

8/16/13 original HUB Permit Outline for
KAFB BFFS ST-106, ST-111
Presentation on Interim
Measures.



OUTLINE OF KAFB BFFS PRESENTATION

The Kirtland Air Force Base (KAFB) Bulk Fuels Spill project involves two Solid Waste Management Units (SWMUs). The units are listed in the KAFB RCRA Permit as SWMU ST-106 and SWMU SS-111.

1. Interim Measures

Interim measures anticipated to be implemented in the near 18 months consist of three primary elements.

The interim measures that will be implemented to address the releases from these two SWMUs consist of the following:

- a) Soil Vapor Extraction (SVE) to be conducted in the unsaturated zone above the water table in the vicinity of the Bulk Fuels Facility. The SVE treatment targets contamination in the unsaturated zone, and to a lesser extent, floating fuel product on the water table most of which is currently submerged.
- b) Source area dissolved and separate-phase (also referred to as non-aqueous phase liquids or NAPL) hydrocarbons remediation. The primary hydrocarbon constituents include benzene, ethylbenzene, toluene and xylenes and EDB.
- c) Remediation of EDB dissolved in groundwater that has migrated beyond the source area.

2. Site Characterization

Data acquired to date will be presented in two RCRA Facility Investigation (RFI) reports to be submitted.

- a) The SWMU ST-106 RFI Report will address characterization of contamination in the unsaturated (Vadose) zone in the vicinity of the former Bulk Fuels Facility.
- b) The SS-111 RFI Report will address characterization of groundwater contamination.

3. SVE Treatment System

Expansion of soil vapor extraction (SVE) at the Bulk Fuels Facility Spill project site has been identified as a number one priority for increasing interim remediation of the fuel plume. Expansion includes:

- a) Pilot testing of existing vapor monitoring wells
- b) Adding extraction wells and air treatment capacity to the current SVE system based on the results of the pilot testing.

4. Dissolved and Separate Phase (NAPL) Hydrocarbons Treatment

Treatment of dissolved and non-aqueous- or separate phase (NAPL) is being evaluated to determine the efficacy of groundwater extraction and treatment. The characterization will include:

KAFB4827



- a) Development and aquifer testing of the existing groundwater extraction well located in Bullhead Park. The well is located in the vicinity of the northern edge of the submerged NAPL plume.
- b) The aquifer test results will be used to evaluate the potential use of a groundwater extraction and treatment system to remediate NAPL and dissolved contamination in groundwater.

5. Dissolved Phase EDB Treatment

There are two primary technologies being considered by Kirtland AFB and the NMED for treatment of EDB in the groundwater:

- a) Treatment of EDB is a remediation focus area is considered a priority for addressing for interim remediation.
- b) Two treatment options are under consideration to remediate EDB. The options are air sparging in the source area and pump and treat to address EDB that has migrated from the source area.
- c) Additional characterization is necessary to evaluate the pump and treat option.