November 27, 2012
5:30 – 7:30 p.m.

Kirtland Air Force Base
Citizen’s Advisory Board (CAB)

Cesar Chavez Community Center
7505 Kathryn Avenue SE
Albuquerque, New Mexico 87108
Meeting Format

• Introduction

• Bulk Fuels Facility Update

• ATSDR Update

• Public Questions/Discussion
  • One question/comment per turn at the microphone
  • Each question/comment will be allotted 3 minutes

• CAB Process and Agenda for next CAB
Acronyms

- ABCWUA – Albuquerque Bernalillo County Water Utility Authority
- ATSDR – Agency for Toxic Substances and Disease Registry
- BTEX – Benzene, toluene, ethylbenzene, xylene
- CAB – Citizen’s Advisory Board
- CME – Corrective Measures Evaluation
- EDB – Ethylene dibromide
- FFOR – Former Fuel Offloading Rack
- HDPE – High-density polyethylene
- ICE – Internal combustion engine
- DPT – Direct Push Technology
- IM – Interim Measure
- LNAPL – Light Non-Aqueous Phase Liquid
Acronyms Continued

- NMAC – New Mexico Administrative Code
- NMED – New Mexico Environment Department
- PBC – Performance Based Contract
- RCRA – Resource Conservation and Recovery Act
- RFI – RCRA Facility Investigation
- ROI - Radius of influence
- SMWU – Solid Waste Management Unit
- SVE – Soil vapor extraction
**RCRA PROCESS OVERVIEW**

**CHARACTERIZATION**
- RCRA Facility Investigation
  - Installation of 78 Groundwater Wells
  - Installation of 35 Soil Vapor Wells
  - DPT Soil Samples at FFOR
  - Installation of 9 PneuLog Wells
  - Installation of 9 Groundwater Wells

**EVALUATION**
- Corrective Measures Evaluations
  - Baildown Testing
  - ROI Testing
  - Quarterly Monitoring
  - PneuLog Well Testing
  - Slug Testing
  - Use Phase II IM to Conduct Extended ROI Testing
  - Continue to Evaluate Early Treatment

**INTERIM MEASURES**
- ICE Unit Operation - Pre-Remedy O&M
- Soil Removal at FFOR - Phase I Interim Measures
- SVE Treatment System - Phase II Interim Measures
- In-Well Treatment Interim Measure
- Move ICE Units to New SVE Wells
- Design and Build of Centralized SVE Treatment System

**EARLY/INITIAL TREATMENT**

**FINAL REMEDY**
- REMEDY IN PLACE
Regulatory Framework

- Completion of characterization of groundwater and vadose zone
  - Adequately define the nature and extent of contamination related to the release of jet fuel at ST-106 and SS-111

NMED approval of RFI Report for both groundwater and vadose zone

- RFI results, as well as quarterly monitoring data, will be used to inform a Corrective Measures Evaluation (CME)
  - Must be submitted within 180 days of RFI report approval
  - Will propose a final remedy
  - Requires a 45 day public comment period prior to NMED approval

NMED approval of CME \( \rightarrow \) development of Corrective Measures Implementation plan

- Implementation of Final Remedy (remedy in place)
Regulatory Framework

• Interim measures allow for early treatment/remediation while completing the RFI and CME
  • Permit and NMAC requirements for interim measure work plans and reporting
  • Results from interim measures (e.g., system operation) are used in the evaluation of remediation technologies for final remedy
  • Will be incorporated in the CME and determination of final remedy
  • Interim measures are not end points of remediation

• Interim measures are in action at Kirtland AFB
  • Shallow soil excavation
  • Operation and maintenance of SVE ICE units at existing monitoring wells
  • Design, construction, and operation of SVE CATOX treatment system
  • Development of in-well treatment for dissolved phase contamination
  • Others

Goal is to treat source in vadose zone while evaluating remedy
Groundwater Monitoring Wells
EDB Plume: Deep 
April – June 2012

Legend
EDB Result (μg/L)
- 0.028 - 0.050
- 0.051 - 0.10
- 0.11 - 0.52
- Nondetect

Water Supply Well
Groundwater Level Contour (ft msl)
NAPL Area

Deep Groundwater
EDB Extent: Shallow
July – September 2011
EDB Extent: Shallow
October – December 2011
EDB Extent: Shallow
April – June 2012

[Map showing the extent of EDB in shallow groundwater areas]
EDB Characterization

- Completed drilling of 9 new groundwater monitoring wells on 4 October 2012 (KAFB-106201 though KAFB-106209)
- Completed well development and slug testing of the new wells 19 October 2012
- Dedicated pumps were installed between October 30th and November 12th
- All 9 new wells have been sampled
  - NMED collected split samples from all 9 new wells
  - Data letter report will be delivered to the NMED on 26 December 2012
- Data from 9 new wells will fill in EDB horizontal and vertical extent in northeastern corner
- The 9 new wells are integrated into quarterly monitoring
Groundwater Monitoring Wells
Phase II Interim Measure

- Construction of concrete pad and electrical lines are complete
  - Ready for SVE skid placement on 28 November 2012
- Construction of natural gas and HDPE pipelines is on-going
- Operation of the new system will begin December 2012
- NMED currently reviewing the stamped drawings for the Phase II Remediation Interim Measure Plan
- AEHD approved emergency air permit letter has been approved; KAFB will submit a modification to the current air permit within 45 days of NMED approval of remediation plan
- Operational data from SVE system will be incorporated into the data evaluation and development of the Corrective Measures Evaluation

Final remedy will likely include this system, plus any expansion and/or additional treatment technology required
SVE Treatment System

- **SVE Treatment Pad**
- **HDPE Piping (above-ground)**
- **SVE Extraction Wells**
  - KAFB-106160 & KAFB-106161
Up and Coming

• Data letter report with first sample results from 9 new monitoring wells will be delivered to NMED on 26 December 2012

• New treatment system estimated completion date of December 2012

• Submittal of groundwater and vadose zone RFI anticipated Summer 2013

• A website specific to the Bulk Fuels Facility spill is being developed – will go “live” February 2013

• Communication to develop formal advisory board
# Path Forward

<table>
<thead>
<tr>
<th>Task/Milestone</th>
<th>Schedule</th>
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<tr>
<td>Finalize SVE treatment system design (submit to NMED)</td>
<td>November 2012</td>
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<tr>
<td>SVE treatment system begins operation</td>
<td>December 2012</td>
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<tr>
<td>Complete soil removal at FFOR</td>
<td>Spring 2013</td>
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<tr>
<td>Submittal of Groundwater RFI to NMED</td>
<td>Summer 2013</td>
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<tr>
<td>ABCWUA Contingency Plan</td>
<td>In process – Air Force and ABCWUA</td>
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<td>ATSDR Draft Report</td>
<td>February 2013</td>
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POINTS OF CONTACT

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Citizens may review Air Force Environmental Restoration Program (ERP) documents at the Kirtland AFB Information Repository (IR) located at the Central New Mexico (CNM) Community College-Montoya Campus Library, 4700 Morris NE, (505) 224-5721
or
Discussion
### Meeting Dates

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<tr>
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<tr>
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Request for Agenda