

# KAFB Bulk Fuels Facility Spill

Site Status

New Mexico Environment Department

<http://www.nmenv.state.nm.us/hwb/>

*May 11, 2012*



# KAFB Bulk Fuels Facility

## Fuel Storage and Distribution System

- Constructed ~ 1952
- Tank farm (2.1 and 4.2 MGal tanks)
- Ancillary piping (underground and above ground)
- Fuel Offloading Rack (removed)
- Fuels: aviation gas (in the past) and jet fuel (JP-4 prior to 1993, JP-8 since 1993)

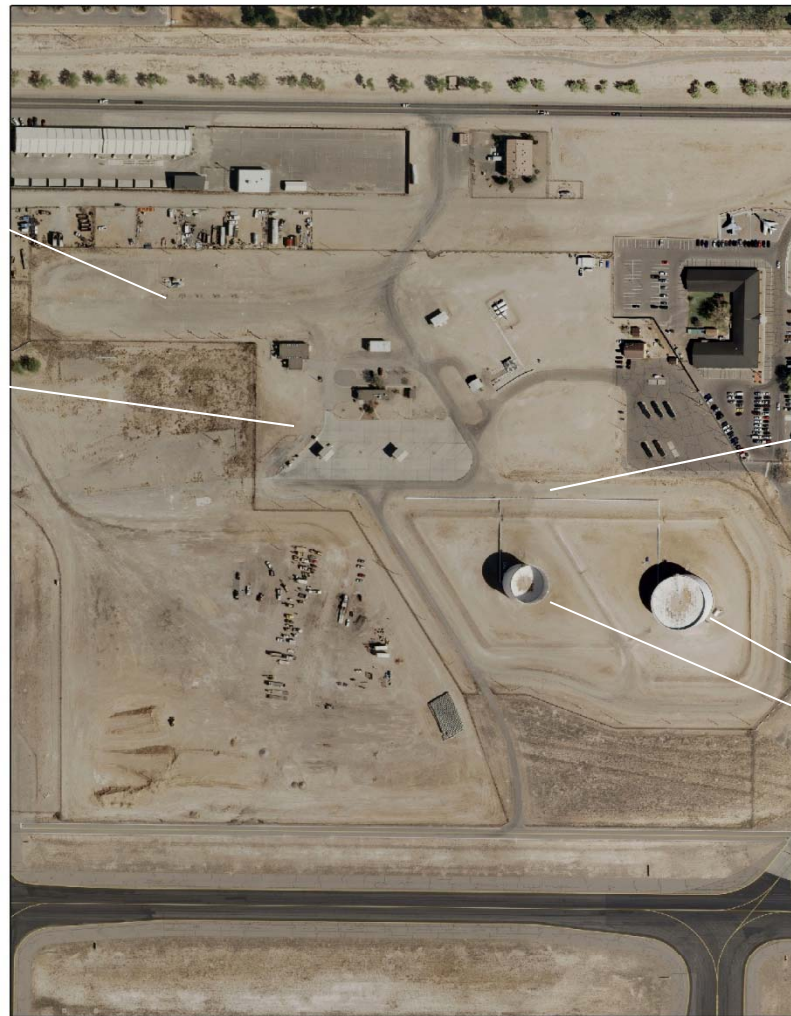
# Primary Features of Bulk Fuels Facility

Former Fuel  
Offloading Rack

Underground  
Pipeline

Above Ground  
Pipeline

Fuel  
Tanks



0 200 400 Feet

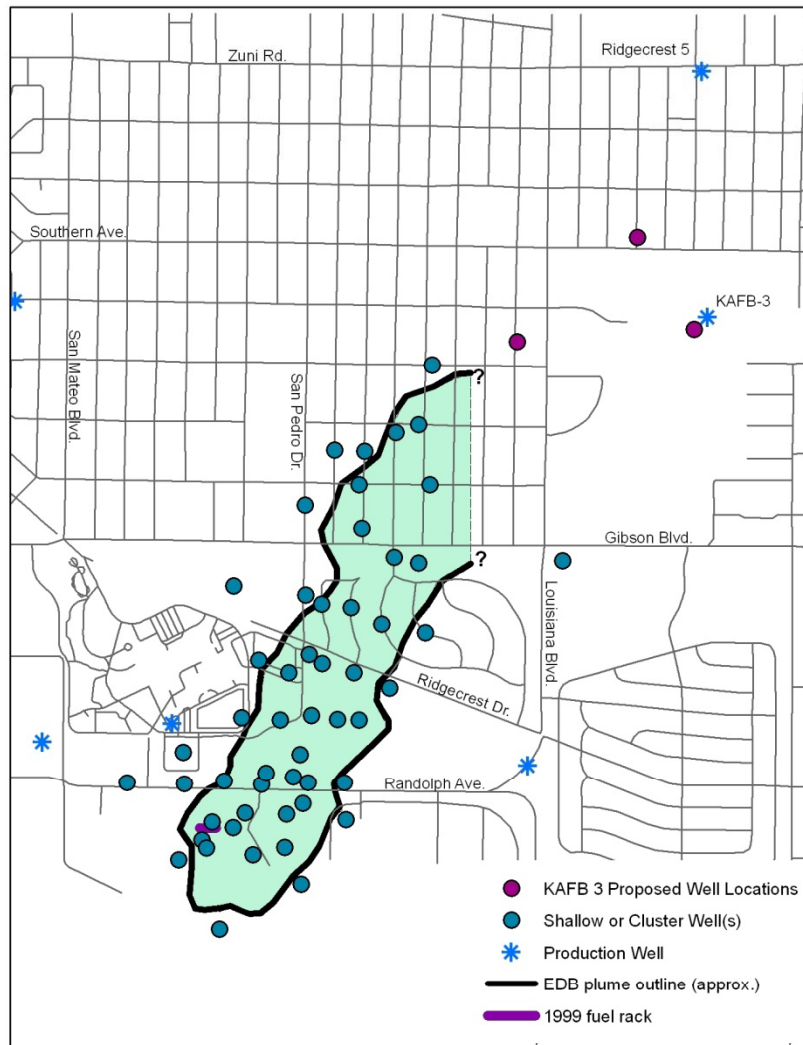
# KAFB Bulk Fuels Facility Spill

- Current primary focus:
  - Install/operate new SVE Unit (on 2 wells)
  - Characterize northern extent and northern core of EDB plume in groundwater
- Secondary focus:
  - LNAPL Containment System:
    - Obtain design data through enhanced well development
    - Implementation on hold to see how contamination responds to SVE

# Characterization of EDB Plume

- Current data confirms northern part EDB plume undefined
- EDB exceeds MCL (0.05  $\mu\text{g/L}$ ) in shallow, intermediate, and deep wells. Full vertical extent not known
- KAFB to complete 9 wells at 3 locations north of where EDB has been found
- NMED proposed additional 24 wells at 8 locations (edge and core of EDB plume)
- KAFB proposing iterative process to select new well locations
- NMED's current estimate groundwater velocity 120-360 ft/year

# Existing and Proposed Ground Water wells



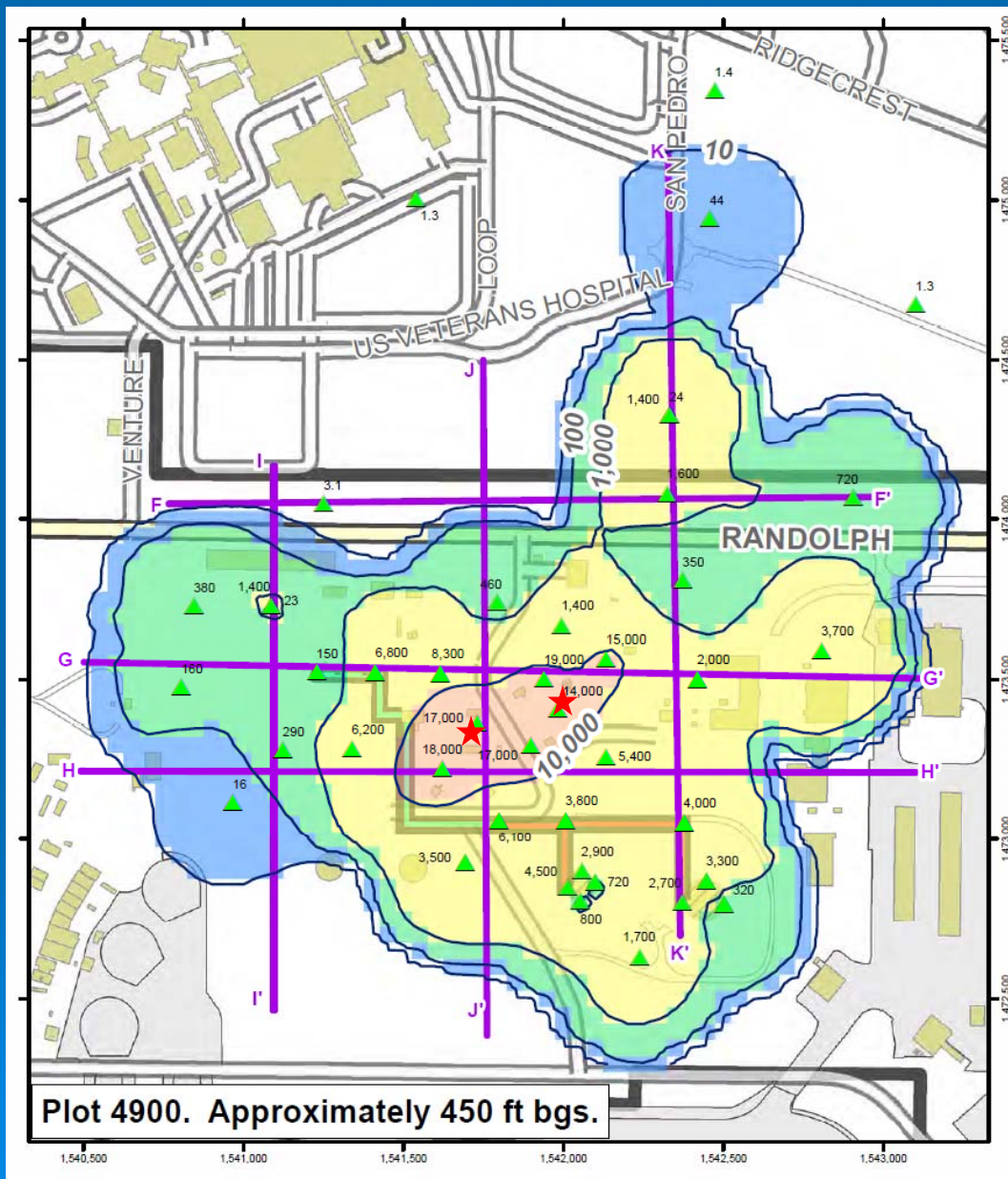
0 500 1,000 2,000 Feet



# New SVE Unit

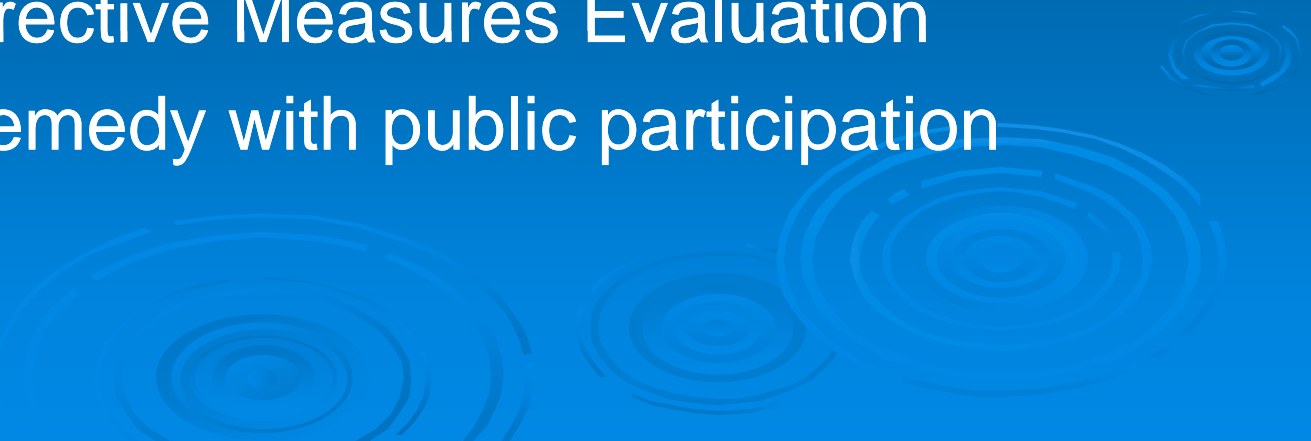
- Design stage
- 2 purpose-built wells completed and ready to be employed when SVE Unit constructed
- In the meantime, older ICE units installed at ST-106 (manifold), KAFB-106149, KAFB-106160, and KAFB-106161

# Total VOCs (in ppmv) at 450 ft bgs





# Looking Ahead

- Conduct SVE with new unit and older ICE units
  - Complete characterization northern extent and core of EDB plume in groundwater
  - Conduct enhanced well development
  - Complete design of LNAPL Containment System
  - Issue Remedial Action Plan to treat groundwater processed by LNAPL Containment System
  - Conduct Corrective Measures Evaluation
  - Select final remedy with public participation
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# Contact Information

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