	Dr Lene'
V. Adjournment	8:30	All

March 1999

MEETING MINUTES
KELLY AFB TECHNICAL REVIEW SUBCOMMITTEE (TRS)
TO THE RESTORATION ADVISORY BOARD (RAB)
9 MAR 99, ST. MARY'S UNIVERSITY

I. Introduction

The TRS Meeting began at 1830 hours. Attachment 1 is the attendance. Documents delivered to the TRS are specified in atch 2.

II. Document Reviews

a) Zone 4 Decision Document

A presentation was given by Mr. Scott Courtney, WPI, on behalf of Kelly EM. The information from the proposed plan was presented. Also discussed was the pilot project investigating the use of horizontal wells at the perimeter of the Zone 4 area. Presentation slides are at atch 3.

b) Zone 5 Remedial Investigation

Ms Lida McCallister, CH2M Hill, on behalf of Kelly AFB, presented the report findings from the subject report. Presentation slides are at atch 4.

Substantial discussion by the TRS took place during presentation of these two documents but there were no formal comments submitted by TRS members.

III. Administrative

a) TRS Mission Statement: Dr. Lene' asked TRS members to provide comments before the next TRS. The mission statement will be reviewed at the RAB after approval by the TRS.

b) BCT Update: Major de Venoge provided an update of the BRAC Cleanup Team meeting held the same day (9 Mar). Key items discussed at the BCT were presented at the TRS. Minutes from the BCT will also be sent out as agreed to earlier at the RAB. The BCT is still reviewing the request for handouts from the BCT to go to the RAB.

c) Spill Summary Report: There were no reportable spills for the month of February. The report is at atch 5.

d) Documents to the TRS/RAB: Atch 2.

e) Next TRS: 13 Apr 99, 6:30pm, St. Mary's, Garni Science Hall

#32S
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 INGLÉS)

9 de marzo de 1999, Universidad de St. Mary's

I. Introducción

La junta del TRS se inició a las 18:30. El Documento Adjunto # 1 es el reporte de asistencia. Los documentos entregados al TRS se especifican en el Documento Adjunto # 2.

II. Revisión de Documentos

A) Documento de Decisión de la Zona 4:

El Sr. Scott Courtney de WPI hizo una presentación en nombre de Kelly EM. Se presentó la información del plan propuesto. También se mencionó el proyecto piloto para investigar el uso de los pozos horizontales en el perímetro de la Zona 4. Las diapositivas de la presentación son el Documento Adjunto # 3.

B) Investigación de Correcciones de la Zona 5

La Srta. Linda McCallister de CH2M Hill presentó en nombre de la Base Aérea Kelly lo que se encontró en dicho reporte. Las transparencias de la presentación son el Documento Adjunto # 3.

Durante la presentación de estos dos documentos los miembros del TRS hicieron muchos comentarios pero no se presentaron comentarios formales ante los miembros del TRS.

III. Puntos administrativos:

- A. Misión del TRS: El Dr. Lené le pidió a los miembros del TRS que proporcionaran sus comentarios antes de la siguiente junta del TRS. Se revisará la misión en el RAB después de que sea aprobada por el TRS.
- B. Actualización del Equipo de Limpieza BRAC (BCT por sus siglas en inglés): El Mayor Tom de Venoge proporcionó información sobre los avances de la junta del BCT que se llevó a cabo en esta misma fecha (9 de marzo de 1999). Los puntos más importantes que se trataron en el BCT se presentaron ante el TRS. También se enviarán las minutas del BCT como se acordó previamente en el RAB.

- C. Informe del Resumen de Derrames: No hubo derrames reportables en el mes de febrero de 1999. El Informe es el Documento Adjunto # 5.
- D. Documentos que se entregaron al TRS /RAB: Documento Adjunto # 2.
- E. **Siguiente Junta del TRS:** La siguiente junta del TRS será a las 6:30 p.m. del día 13 de abril de 1999 en el Garni Science Hall, de la Universidad de St. Mary.

IV. Cierre de la Sesión:

Se cerró la junta del TRS aproximadamente a las 8:30 p.m.

Documentos Adjuntos:

1. Lista de Asistencia
2. Lista de Documentos
3. Transparencias de la Presentación de la Zona 4
4. Transparencias de la Presentación de la Investigación de Correcciones de la Zona 5
5. Informe del Resumen de Derrames

Major de Venoge asked Mr. Rice for a copy of his comments so that they could be addressed.

V. Administrative

- a) TRS Mission Statement: On hold until 9 Mar 99.
- b) BCT Update: Major de Venoge provided an update of the BRAC Cleanup Team meeting held the same day (9 Feb). Key items discussed at the BCT were presented at the TRS. Minutes from the BCT will also be sent out as agreed to earlier at the RAB. The BCT is still reviewing the request for handouts from the BCT to go to the RAB.
- c) Spill Summary Report: There were no reportable spills for the month of January. The report is at atch 4.
- d) Documents to the TRS/RAB: Atch 2. A copy of the BRAC Process Training book was also provided to the TRS.
- e) Next TRS: 9 Mar 99, 6:30pm, St. Mary's, Garni Science Hall

VI. Adjournment

The TRS adjourned at approximately 9pm.

Attachments:

1. Attendance
2. Documents list
3. Presentation on S-1 Natural Attenuation Study Report
4. Spill Summary Report

2-9-99

TRS

NAME	ORG	PHONE
Mai Tom deVenter	Kelly AFB	(210) 925-3100 x 251
George Rice	RAB	(210) 737-6180
Amoroso, D. Quintana	RAB	(210) 923-3875
LAURA STANKOSKY	EPA	(214) 665-7525
Gordon Banger	JNRCC	512-239-5914
Ed Shorey	RAB	210 695-2194
Rick Walters	SA-ALC/PA	210 925-3100-x 230
Paul Person	Union Pacific	210-921-4037
Jim Spain	Tyndall AFB	850-283-6058
LIDA McALLISTER	CHAM HILL	(210) 377-3081
Ed Shorey	CH2M HILL	210-377-3081
TRINIDAD ALMAGUER	SAMHO	207-8853
Gene W. Lane	RAB	(210) 436-3011 ext. 1434
Mary Q. Kelly	Kelly JAV	210-925-3095
Beth Gentry	WPI	210 925 3100 ext 23
KHONDA HAMPTON	Kelly	210 925 3100 ext 226
William P. Ryan	Kelly	210-925-3100 x 338
Don Buelter	Kelly	210-925-3100 x 232
Shigail Power	TNRCC - Reg. 13	210-403-4064
Todd Herrington	Parsons	
NAZARITE PEREZ		

REPORTS FOR
ST MARY'S

REPORTS LISTED BELOW WERE TAKEN TO THE ST. MARY'S LIBRARY ON <u>9</u> FEB 1999			
182	Design Submittal Zone 1 GW Collect Sys CMI WP Design Basis Report & Maps	Dec 98	Final
444	Quality Program Plan, Phase II Remedial Facility Investigation Zone 4 OU2	Dec 98	Draft Final
539A	Remedial Investigation Report for Zone 5 - 3 Volumes	Jan-99	Final
679A	Semiannual Compliance Plan Rprt for Jan 99 (Jul - Dec 98) w/BRA - 7 Vols	Jan-99	Final
Received by:	<i>Gene W. Lee</i>		
Date:	<i>2/9/99</i>		

ATTACH 7

Monitored Natural Attenuation For Chlorinated Benzenes In Groundwater At Site S-1, Kelly AFB

R. Todd Herrington
Parsons Engineering Science, Inc.
Denver, Colorado

Erica Becver
Applied Research Associates, Inc.
Tyndall AFB, Florida

Dr. Jim Spain
Air Force Research Laboratory
Tyndall AFB, Florida

Dr. Jim Gossett
Cornell University
Ithaca, New York

Kelly AR # 3293

Compounds With Potential For Natural Attenuation

- Hydrocarbons
- Acetone
- Methyl ethyl Ketone
- Chlorobenzene
- Dichlorobenzenes
- 1,2,4-Trichlorobenzene
- 1,2,4,6-Tetrachlorobenzene
- Chlorophenols
- Pentachlorophenol
- Methylene Chloride
- 1,2-Dichloroethane
- Perchloroethylene
- Trichloroethylene
- Dichloroethylene
- 1,2-Dibromoethane
- Vinyl Chloride
- Polychlorinated Biphenyls
- Nitrobenzene
- Nitrotoluenes
- Dinitrotoluenes
- 1,3-Dinitrobenzene
- Nitrophenols
- 2,4-Dinitrophenol
- Picric Acid
- Nitroglycerin
- Pesticides
- Aniline

Source: (Spink, 1979; Microbiol. Rev., Vol. 43)

Kelly AR # 3293

EPA Definition- Monitored Natural Attenuation

The Term Monitored Natural Attenuation Refers to The Reliance on Natural Attenuation Processes (Within the Context of a Carefully Controlled and Monitored Site Cleanup Approach) to Achieve Site-specific Remedial Objectives Within a Time Frame That is Reasonable Compared to Other Methods

Kelly AR # 3293

EPA Definition- Natural Attenuation Processes

A Variety of Physical, Chemical, or Biological Processes that, Under Favorable Conditions, Act Without Human Intervention to Reduce the Mass, Toxicity, Mobility, Volume, or Concentration of Contaminants in Soil or Groundwater

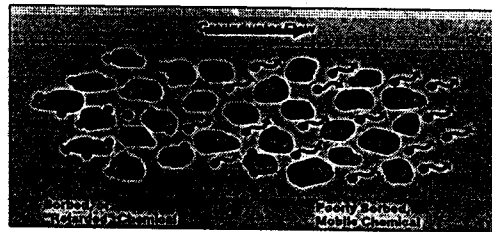
Kelly AR # 3293

Three Lines of Evidence Used to Document Natural Attenuation

1. Documented Loss of Contaminants at the Field Scale
2. Contaminant and Geochemical Analytical Data
3. Microcosm Studies

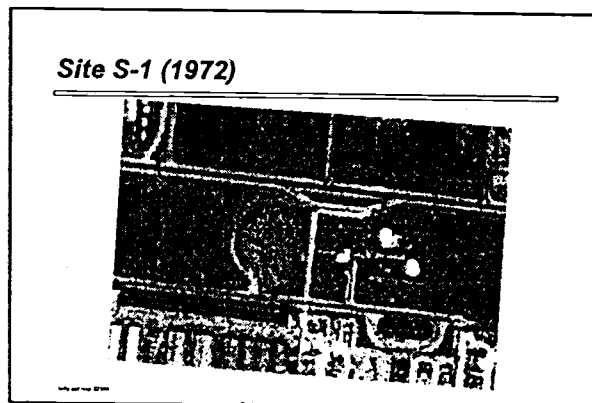
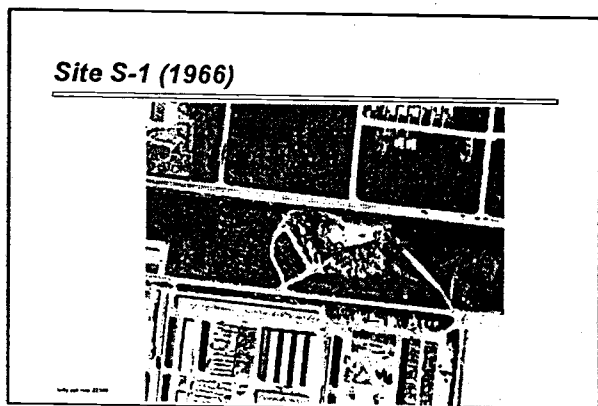
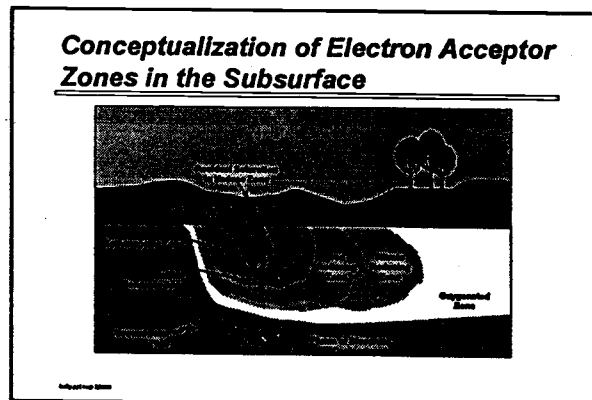
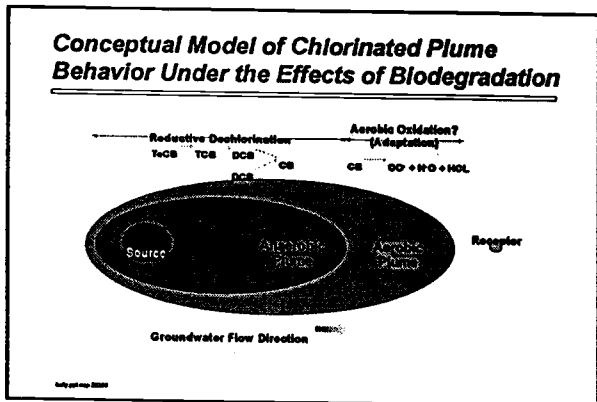
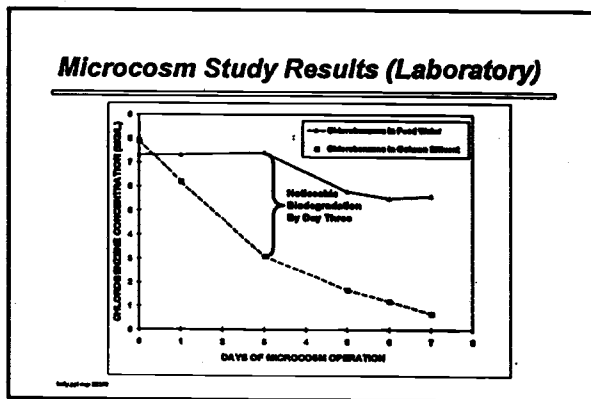
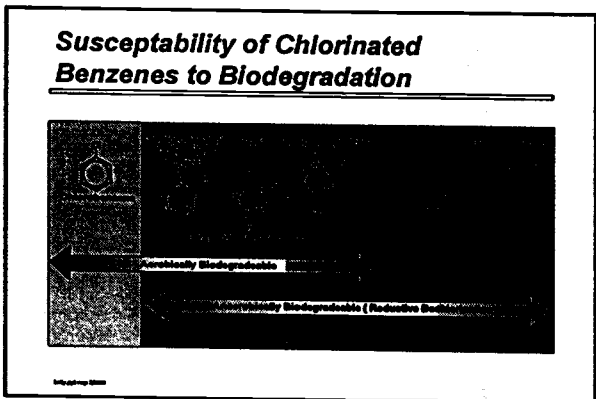
Kelly AR # 3293

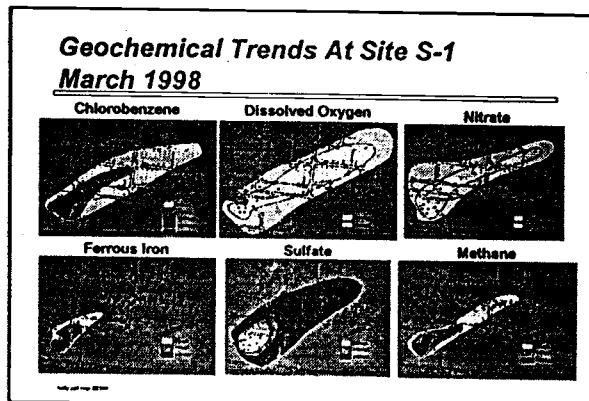
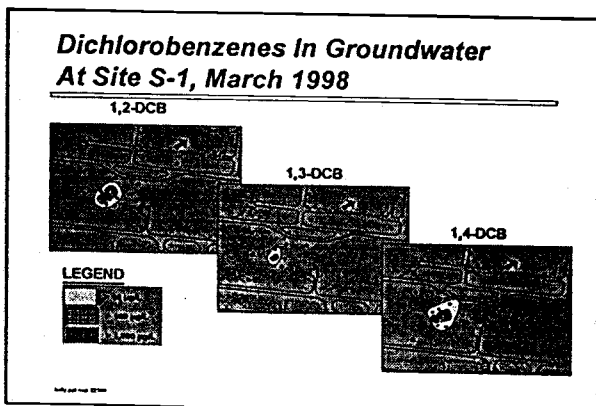
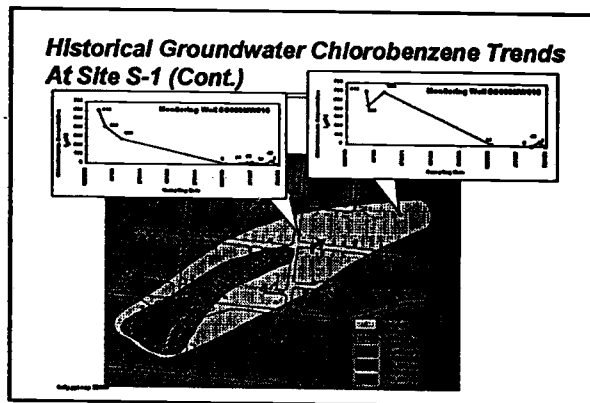
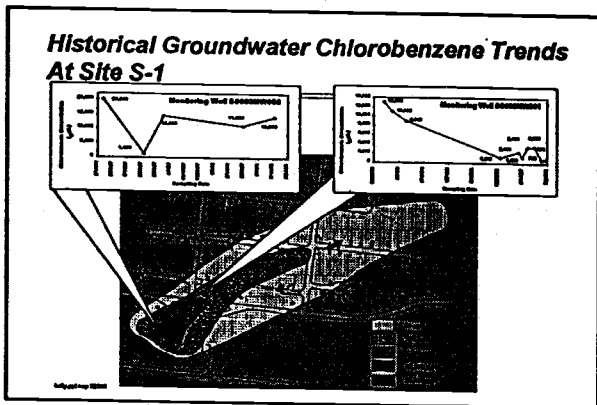
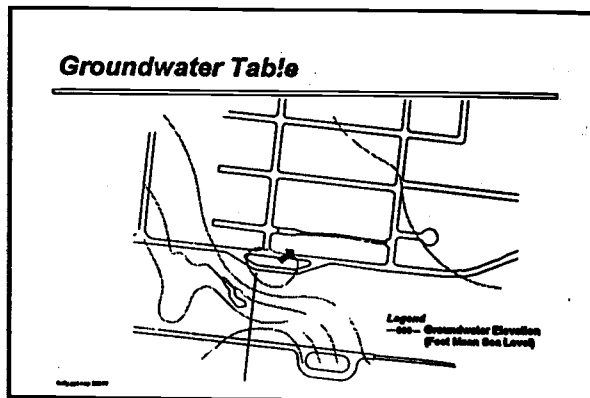
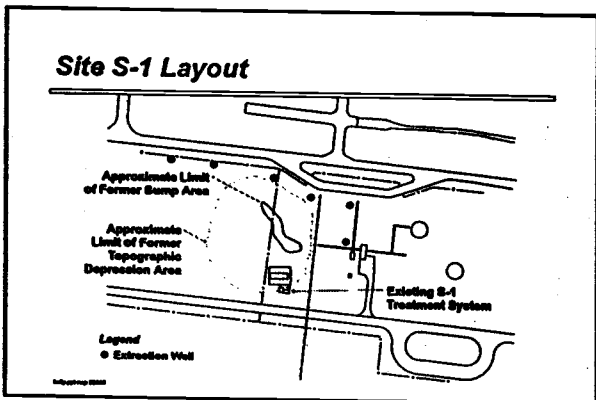
Chemical Retardation and Dispersion



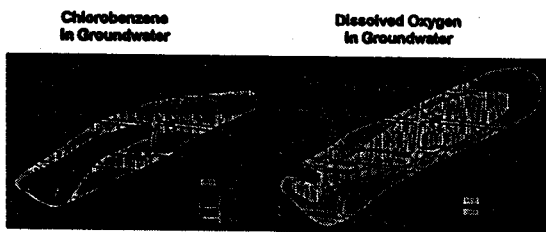
Kelly AR # 3293

ATCH 3

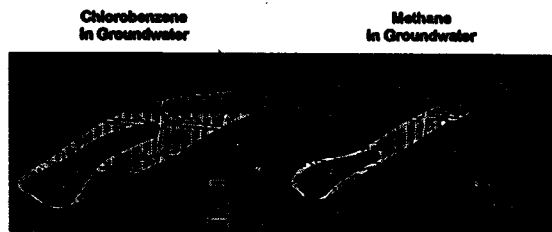




Chlorobenzene Versus Dissolved Oxygen March 1998



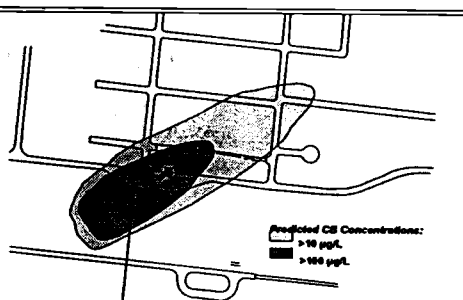
Chlorobenzene Versus Methane March 1998



Summary of CB Half Lives at Site S-1

- CB half life on base ~ 36 to 48 days
- DCB half life on base ~ 10 to 151 days
- CB half life off base ~ 315 to 877 days
- DCB half life off base ~ Not Applicable

Groundwater Model - 2009



Proposed Long-Term Monitoring Plan For Site S-1

- 9 long-term monitoring wells within, upgradient, crossgradient, and downgradient from the current CB plume.
- 3 point-of-compliance monitoring wells northeast of CB plume toe.
- Annual LTM and POC sampling until 2009; biennial sampling until 2019.

Predicted Trends For DCB and CB Contamination at Site S-1

- Natural attenuation has halted plume expansion at Site S-1; however, CB concentrations above the Federal MCL of 100 µg/L will persist near the base boundary;
- Currently, ~2.7 acres of the off base CB plume exceeds the Federal MCL for CB of 100 µg/L, and will drop to 1.2 acres by 2009; and
- DCB concentrations attenuated prior to off base migration.

Predicted Trends For DCB and CB Contamination at Site S-1 (Continued)

- The CB plume may attenuate faster than predicted and fall below the Federal MCL of 100 µg/L sooner for the following reasons:
 - attenuation by aerobic biodegradation becomes more important as carbon loading lessens;
 - actual source weathering rates exceed assumed geometric weathering rates of 3 percent per year.

Conclusion

- Documented biodegradation of chlorinated benzenes supports the application of MNA; and
- Behavior of chlorinated benzenes in groundwater is similar to chlorinated ethene behavior:
 - Reductive Dechlorination most important for multi-chlorinated benzenes; and
 - Aerobic Biodegradation of CB limited by rate of oxygen supply to aquifer.



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

9 FEB 1999

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 January 1999

There have been no reportable quantity spills for the month of January. One otherwise notable spill occurred on 06 January 1999. A Citrus based cleaner from an unknown source entered an industrial area storm drain, which leads to Outfall 003. The discharge reached the Outfall 003 basin and the tributary leading to Leon Creek, but did not migrate off Air Force property. The discharge was controlled within the tributary and corrective measures were taken to recover the contaminated water. Localized high concentrations of this product may cause adverse effects to aquatic life. Several small fish in the affected area were killed. The incident was reported to the Texas Natural Resource Conservation Commission (TNRCC), Local Emergency Planning Committee (LEPC), and Air Force Headquarters. Representative from the Texas Parks and Wildlife and the TNRCC responded to investigate the incident. Inspection of the impacted area and the Leon Creek concluded appropriate corrective measures in mitigation of the release, and concluded no impact to the State waterway. Should you have any further questions or require additional information, please contact Mr Jerry Pantoja at (210) 925-3100 ext 310 or e-mail jpantoja@emgate1.kelly.af.mil.

A handwritten signature in black ink, appearing to read "C. Williams".

CHARLES R. WILLIAMS, P.E.
Chief, Environmental Compliance Division

ATTN 4



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

9 MAR 1999

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

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


SUBJECT: Monthly Spill Report for February 1999

There have been no reportable quantity or otherwise notable spills for the month of February 1999. Should you have any further questions or require additional information, please contact Mr. Jerry Pantoja at 925-3100 ext. 310 or email jerry.pantoja@kelly.af.mil.

Sincerely


A handwritten signature in black ink, appearing to read "C. Williams", is written over the word "Sincerely".

CHARLES R. WILLIAMS, P.E.
Chief, Environmental Compliance Division




**Technical Review
Subcommittee
Briefing**



**Zone 4 Groundwater OU-1
Decision Document**



INTRODUCTION



- Background
- Decision Document
- Focused Feasibility Studies
- Proposed Plan
- Responsiveness Survey
- Project Update



INTRODUCTION

- Background
- Decision Document
- Focused Feasibility Studies
- Proposed Plan
- Responsiveness Survey
- Project Update



BACKGROUND



- **Zone 4 OU-1 RI** identified chlorinated solvents groundwater plumes on East Kelly AFB
- Sources of plume identified:
 - Site SS051(IWCS Line)
 - Site SS040 (Metal Plating Shop)
- **Focused Feasibility Studies** for both sites evaluated alternatives to prevent migration of contaminated groundwater
- **Proposed Plan** identified the preferred alternative “hydraulic containment”
- **Responsiveness Summary** documents public and regulatory comments on Proposed Plan
- **Decision Document** presents the selected interim remedial action




Decision Document



Decision Document (DD) is an internal Air Force IRP requirement for non-NPL sites which describes the decision making process and provides a formal record of the decision.

DD Contents

- **Site History**
- **Site Risks**
- **Summary of Alternatives**
- **Summary of Comparative Analysis**
- **Conclusion**



Focused Feasibility Studies

Site History

Risk Evaluation - Justify need for interim remedial action

Summary of Alternatives

- No Action
- Monitored Natural Attenuation
- Vertical wells, UV Oxidation, surface water discharge
- Vertical wells, UV Oxidation, aquifer injection
- Vertical wells, air stripping, surface water discharge
- Vertical wells, air stripping, aquifer injection
- Collector trenches, UV Oxidation, surface water discharge
- Collector trenches, UV Oxidation, aquifer injection
- Collector trenches, air stripping, surface water injection
- Collector trenches, UV Oxidation, aquifer injection

Comparative Analysis

Recommended Alternative

Cost of Collector Trench over budget

Implementation, logistics, disruption of Rail Car America all factors against Collector Trenches



Horizontal Wells - initial screening in the FFS received **“poor”** rating for **implementation** and was not considered further.

Additional site data and advances in technology upgraded **implementation** rating to **“good”**

Modeling Supports capture zone requirements

Cost within budget

Horizontal Well Constructability Test



Proposed Plan

**Preferred Alternative - Hydraulic Containment,
Treatment, Discharge**

- **Combination Vertical Extraction Wells/Collector Trenches***
- **Ex-situ treatment of groundwater using UV Oxidation**
- **Surface water discharge to permitted Outfall 004**

* **Horizontal wells may replace collector trenches**

If Horizontal Well Constructability Test is successful Horizontal Wells will replace Collector Trenches. Only change is installation method. Intent and purpose of PP remains the same.




Responsiveness Summary




Documented comments received and Air Force responses:

- **Community**
- **EPA**
- **TNRCC**

Both regulatory agencies concurred with the interim action recommendation and no issues were raised during the public comment period precluding Kelly AFB from proceeding with the project.



SS052 IRA, Boundary Control



- **Original Design**
 - 10 Collector trenches along southern and eastern perimeter East Kelly AFB
 - 3 vertical wells in southeast corner, 7 vertical wells in southwest corner
 - Combined maximum flow rate 525 gallons per minute
 - UV Oxidation Treatment Plant located in Southeast Corner of East Kelly AFB
 - Discharge treated groundwater to permitted Outfall 004
 - GKDC aware of water reuse availability
- **Construction Timeline:**
 - 100% design submitted on Sep 98
 - Conduct constructability test Jan - March 99
 - Projected completion date 30 Oct 99

-This project is scheduled for completion in Oct 99.


-The purpose of this project is to construct a system of horizontal wells along the southern and eastern perimeter of East Kelly to intercept and extract contaminated shallow groundwater. This project began in Sept 98. Plans are to extract the contaminated groundwater and treat the water at an on-base treatment facility before discharging to Sixmile Creek.

- Weston has contracted with George Losonski (IT Corp. Horizontal Well Construction) to review the Horizontal Well Constructability (Request for Proposal) RFP and assist in the design and installation of the wells. When the vertical soil borings have been completed, the soil boring information and the RFP will be submitted to qualified bidders. Estimated start date for the HW Constructability Test is Feb-Mar.


- George Losonski will take the cross-section from drilling and help the AF make a decision about how and where horizontal well will be installed. This will be communicated in the RFP. Construction of test horizontal wells should occur in Mar. We will perform a series of test to determine how well horizontal well are operating. If good, we will not demobilized the drilling unit, but will instead have the additional sections of horizontal pipe installed.

- Despite the well technology that is chosen (horizontal, vertical or trench), the pump house will be installed. The original construction calls for March.

Perimeter Interim Remedial Action (IRA): KAFB is going to conduct a pilot-scale test of horizontal drilling as an alternative to the designed trench. The schedule for the IRA can be see in the following slide. Data collection (soil borings) for the design of the horizontal wells is in progress with the horizontal drilling beginning in late February. An aquifer-pumping test will be conducted on one of the horizontal wells following installation.



SS052 IRA, Boundary Control Constructability Test



Purpose: Budget constraints and collector trench installation issues required the Base to evaluate alternate installation methods.

Rational: Horizontal wells supported by modeling and budget estimates.

Objective: Evaluate drilling, completion, and performance of horizontal wells in lieu of collector trenches

Scope: Two horizontal wells replacing trench sections 1 & 2

- 10 soil borings along alignment, 6 converted to monitoring wells for pumping test analysis
- Average screen length 600'
- One Pass-through completion
- One Blind completion

-This project is scheduled for completion in Oct 99.



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Kelly Air Force Base
IRP Zone 5

Remedial Investigation
Presented to
Technical Review Subcommittee
March 9, 1999



Goals

- Identify nature of contaminants
- Identify Source Areas
- Evaluate vertical and horizontal extent of contamination
- Evaluate potential risks to human health and the environment
- Determine the need for corrective action



Boundary Control Schedule



PROJECTED SCHEDULE SS052 BOUNDARY CONTROL

- 12 Jan 99 Install soil borings & monitor wells for constructability & pump test
- 20 Jan 99 Horizontal constructability test work plan ready
- 8 Mar 99 Begin drilling 2 horizontal wells
- 26 Mar 99 Drilling complete on first phase of horizontal drilling.
- 2 Apr 99 Pumping Test complete
- 15 Apr 99 Report on Constructability Test
- 3 May 99 Resume construction of system
- 30 Sep 99 Recovery system southern boundary complete.
- 17 May 99 Begin drilling horizontal wells eastern boundary.
- 30 Oct 99 Recovery system eastern boundary complete.

PROJECTED SCHEDULE GROUND WATER TREATMENT PLANT

- 29 Jan 99 Plant package ready for bid
- 19 Mar 99 Award contract for plant
- 19 May 99 Start construction
- 30 Sep 99 Plant construction complete



Data Collected





- 106 Wells and 41 soil borings were installed in two phases in 1995
- Two soil samples were collected from each well and soil boring
- One groundwater sample was collected from each new well and from 83 existing wells
- Aquifer testing was performed in two locations



Analyses Performed





- Conventional parameters: pH, conductivity, total petroleum hydrocarbons
- VOCs
- Semivolatile organic compounds
- Pesticide/PCBs
- Metals and cyanide



Compounds Observed

- Solvent Related Compounds
 - Chlorobenzene, PCE, TCE, DCE, and Trichloroethane
- Fuel Related Compounds
 - Benzene, toluene, ethylbenzene, xylene
- Pesticide/Herbicide
 - DDT and derivatives in some surface soils
- Naturally Occurring Compounds
 - Arsenic, Chromium, Nickel, Manganese



Conclusions

- Nature of contaminants was identified
- Concentrations indicate possibility that there are sources both on and offbase
- Compounds present in groundwater on and offbase
- Corrective measures study for identified sites will be required

REPORTS FOR
ST MARY'S

REPORTS LISTED BELOW WERE TAKEN TO THE ST. MARY'S LIBRARY ON 8 MAR 1999			
336A	Evaluation and Closure Strategy (IWCS)*	Jan 99	Final
338A	Interim/Stabilization Measures Work Plan for the Bldg 258 SWMU, Phase 2 *	Jan-99	Final
340A	Interim/Stabilization Measures 90% Design Specifications for Zone 3, Site MP (OT-2)	Jan-99	Final
684A	Basewide Quality Assurance Project Plan and Sampling and Analysis Plan	Jan-99	Draft
754	Quality & Technical Plans, Lead Contaminated Soil Removal at DRMO Lot Z04	Nov 99	Final
* for APRIL TMS Review			
Received by: <i>Gene W. Lane</i>			
Date: 3-9-99			

**BCT Meeting
March 9, 1999**

The meeting will begin on March 9, 1999 at 9:00 am at Kelly AFB in Building 306. After the first agenda item is completed the meeting will move to Building 1530, room 211.

Dates for upcoming meetings:

March 9-10, 1999

April 13-14, 1999

May 11-12, 1999

June 8-9, 1999

July 13-14, 1999

August 10-11, 1999

September 14-15, 1999

October 12-13, 1999

November 9-10, 1999

Item #	Tracking #	Time	Lead	Support	Discussion Topic	Comments	How will we know it's done?	Disposition
1.	155	9:00am	Wills, P.	BCT Members	GIS Web Map Demonstration ✓	Demonstrate GIS Web Map Capabilities.	Demonstration is completed.	
2.	326	9:30am	Wolf, C.	BCT Members	Basewide Groundwater Update ✓	Provide an update on the HGL modeling effort.	Update is provided.	
3.	180	9:40am	Brown, L.	Price, L.	Site D-10/ 106 Action	Report status on Site D-10/ 106 Action including timeframe for DoD to proceed.	Status report is completed.	As Pk
4.	323	9:50am	de Venoge, T.	BCT Members	Background Metal Values	Provide BCT Summary of Statistical Data for Existing Soils Background Values.	Data provided to BCT.	LINDA PETERSON WAITING ON COMPLETE DATA SET THAT WAS ORIGINALLY USED FOR 94 REPORT
5.	313	10:00am	Wolf, C.	BCT Members	Zone 1 Update ✓	Each month provide team with current activities in Zone 1.	Discussion is completed.	
10 min break								
6.	314	10:20am	Buelter, D.	BCT Members	Zone 2 Update ✓	Each month provide team with current activities in Zone 2.	Discussion is completed.	
7.	315	10:35am	Buelter, D.	BCT Members	Zone 3 Update ✓	Each month provide team with current activities in Zone 3.	Discussion is completed.	
8.	337	10:50am	Sassaman, B.	BCT Members	Off-base Risk Assessment ✓	Establish the extent of any risk assessment in Zone 4 off-base.	Approved written procedure for Zone 4 off-base risk assessment.	
9.	344	11:00am	Sassaman, B.	BCT Members	SARA and USGS Project Work Plans ✓	Provide formal response to comments to the regulators.	Regulators receive response to comments.	
10.	316	11:20am	Sassaman, B.	BCT Members	Zone 4 Update ✓	Each month provide team with current activities in Zone 4.	Discussion is completed.	
Lunch (11:40 - 1:00)								
11.	333	1:00pm	Ryan, W.	BCT Members	Monitor Well Construction /MNA Sampling ✓	Discuss monitor well construction and natural attenuation sampling.	Discussion is completed.	
12.	317	1:10pm	Wolf, C.	BCT Members	Zone 5 Update ✓	Each month provide team with current activities in Zone 5.	Discussion is completed.	

Item #	Tracking #	Time	Lead	Support	Discussion Topic	Comments	How will we know it's done?	Disposition
13.	338	1:25pm	Wolf, C.	BCT Members	Tier I Workplan	Update the BCT on the status of the Tier I Workplan.	Specific data submitted to regulators is approved.	
14.	336	1:35pm	Wolf, C., Buelter, D.	BCT Members	Metals in Groundwater	Establish means of determining if metals have been released to groundwater on Kelly.	BCT consensus on document which defines the process of determining metals released to groundwater.	memo
15.	339	2:05pm	Ryan, W.	BCT Members	Revised Full Closure Model	Generate revised full closure model.	Revised full closure model is accepted.	
10 min break								
16.	340	2:45pm	Skrobarcek, B.	BCT Members	BCT Database Update	Update BCTDB with Revised Milestones from the Full Closure Model.	BCTDB is updated.	
17.	448	2:50pm	de Venoge, T.	BCT Members	TRS Update	Provide team with a TRS update.	Discussion is completed.	see agenda 9 MAR
18.	447	2:55pm	Underwood, T.	BCT Members	PBA Award	Update the BCT on the Lockheed Martin transition.	Discussion is completed.	
19.	343	3:05pm	Ryan, W.	BCT Members	SWMU Schedules	Reach consensus on the QC model.	BCT reaches a consensus on the model.	
20.	385	3:35pm	Ryan, W.	Wille, L.	Tentative Agenda	Define a method for developing and distributing the draft and final agenda.	BCT reaches a consensus on the method.	don't include draft with minutes
21.	386	3:50pm	Ryan, W.	BCT Members	BCT Teleconference Scheduling	Each month establish the upcoming schedule of teleconferences.	Teleconference schedule adopted by the team.	3/31
22.	384	4:00pm	Ryan, W.	de Venoge, T. Banner, G. Carrillo, M.	List of Documents going to the RAB at the Conclusion of the March BCT Meeting	Each month review the documents going to the RAB.	Team reviews the list of documents to go to the RAB.	see TRS list - NO EXEC SUMM'S
23.	383	4:05pm	Ryan, W.	BCT Members	Begin April Agenda	Each month establish the following month's agenda at the end of the BCT meeting.	Team approves agenda items.	
Meeting Adjourns @ 4:15pm								

BCT

1. Closed: Team heard presentation on GIS system and web site.

2. Closed. Incorporating comments into Base-wide flow model + calibration reports

→ by end of March. Received draft of Biodegradation report from HGL. Draft will be ready by end of March. S-4 plume model development is on schedule. Currently on step 4 of zoom model. Brian - add to tracking data base.

4. Open Forwarded background inorganic info to Corps of Engineers. She is in-process. Change date to 4/15/97

7-2/3 update

5. Closed. Handout presented.
Briefing delivered.

6+7. Closed. Handout presented.

7-2/3 update
Handouts include a little more detail. Many crews out April-July collecting samples. Don suggested that a small number of new wells may be needed to characterize the interior of the ³⁻⁴ plume. Re p.2, slide 6 base will move forward with optimization of interim system at site S-8. Letter to Gordon B. (cc. EPA) to be written soon. (Lesley and Parker have communicated about it.)

Re p.3, slide 22, TNREC accepted that Gundle Wall would satisfy regulatory requirement to prevent GW. infiltration to storm drain, but did not require the wall specifically.

off base
NRSA A95

8. Open. Investigating
Air Force internal requirements.
That issue is pending.
New date 4/13/99.

9. ~~Closed.~~ Kelly has received regulatory
comments. Letter response will be
sent to EPA/TNRCC by 4/12/99.
SARA/USGS
Kelly will begin river study
in cooperation w/SARA.
Brian will track letter response.

10. Closed. Handout distributed.
Highlighted changes since
last BET.
2-4
update

Closures

11. Effect of stainless steel casing on hydrogen in wells is hard to determine in the field. It is a factor to consider, but should not necessarily drive a change in procedure. Kelly will not change well construction procedures.

12. ^{closed} Handout distributed. Construction at Site S-1 ISM will begin in May.

13. Received more comments from contractors than anticipated; meeting tomorrow. Draft final should be done by 3/19/99. Separating Tier I ^{checklist} and Tier II Workplan. Will be submitted simultaneously, but as separate documents. This item is about an eco-risk work plan.

(14) Open. Change date to 4/13/99.
Indicate Chris W. as lead
and Abbi, Gordon, Laura and
Don To support, group.

(15) ~~Closed~~ Report of anticipated deliverable
due dates based on full closure model was distributed.

All ^{items} are now in the BCTDB.
(BCT Data Base) Moving forward
changes will be recorded as they
occur, and Kelly will reissue Full
Closure model quarterly. (Some
descriptors and dates need to be
changed, e.g. approach to establishing
background metals values. (p 9))

(18) ~~Closed~~ PBA contract went to Lockheed
Martin and Tinker. L-M wants
interim measures in place by
6/14/99 Plan concludes transi-
tion, including permanent modifi-
cations by 12/14/99. They will use
21 environmental units.

17. Closed. Discussed TRS agenda.

19. Open.

Rewrite this item to clarify that BCT is receiving the list, not creating or approving it.

Notebook handed out last time had 300 + 600 areas. #'s were project numbers. Year is funding year. Process would be applied to Closure

not needing corrective actions.

New date - next telecon.

21. Next telcon 3/31/99, 9:00 am est.

22. Evaluation and closure strategy-INS.

- Interim/Stabilization Measures Work Plan for Bldg 258 SWMU, Phase 2
- Interim/Stabilization Measures 90% Design Specs for Zone 3, Site MP (OT-2)
- Basewide QAPP and Sampling and Analysis Plan
- Quality & Technical Plans, Lead
- Soil Removal at DRMO

18 (cont)

Extensive construction to alter facilities is planned. Will have better definition of plans on 3/25/99. We will need to implement hot transfer process. Gordon would like to suggest changes in hot transfer process.

3. Dismissed and closed. Matter is not resolved.

20. Closed. Richelle e-mail BET proposed agenda 2 weeks before BCT. Return time frames, limits and new items to Richelle by Friday that week. Richelle emails tentative agenda to BET by following Tuesday. Send modifications to Richelle by following Thursday. Richelle emails William, Gordon, Mike by c.o.b. Thursday. They approve by Friday noon. Richelle e-mails the team Friday p.m.

23. Closed.

- Item 4
 - Item 8
 - Item 14
- } From present agenda.

- Update for RAB meeting 4/27/96
(Tom D.)

- Feedback to Brian on Status Report from BCT database.
(Mike)

- Kelly to provide info on wells to be sampled using low flow in May/JUNE. (William) (List + maps.)

- PBA transition (TIM)

- Team input to Lee.
(Lee)

- Lee input to team.
(Lee)

} New Standing Items

24.

BCT A.O.'s

— will be provided monthly to
TNS chairman

— FOIA ANALYSIS (per CHAMBER)

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE