

Meeting Minutes
Air Force Plant 42 (AFP 42)
Environmental Restoration Advisory Board (ERAB)
December 5, 2007
Hampton Inn & Suites, Palmdale, California

Participants

Blanco, Juan/ ERAB Member
Canfield, Jennifer/ Black & Veatch
Cope, Garry/ ERAB Member
Davis, Brian/ Department of Toxics Substances Control (DTSC)
Dexter, Gordon/ ERAB Member
Dyas, Keith/ Antelope Valley East Kern Water Agency (AVEK)
Edwards, Scott/ Black & Veatch
Freeman, Kellie/ CH2M HILL
Hirtle, Lieutenant Colonel Ron/ ERAB Government Co-Chair
Kester, Desmond/ ERAB Community Co-Chair
La Moreaux, Dennis/ ERAB Member
Laws, James/ CH2M HILL
Mahmoud, Tayseer/ DTSC
McClain, Jim/ Black & Veatch
Powell, Larry/ Los Angeles World Airports (LAWA)
Ranger, Walter/ ERAB Member
Rose, Randy/ CH2M HILL
Smith, Tim/ CH2M HILL
Steele, Frank/ ASC/USAF/WPAFB
Warner, George/ ASC/ USAF/WPAFB
Webb, Dean/ ERAB Member

Introduction

At 6:30 pm, the meeting was called to order and meeting attendees introduced themselves. The ERAB Purpose Statement was presented to the ERAB Members. Kellie Freeman, CH2M HILL, gave a brief overview of the agenda.

Old Business

Minutes

A quorum of ERAB members was present and the minutes from the September 26, 2007. The ERAB Minutes were approved with no abstention. An action item was created to discuss the ERAB Charter at the next ERAB Meeting.

Alternative ERAB Meeting Locations

The Larry Chimbole Cultural Center is being considered for the next ERAB meeting. An ERAB member requested that the location not change too frequently so that it did not become difficult to remember where the meeting will be held.

New Business

An election for the Community Co-Chair will be held on the first meeting of the year, or the next ERAB meeting. The ERAB Charter will be discussed at the next ERAB meeting.

Site 6 Remedial Investigation (RI) Update

Tim Smith, CH2M HILL, presented a remedial investigation update for Site 6. Site 6 is the original fire training circle located on the south central portion of Air Force Plant (AFP) 42. During the March 2005 removal action; other features adjacent to the training circle were identified. Such features included black-stained surface soil and areas of scattered paint chips. A work plan to conduct field investigations was approved in June 2007 (Slides 7-12).

Fieldwork

Field investigations were performed in July and August 2007. Soil samples were collected from the surface soil, and from the soil directly beneath the stained soil layer. The stained surface layer extended approximately 6 inches below ground surface. A total of 110 total samples were collected.

Sample Analysis

A field screening method was used to analyze all samples. The samples were analyzed for polynuclear aromatic hydrocarbons (PAHs) and polychlorinated biphenyls (PCBs). In addition, a subset of samples was analyzed at a fixed laboratory to verify the accuracy of the field screening method. These fixed lab results will be used in a risk assessment performed for the site. Samples from three paint chip areas were also analyzed for metals; the results of the metals analysis are pending at this time.

Results

The field screening provided high-biased results, which indicates that the screening method provided conservatively higher results than the fixed laboratory results. Preliminary data

screening was performed and PAHs and PCBs were compared to the United States Environmental Protection Agency (US EPA) Region 9 Preliminary Remediation Goals (PRGs). PAH and PCB concentrations were found to be less than the maximum acceptable levels for industrial workers. This means that there will not be unacceptable risk for an industrial worker type scenario. Additionally, viable ecological habitat does not exist at the site; therefore no impacts or exposures to ecological receptors are expected at the site.

A Supplemental Remedial Investigation (RI) Report is currently being prepared. A human health risk assessment will be performed for the report.

ERAB members asked the following questions:

- **What are the common formations of PAHs?** T. Smith replied that PAHs can be produced by combustion and are found in vehicle exhaust and in asphalt. PAHs are a subset of semi-volatile organic compounds (SVOCs) and are longer chain hydrocarbons and are not as volatile as VOCs. Bryan Davis, Department of Toxics Substances Control (DTSC), stated that PAHs are formed from incomplete combustion and are present in oils and petroleum products without combustion. They do not necessarily need combustion to form.
- **How far did you sample into the soil at Site 6?** T. Smith responded that typically the stained soil samples extended approximately 6 inches deep. Samples were collected directly below the stained soil layer.
- **Is the presence of chemicals at Site 6 why you're not finding any habitat?** T. Smith stated that the vegetation in the vicinity of the runways has been cleared to keep birds and wildlife away. Vegetation at AFP 42 is generally sparse and the vegetation onsite is not distinguishable from adjacent areas. Evidence of stressed vegetation is also not prevalent onsite.
- **How is vegetation controlled?** Col. Ron Hirtle stated that vegetation is regularly mowed onsite. No chemicals are used to control vegetation on AFP 42.

Site 28 RI Activities

Background

Site 28 is located in the north central portion of AFP 42. Previous investigations at Site 28 indicated the presence of PAHs and PCBs. Based on this information it was identified for further investigation under the Installation Restoration Program (IRP) (Slides 15-18).

The work plan for further investigation was approved in June 2007. Field investigations were performed from July and August 2007. All samples were analyzed for PCBs and PAHs using immunoassay field screening kits. A subset of sample analyses was analyzed at a fixed laboratory. Shallow soil samples were collected at 118 locations. Samples were collected from the surface soil directly beneath the stained surface layer. Stained soil was observed typically at 12 to 16 inches deep. To date, 162 samples have been collected at Site 28.

In early 2008, additional sampling will be conducted to evaluate the lateral and vertical extent of PAHs. Additional step-out sampling will be performed to the east and south of

the site for the lateral characterization. Deeper samples will be taken at those locations with highest screening sample concentrations for vertical characterizations.

ERAB members asked the following questions:

- **Is this the site where arsenic was removed?** T. Smith replied a Removal Action (RA) was performed at Site 4, which is in the southeastern portion of AFP 42.
- **It is my understanding that all of AFP 42 was investigated and these site issues should have already been identified.** George Warner/ Air Force] stated that this area was identified and discovered in 1983.
- **What was being sprayed on Site 28?** T. Smith replied that records do not specify what was exposed on the site; however, it appears to be waste oil.
- **Is jet fuel a variance of kerosene?** T. Smith stated that jet fuel is a heavier fuel than kerosene.
- **The aerial photograph of Site 28 shows dark vegetation. Are these Joshua trees?** T. Smith stated that there are no Joshua trees onsite but there are non-native trees that were planted to control dust created by from the aircraft engine run-up activities. Metal structures were also constructed to deflect the exhaust.
- **When was the Site 28 aerial photo taken?** James Laws, CH2M HILL, stated that the photo was taken in 2001.
- **If contamination were detected in 1983 at 10 feet, would contamination linger due to the porosity of the soil at the location?** T. Smith stated that it was not suggested that contamination was found at 10 feet. It will be sampled to a maximum of 10 feet to see how far it has migrated vertically. PAHs and PCBs do not tend to migrate vertically.

Area of Concern (AOC) 2 Update

Extended Area - Background

J. Laws presented an update on the AOC 2 Extended Area Investigation. A site walk was performed at the AOC 2 backstop in October 2006. During the site walk, spent 20 and 30 millimeter (mm) projectile fragments were discovered on the ground surface northeast of Building 728. The likely source is historic clean out of the Building 728 backstop. A work plan was prepared for further investigation and was submitted to the Department of Toxics Substances Control (DTSC) in August 2007 (Slides 19-27).

Field investigations were performed in September and October 2007. This consisted of visual and instrument-assisted surface clearance. Technicians removed all metal debris on the unpaved areas of the site to allow for the geophysical survey data collection. An intrusive investigation (test pits) was then performed, where staff hand-dug test pits at approximately 300 locations based on the geophysical survey results. Equipment used for the geophysical survey was presented to the ERAB members (Slide 23).

Three areas of subsurface spent 20 and 30 mm target practice projectiles were identified:

- Southwest of Building 728 (50 x 70 x 2 feet [ft] deep)

- Northeast of Building 728 (120 x 70 x 2 ft deep)
- Drainage swale west of Building 730 (400 x 35 x 1 ft deep)

Additionally, an area of subsurface municipal and construction debris was identified east of Building 728. This area is approximately 40 x 40 ft. The exact depth of this area was not able to be determined by shovel due to the concrete and construction debris (Slide 25-26).

Path Forward

An investigation report is currently being prepared for the AOC 2 extended area, summarizing geophysics results and intrusive investigation results. The Air Force is programming a project to perform future investigation activities.

ERAB members asked the following questions:

What is considered municipal debris? J. Laws stated that municipal debris is considered solid waste such as empty cans, broken glass containers, or trash.

How was the drainage swale found? J. Laws stated that a visual survey was performed, then the geophysical data showed that there were areas of strong metallic signals. Approximately 20 to 40 test pits were then performed where the spent target rounds were found. T. Smith stated that the projectiles are made of steel with copper rings. While preparing the work plan, DTSC and CH2M HILL collected metal samples and did not find any elevated metals in the area other than copper. Copper was found to be below any screening criteria. Additionally, no elevated metal of concern was found in the area.

Were casings found onsite? J. Laws stated that only spent projectiles were found onsite.

How many readings did you receive? J. Laws stated that more than 300 locations of suspicion were identified. Test pits were performed at these locations.

Did you visually see projectiles in the drainage swale? J. Laws stated that projectiles were seen sporadically. The spent rounds are very small objects, no larger than 0.5 inch to 1 inch, and can be mistaken as scrap metal. A magnetometer was used to find projectiles in the drainage swale.

Action Item Review

The next meeting is tentatively planned for February 27, 2008 at the Larry Chimbole Cultural Center.

Possible agenda items for the next meeting includes: ERAB Charter and Community Co-Chair Election and a Site 29 update. A proposed public meeting to review the Site 29 Proposed Plan has been delayed. The ERAB meeting was adjourned at 7:45 p.m.

Note: The AFP 42 ERAB meeting minutes are intended to capture the essence of the meeting and discussions. The presentation slides are included as Attachment A and the Road Map handout is Attachment B.

For more information on the AFP 42 cleanup program: (1) view the AFP 42 administrative record at: <http://www.wpafb.af.mil/asc/environmental/index.asp>, (2) stop by the AFP 42

Information Repositories at the Palmdale and Lancaster Libraries; or (3) contact Chuck Muston ASC/PA, WPAFB, (800) 982-7248, ext. 53266, Charles.Muston@wpafb.af.mil.

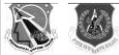
Attachment A

December 5, 2007 ERAB Presentation Slides

Air Force Plant 42 Installation Restoration Program Update

Presentation to:
Environmental Restoration Advisory Board
December 5, 2007

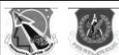
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Agenda

- Welcome and Introductions
- ERAB Purpose Statement
- Old Business
 - Minutes for September 2007 ERAB Meeting
 - Alternative Locations for ERAB Meetings

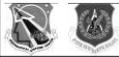
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Agenda (continued)

- New Business
 - Site 6 Remedial Investigation Update
 - Site 28 Remedial Investigation Update
 - AOC 2 Extended Area Investigation Update
 - Open Discussion
- Adjourn

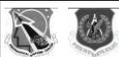
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AFP 42 ERAB Purpose Statement

The primary function of the AFP 42 ERAB is to enhance community awareness of the Installation Restoration Program (IRP) at AFP 42 in Palmdale, California, and to obtain constructive community review and comment on proposed environmental cleanup activities. Community ERAB members are asked to review and comment on cleanup activities and projects including the progress of projects, the level of restoration required, and acceptable risks.

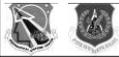
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Old Business

- Minutes for September 2007 ERAB Meeting
- Alternative Locations for ERAB Meetings

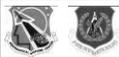
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New Business

- Site 6 Remedial Investigation Update
- Site 28 Remedial Investigation Update
- AOC 2 Extended Area Investigation Update

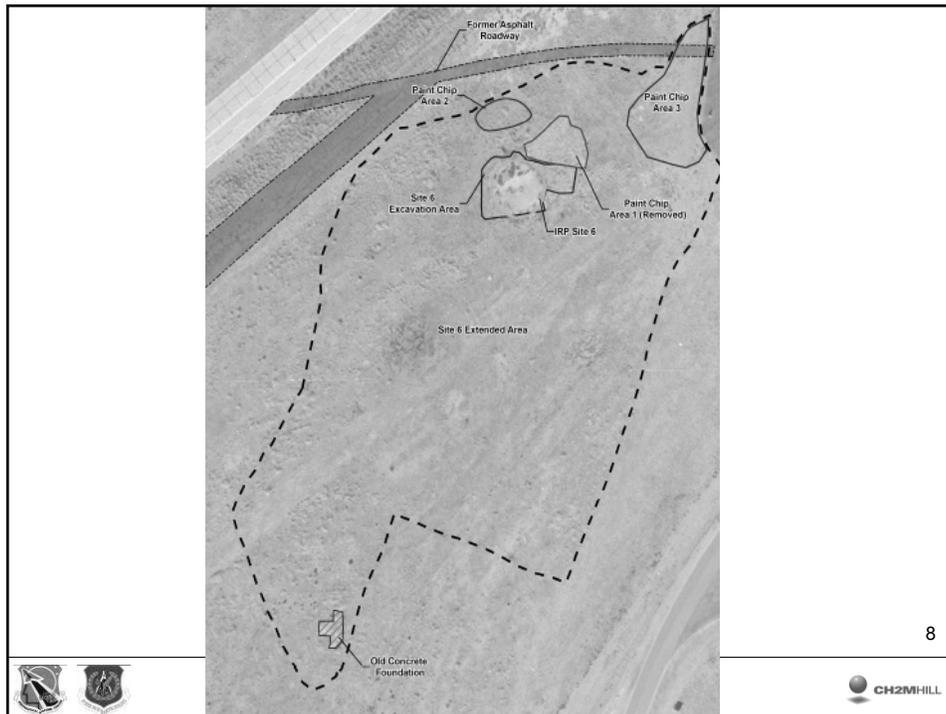
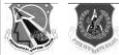
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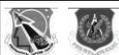
Site 6 Remedial Investigation Update Extended Area - Background

- Site 6 - Original Fire Training Circle
- During March 2005 removal action, other features adjacent to training circle identified
 - Black-stained surface soil
 - Additional areas of scattered paint chips
- Work plan approved in June 2007

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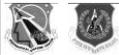
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Site 6 RI Activities Fieldwork

- Field investigations in July-August 2007
- Collected shallow soil samples
 - Surface soil
 - Soil directly below stained surface soil layer
 - Typically 6 inches deep
 - Total samples: 110

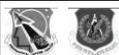
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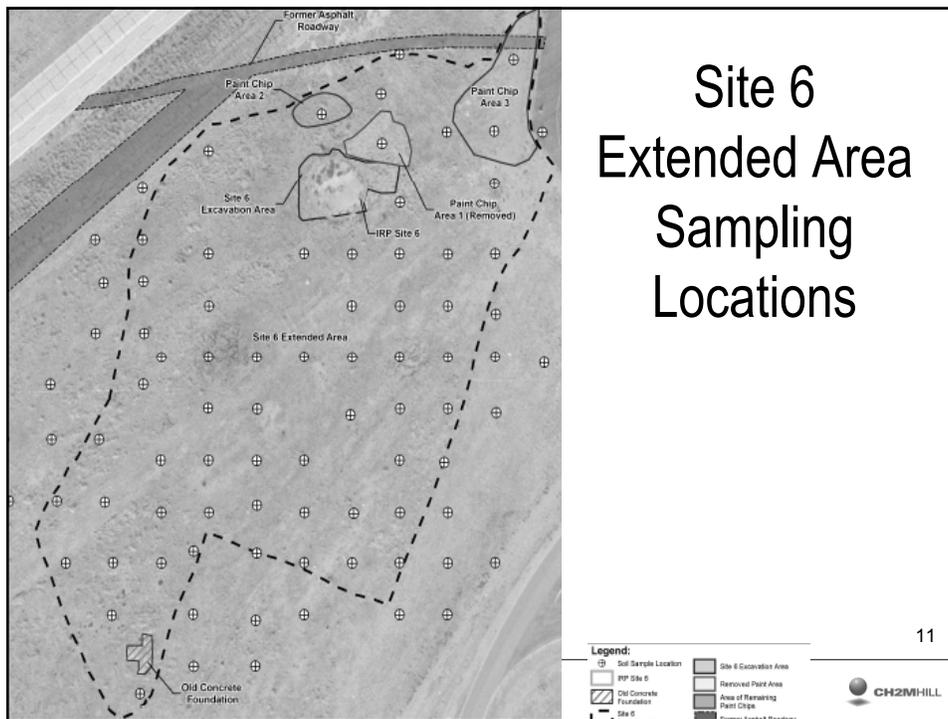


Site 6 RI Activities Sample Analysis

- Samples analyzed using field screening method
 - PAHs - Polynuclear aromatic hydrocarbons
 - PCBs - Polychlorinated biphenyls
- Subset: analyzed at a fixed laboratory
 - Purpose: verify accuracy of field screening method
- 3 Paint Chip Areas:
 - Also analyzed samples for metals (fixed laboratory)
 - Awaiting metals results

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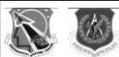


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Site 6 RI Activities Results

- Field screening and fixed laboratory correlation
 - Field screening provided high-biased results
- Preliminary data screening:
 - PAHs and PCBs < Preliminary Remediation Goals (industrial)
- Currently preparing Supplemental RI Report
 - Perform human health risk assessment

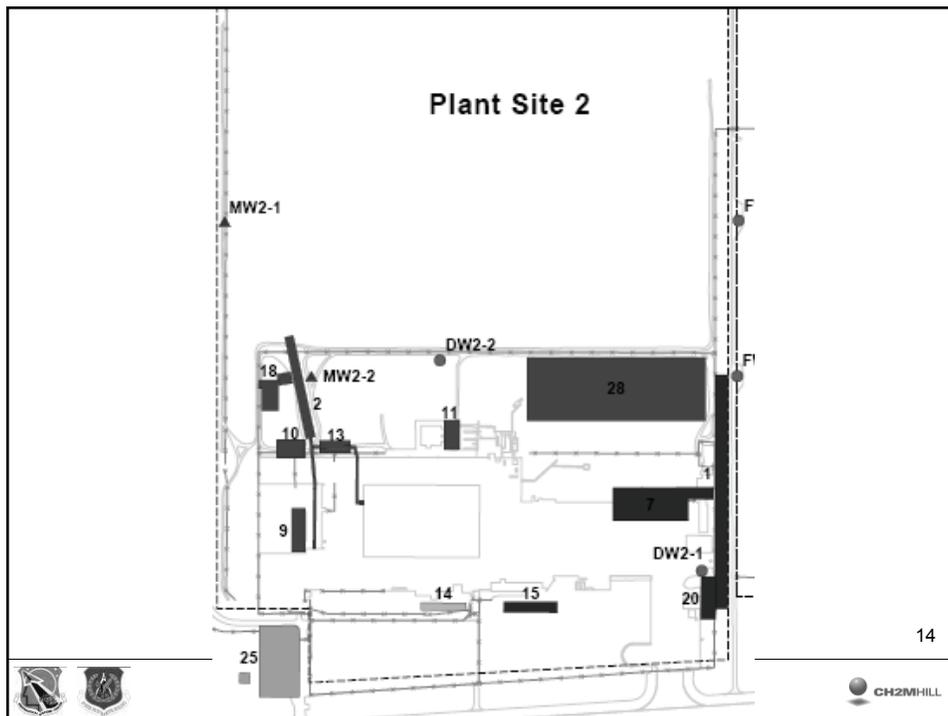
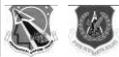
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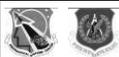
Site 28 RI Activities Background

- Site previously identified through a Compliance Program project
 - Dust Control Area
 - Soil sampling indicated the presence of polynuclear aromatic hydrocarbons (PAHs) and polychlorinated biphenyls (PCBs)
- Identified for further investigation under Installation Restoration Program

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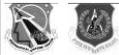
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Site 28 RI Activities

- Work Plan approved in June 2007
- Performed field investigations in July-August 2007
- Sample analyses:
 - All samples:
 - Total PAHs and total PCBs using immunoassay kits
 - Subset: Analyzed at a fixed laboratory

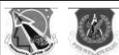
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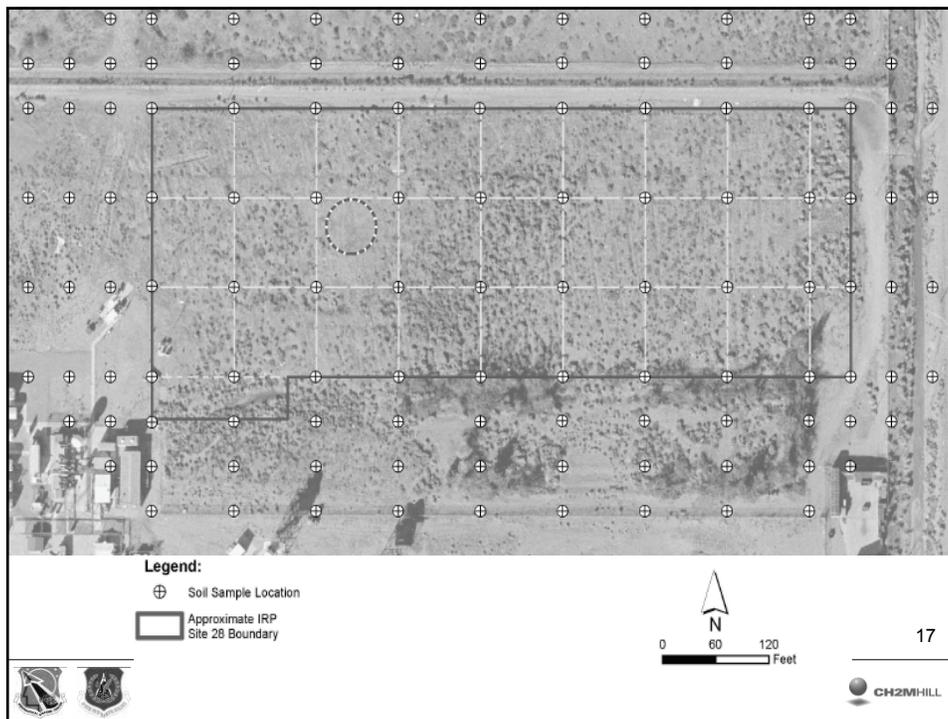


Site 28 RI Activities

- Field investigations in July-August 2007
- Shallow soil sampling at 118 locations
 - Surface soil
 - Soil directly below stained surface soil layer
 - Typically 12-16 inches deep
 - Total samples to date: 162

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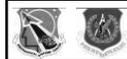




Site 28 RI Fieldwork

- Additional sampling planned to evaluate lateral and vertical extent of PAHs
 - Early 2008
- Lateral Characterization
 - Additional step-out locations to east and south
- Vertical Characterization
 - Deeper samples at locations with highest screening sample concentrations
 - 2, 5, and 10 feet bgs

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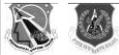


AOC 2 Update

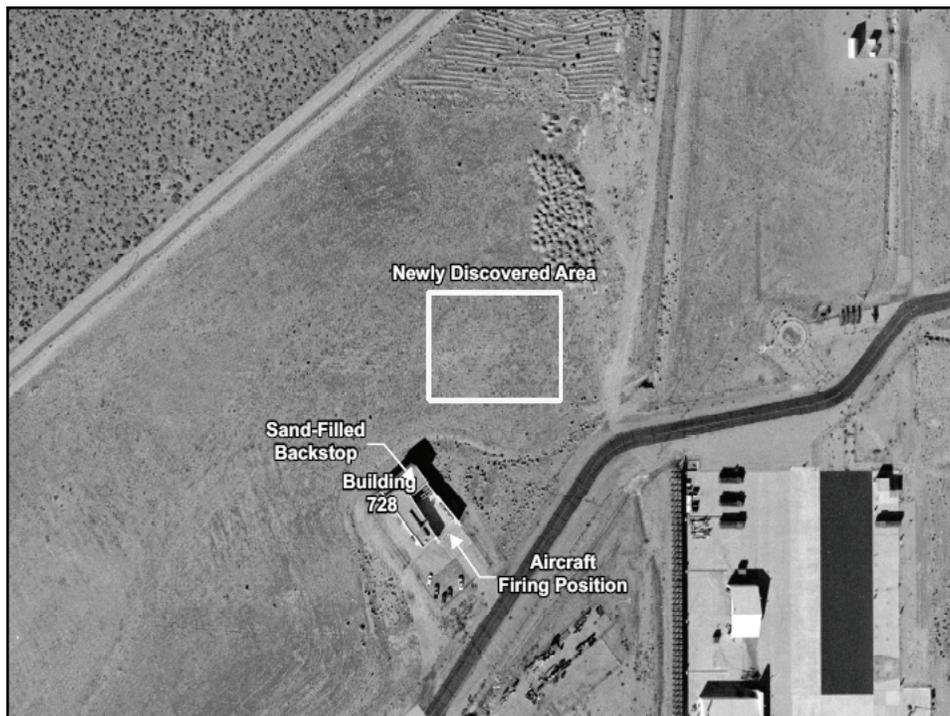
Extended Area - Background

- Performed site walk in October 2006
 - AOC 2 backstop cleanout field activities
- Discovered spent 20 mm/30 mm target practice projectile fragments on ground northeast of Bldg 728
 - Likely source of materials - historic clean out of the Bldg 728 backstop
- Prepared work plan for further investigation
 - Submitted to DTSC in August 2007

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CH2M-HILL

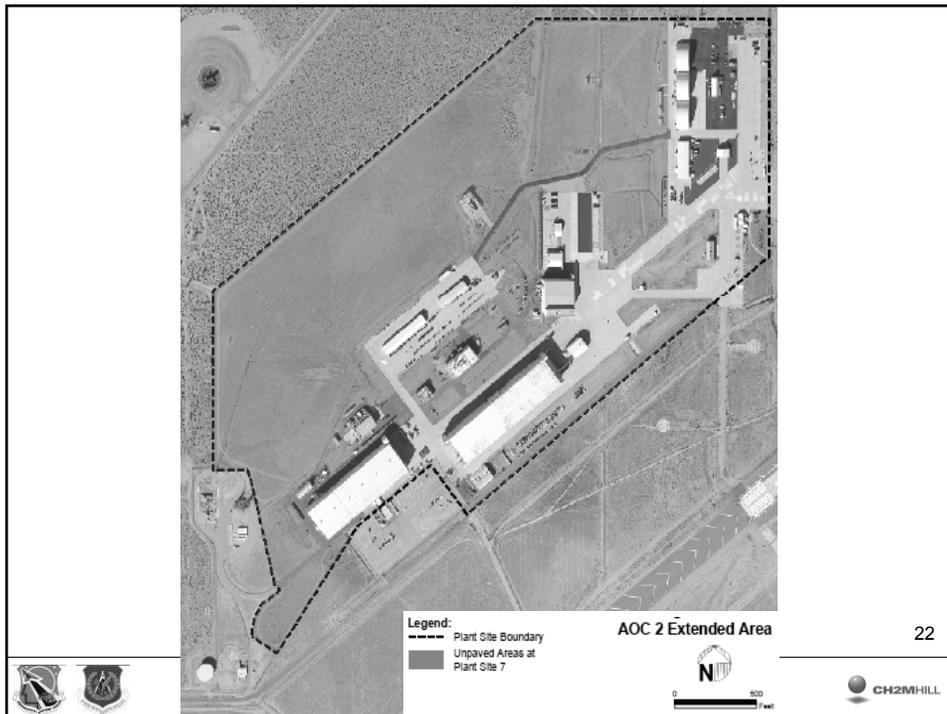
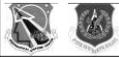


AOC 2 Update

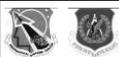
Extended Area Investigation

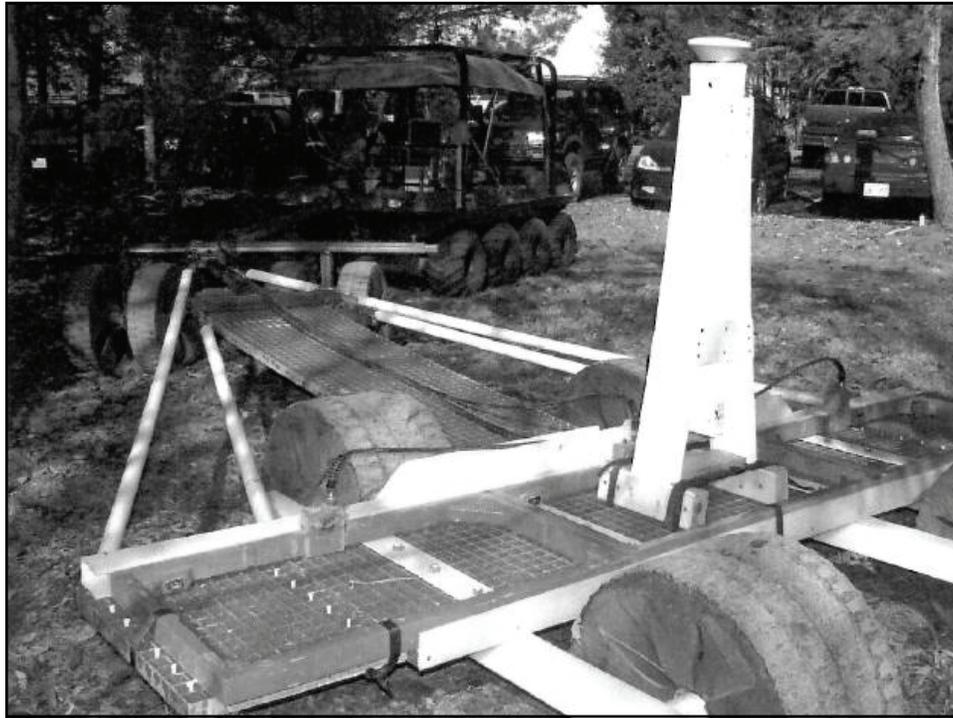
- Fieldwork performed in September-October 2007
 - Visual and instrument-assisted surface clearance
 - Geophysical survey
 - Intrusive investigations (test pits)
 - > 300 locations based on geophysical survey results

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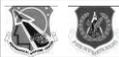


AOC 2 Update

Extended Area Investigation

- 3 areas of subsurface spent 20 mm/30 mm target practice projectiles
 - Southwest of Building 728
 - 50' x 70' x 2' deep
 - Northeast of Building 728
 - 120' x 70' x 2' deep
 - Drainage swale west of Building 730
 - 400' x 35' x 1' deep

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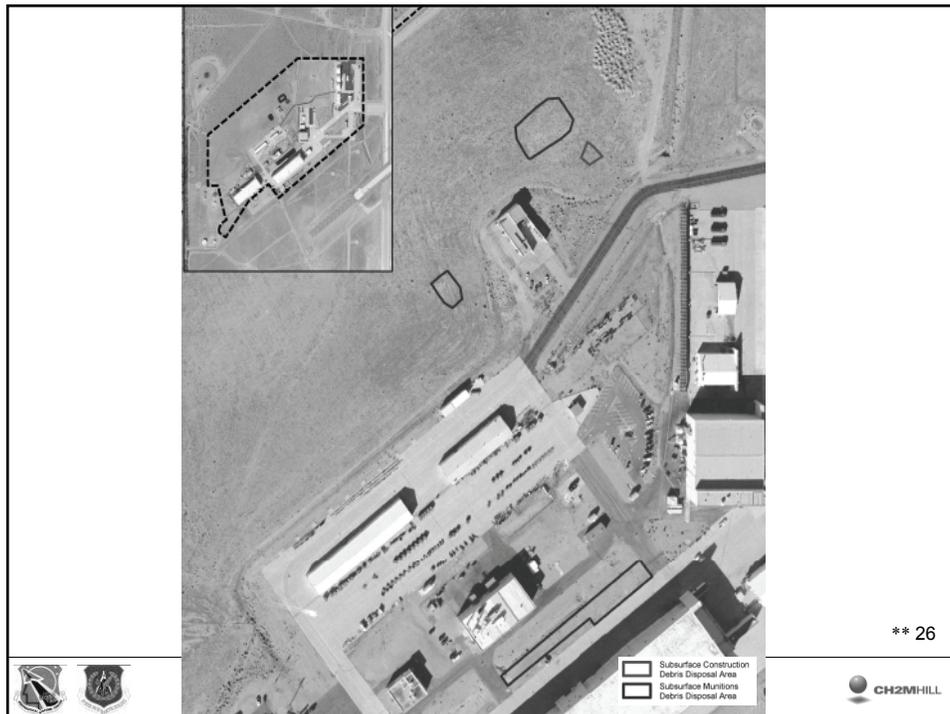
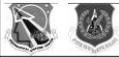


AOC 2 Update

Extended Area Investigation (cont.)

- Area of subsurface municipal and construction debris - East of Building 728
 - Lateral dimensions: 40' x 40'
 - Depth: >2'
 - Could not be determined by hand digging method

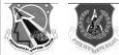
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AOC 2 Extended Area Path Forward

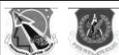
- Currently preparing investigation report
 - Early 2008
- Air Force programming project for additional investigation activities
 - 4 subsurface debris areas

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Action Item Review

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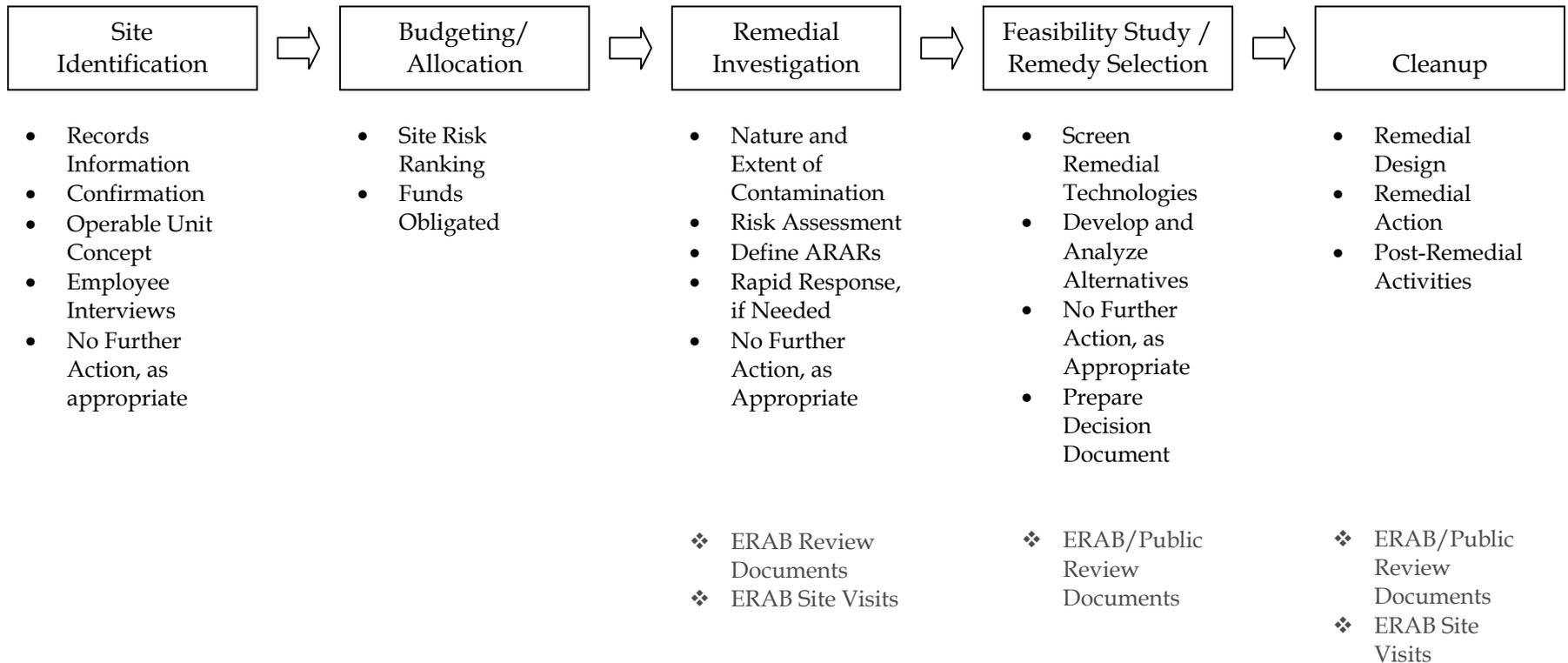


Attachment B

December 5, 2007 ERAB Roadmap Handout

Installation Restoration Program Process

Roadmap to Cleanup at AFP 42 IRP Sites



❖ Denotes Opportunity for Public Input.

AFP 42 ROAD MAP TO CLEANUP

December 5, 2007 ERAB MEETING

BUDGET UPDATE

- No activities

SITE IDENTIFICATION

- In October 2007, the Air Force performed an investigation at the AOC 3 subsurface debris area.

REMEDIAL INVESTIGATION (RI)

Investigations

- The Air Force performed the field investigation at the AOC 2 Extended Area in September and October, 2007.
- The Air Force is performing sampling at IRP Sites 6 and 28.
- In November 2007, the Air Force submitted the agency draft version of the work plan for the Remedial Investigation at IRP Site 27 (concrete rubble piles). The Air Force is currently awaiting agency feedback.

Reports

- The Air Force is currently preparing the draft version of the IRP Sites 6 and 28 reports.

FEASIBILITY STUDY/REMEDY SELECTION

- Air Force is performing IRP Site 29 remedial technology testing:
 - Continued pilot testing activities for Soil Vapor Extraction system at Building 150.
- In September 2007, the Air Force submitted the draft responses to agency comments for the Feasibility Study (FS) for IRP Site 29. The Air Force is currently finalizing the draft responses based on agency feedback.

CLEANUP

- The Air Force is currently preparing the draft version of the AOC 3 removal action completion report.