



KELLY AFB  
TEXAS

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ADMINISTRATIVE RECORD  
COVER SHEET

AR File Number 3268

**DRAFT**

**KELLY RESTORATION ADVISORY BOARD**  
**TECHNICAL REVIEW SUBCOMMITTEE**  
**MEETING AGENDA**

**20 March 2001, 6:30 P.M.**  
**St. Mary's University, Garni Science Hall**

- |   |                    |                                 |
|---|--------------------|---------------------------------|
| <b>I. Introduction</b>                        | <b>6:30 – 6:40</b> | <b>Dr. Lené, Comm. Co-chair</b> |
| Agenda Review and Handouts                    |                    |                                 |
| <b>II. Update on Status/Schedule for</b>      | <b>6:40 – 6:55</b> | <b>AFBCA</b>                    |
| Area 1592 Tank Site                           |                    |                                 |
| <b>III. Update on TAPP Funding Priorities</b> | <b>6:55–7:10</b>   | <b>Dan Zatopek, AFBCA</b>       |
| <b>IV. Presentation on Zone 4</b>             |                    |                                 |
| RCRA Facility Investigation (RFI)             | <b>6:55 - 7:30</b> | <b>Mr. William Ryan, AFBCA</b>  |
| <b>V. Discussion on Zone 4 RFI</b>            | <b>7:30 – 8:15</b> | <b>Dr. Lene</b>                 |
| <b>VI. Administrative</b>                     | <b>8:15 - 8:45</b> | <b>Dr. Lené</b>                 |
| A. BCT Update                                 |                    |                                 |
| B. Spill Summary Report                       |                    |                                 |
| C. Documents to TRS/RAB                       |                    |                                 |
| D. Action Items                               |                    |                                 |
| E. Agenda/Location/Time of Next TRS Meeting   |                    |                                 |
| <b>VII. Adjournment</b>                       | <b>8:45</b>        |                                 |

**DRAFT**

# Area 1592

## *Fuel Tanks Project*

- **Both fuel tanks near North Kelly Gardens taken down**



- **Underground tanks were removed**



- **Concrete dikes were demolished and removed**

- **Daily air monitoring**

- **Soil sampling to ensure clean-up**



- **After demolition the area will be graded and seeded**



**Kelly AFB**  
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**Kelly Health Issues**

20 Mar 2001



**U.S. AIR FORCE**




**Chronology of Major Events**

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Jul 1995	BRAC decision to realign Kelly AFB announced
Aug 1996	ATSDR conducts initial site visit
May 1999	EJ complaint filed against Kelly, EPA, TNRCC, GKDA & ATSDR
Aug 1999	ATSDR releases Phase 1 of PHA
Dec 1999	AFBCA assumes responsibility for environmental restoration
Feb 2000	AFBCA launches community outreach program for Zone 4
Oct 2000	ALSA announces possible link between ALS and Kelly workers
Nov 2000	SAMHD begins providing screenings for people living near Kelly
Dec 2000	Mortality Study and ALS Case Series Investigation begin

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**Upcoming Major Events**

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Apr 2001	ATSDR to release Phase 2 of PHA
Jun 2001	SAMHD screenings will expend current appropriation of \$465K
Jul 2001	Kelly AFB will officially realign to Lackland AFB

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**Current Kelly Health Studies**


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Study or Initiative	Occupational Health	Public Health	CERCLA / Environmental	BRAC Decision Generated	Lead	Time Frame
Cleanup		X	X		AFBCA	1982-2032
PHA Phase 1 & 2		X	X		ATSDR	1996-1999
PCEH		X	X		AFBCA*	2000-2010
ALS Case Series	X				AFIERA	2000-2001
Mortality Study	X				AFIERA	2000-2001
B/171 Study	X				GKDA	2000-2001
JHU Case Study		X	X		SAF / MQ	2001-2003

\*Only if SAFROCH and AFBCA concur on use of BRAC Environmental Funds for PCEH

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**PCEH Background**

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- San Antonio Metropolitan Health District (SAMHD) began conducting environmental health screenings for people living the vicinity of Kelly AFB in November 2000 using a congressional appropriations of \$250K
- An additional appropriation of \$213K was announced in December 2000
- The number of people requesting screenings was much greater than originally anticipated and screenings are currently booked out until May 2001 and appropriated funds will be expended by June 2001

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**Current PCEH Screenings**

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- As any potential exposures to shallow groundwater or other environmental contaminants would be at extremely low concentrations, tests used to assess acute exposure to PCE or other contaminants would not be effective
- Screenings currently being performed by the PCEH attempt to identify the source of a specific individual's health complaint to determine whether or not it is attributable to an environmental contaminant

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**Future PCEH Funding / MOA**

- SAF/GCN's opinion is that using environmental (CERCLA) funds for PCEH is appropriate iff the activities represent information gathering to evaluate remedies for the contaminated shallow groundwater or other releases
- Information gathered by the PCEH might be used to determine if incidences of health complaints have any correlation to proximity to shallow groundwater contamination

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**Hazards and Pathways of Public Concerns**

- Chemicals**
  - Aluminum
  - Beryllium
  - Cadmium
  - Chromium
  - Lead
  - Thallium
  - Fuels
  - Radio Nucleotides
  - SVOCs
  - VOCs
- Facilities**
  - 171
  - 43
  - 324/326/375/1556
  - 1420
  - Industrial Facilities
  - Electroplating Shops
  - Medina Annex (LAFB)

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**Pathways of Public Concern (Continued)**

- Air:**
  - Indoor, past/present
  - Outdoor, past/present
- Ingestion:**
  - Residential garden vegetables
  - Soil in gardens
  - Water to irrigate gardens
  - Fruit and nuts from deep-root trees
- Soil:**
  - On-base, past/present
  - Off-base, past/present
- Water:**
  - Drinking water, on- and off-base, past/present (i.e., deep aquifer)
  - Surface water:**
    - Flooding off the base, into soil
    - Creeks, rivers, seeps
    - Shallow groundwater on and off-base, past/present

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**Conceptual Site Model**

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**AF San Antonio Health Program Office**

- Function as single point of contact, coordination and research for local AF response to:
  - worker health and safety
  - occupational health and safety
  - community health issues
  - health studies
  - referrals to appropriate resources
  - facilitation of inter-AF dialogue
- Possible five person staff:
  - Public health professional
  - Attorney
  - Research/FOIA officer
  - Communications expert
  - Administrative assistant
- Possible contractor support with specialized expertise
- Located at Kelly, Lackland or Brooks
- Needed ASAP and may be needed for a few years

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**Possible Resources for AF SA Health Program Office**


- Surgeon General
- Commands (i.e., AETC, AFMC)
- Special legislation and appropriations
- AF administrative direction
- Two PDs Kelly transferred to Lackland

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**Kelly AFB Zone 4 RFI**

Walter Peck, AFBCA/DK  
 Scott Courtney, BAH-*no there*  
 Mark Stoker, CH2M HILL

March 2001




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**Zone 4 RFI Objectives**

- Draft Final RFI for OU-1/OU-2
  - Submitted February 2001
- Objectives of the RFI
  - Presence of releases
  - Nature and extent of contamination
  - Compare data to relevant standards




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**Zone 4 RFI Operable Units 1 and 2**

- What is OU-1?
  - Soil within East Kelly and IWCS on college property
  - Does not include DRMO sites to be closed under RCRA permit
  - Site SS051, AOC MW125, AOC MW160 and AOC Yard 68
- What is OU-2?
  - Groundwater impacted by Kelly sites SS051 and MP extending to the east and southeast of those sites




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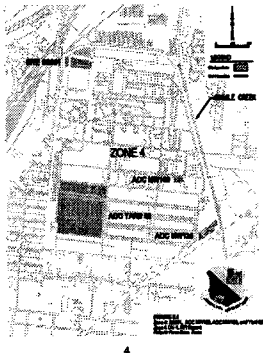
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### Zone 4 RFI OU-1 (Soils) Sites



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### COC Determination

- Assembled all historical data for each site.
- Compared inorganic maximum values to background
  - Most current UTLs for soil background
  - Downgradient unaffected groundwater UTLs
- Compared organics detected at source areas to PQLs
- Must be present at the source area at least once in historical groundwater data to be called a COC

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### Site SS051 Soils

- Data analysis performed
  - Geoprobe on 50-foot intervals along the IWCS
  - Data collected in borings and wells
  - Over 70 data points in 4 acre site
  - Minor VOC soil concentrations
- Residual PAHs
  - low concentrations in shallow soil (0 to 5 feet)
  - over 95 percent of area is paved
  - potential impact from overlying asphalt
  - low solubility/mobility
  - not detected in groundwater
- Extent of VOCs
  - Extent of VOCs in soil is defined
- Goal: RRS #2 closure for Soil

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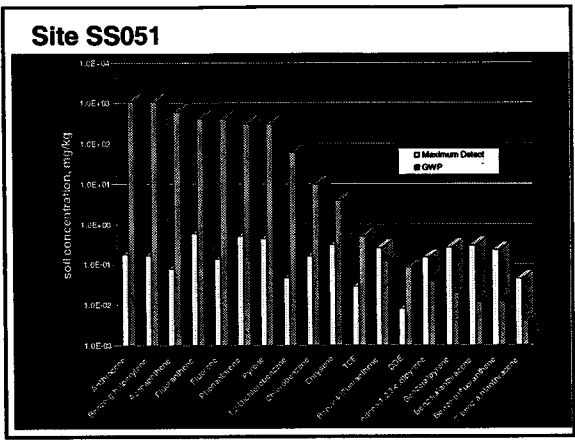
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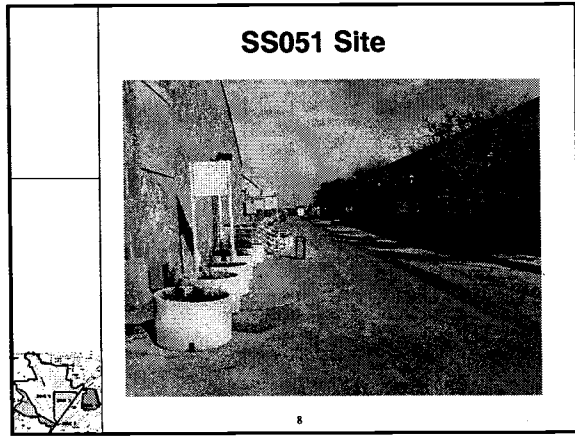
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### AOC MW160 Soils

- Site of former OWS/UST (closed)
  - CVOCs detected in soil during closure investigation
  - MW160 installed in 1994 as a result of OWS/UST closure
  - Additional soil samples collected to provide more detail on vertical and lateral extent
  - All concentrations below SAI and GWP
  - Extent delineated to PQLs
- Goal: RRS #2 closure
  - no remediation required

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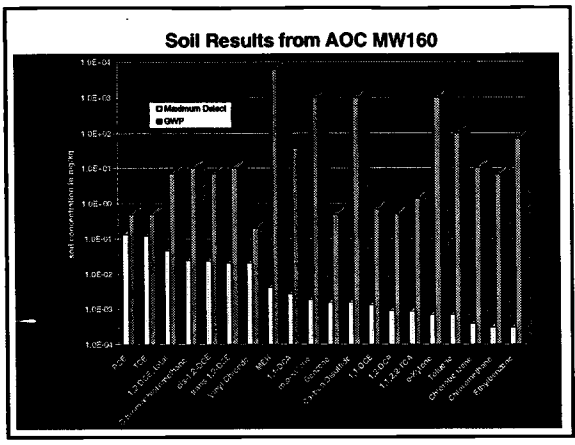
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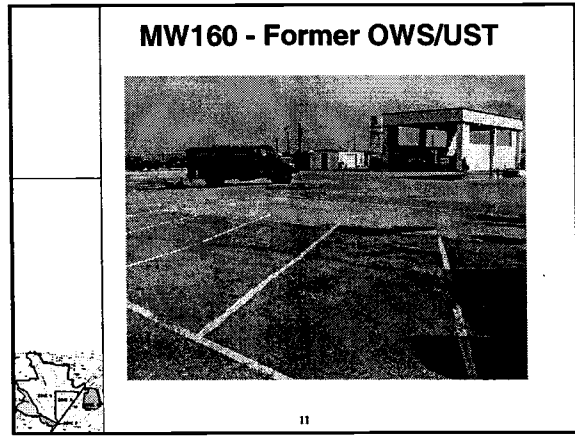
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**AOC MW125 Soils**

- Area of concern around well MW125
  - Soils impacted by BTEX, PAHs and CVOCs
  - Additional soil samples collected
    - detail on vertical and lateral extent
- Soil Data
  - VOCs pass SAI and GWP
  - PAHs pass SAI, but exceed GWP

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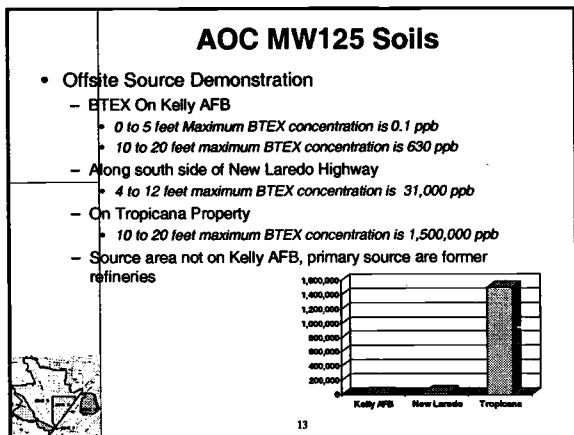
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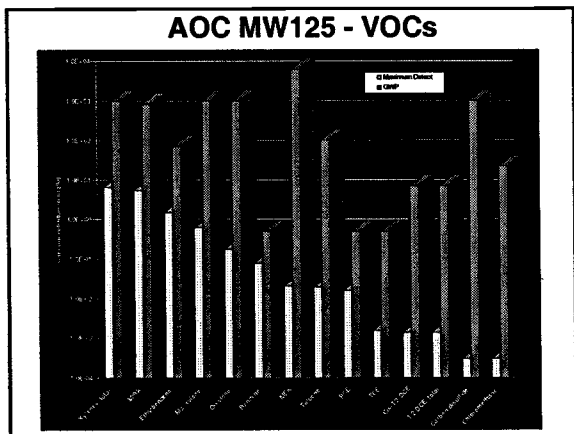
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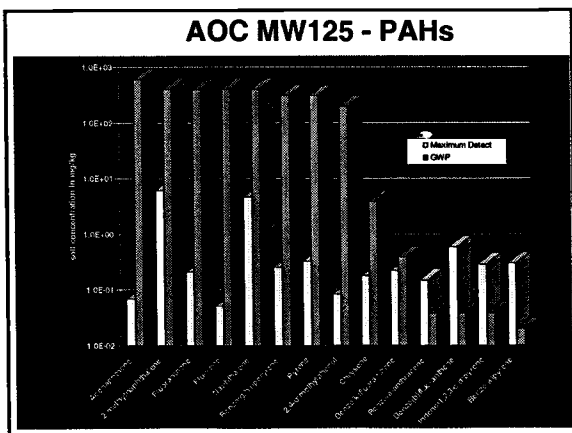
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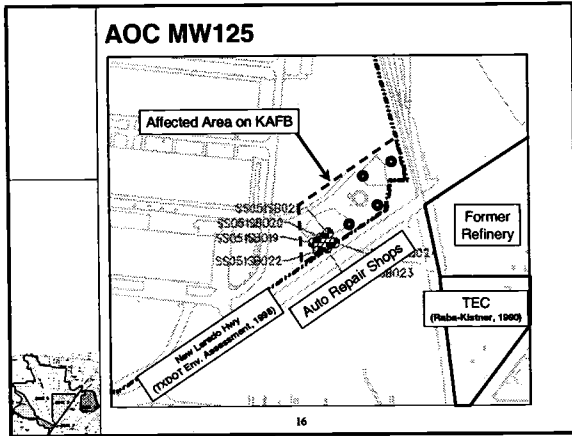
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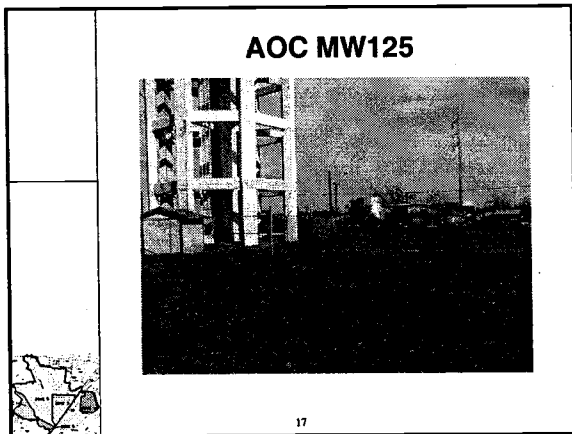
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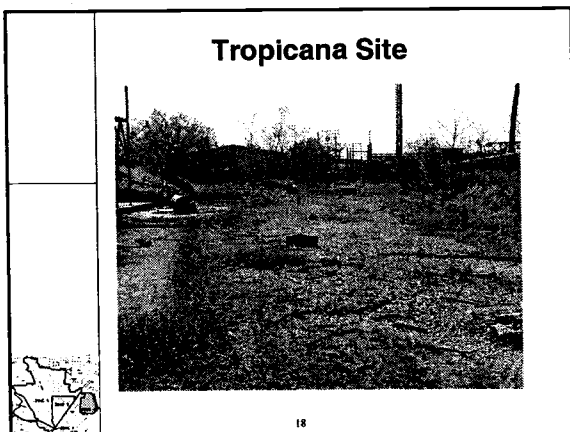
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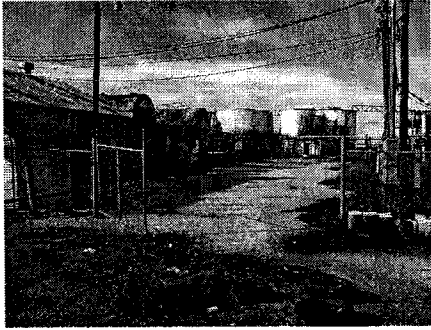
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**R&H Site125**



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**RFI OU-1: AOC Yard 68**

- Outdoor storage for about 60 years
  - During closure of IRP Site SS009 metals were detected in caliche/asphalt that were not related to herbicide spill at SS009
- Yard 68 Conditions
  - Metals (Antimony, Cadmium, Chromium and Lead) concentrations above background, but below SAI and GWP
  - TNRCC comments from 1998 RI requested extent of metals
  - Soil disturbed by recent construction (rail car rehab facility)
- Closure of SS009 included:
  - soil removal
  - closure to RRS #2 standards
  - deed recordation of 32 acres
    - much larger than SS009
    - included metals affected soils in Yard 68
  - Recommend no further action

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**Yard 68**



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**Zone 4 OU-2 Groundwater**

- RFI report volume III
- OU-2 consists of plumes sourced from SS051 and MP sites.
- The plumes extend east and southeast from the sites
- The primary contaminants of concern are PCE and TCE



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**MP Groundwater COCs**

Historically Present at Source	Above Background	Exceeded RRS #2
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- Arsenic (8 of 17; 0.091 mg/l)
- Benzene (15 of 38; 0.085 mg/l)
- Total chromium (2 of 4; 0.014 mg/l)
- PCE (33 of 35; 200 mg/l)
- Cis-1,2-DCE (24 of 25; 13 mg/l)
- TCE (35 of 38; 67 mg/l)
- Vinyl Chloride (22 of 39; 0.61 mg/l)



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**SS051 Groundwater COCs**

Historically Present at Source	Above Background	Exceeded RRS #2
--------------------------------	------------------	-----------------

- Total chromium (9 of 14; 0.114 mg/l)
- PCE (1 of 16; 0.002 mg/l)
- Total 1,2-DCE (6 of 15; 1.2 mg/l)
- TCE (14 of 16; 0.79 mg/l)
- VC (Only detected in one well historically; 0.024 mg/l)



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### SS051 and MP Extent

- The extent of the SS051 and MP VOCs plume is fully defined.
  - Non-detect concentrations in monitoring wells are located to the east and south of the two plume lobes.
  - Modeling confirms the current extent



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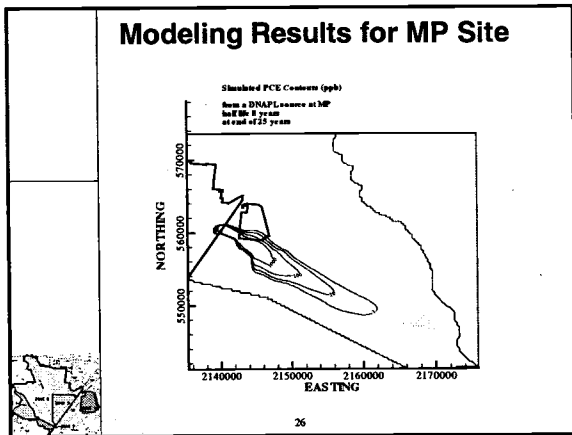
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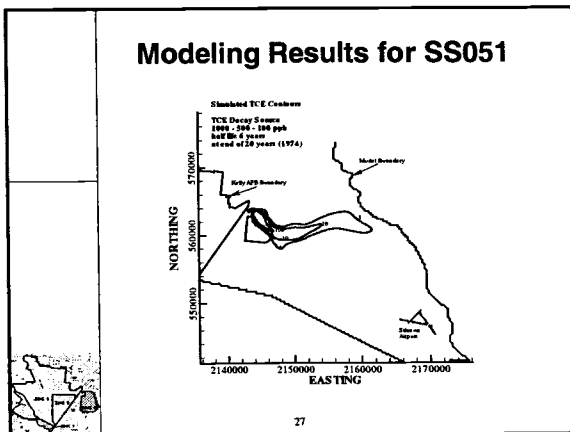
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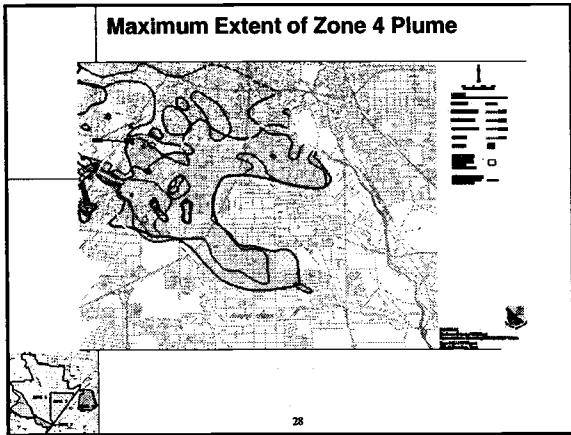
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- Zone 4 RFI Conclusions**
- **Completed investigation of nature and extent**
    - four soil sites
    - two groundwater plumes
  - **Human and Eco risks within criteria**
    - soil and groundwater
    - no potable groundwater use
  - **Air Force proceeding with CMS**
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*no data in pres.*

REPORTS  
FOR  
ST MARY'S

REPORTS LISTED BELOW WERE TAKEN TO THE ST. MARY'S LIBRARY - BCT On 20 Mar 2001		Status	Date	ADM
370A	Replacement Pages for Fuel Spill Area, S-4 Soils SWMU Report	Final	Feb 00	Inf
635B	Semiannual Compliance Plan Report for Jan 01 (Jul-Dec 00) (6 Vols)	Final	Jan 01	Inf
Date: <i>March 20 2001</i>				
Signature: <i>Terrell W. Lewis</i>				



**FINAL PAGE**

**ADMINISTRATIVE RECORD**

**FINAL PAGE**