

Bulk Fuels Facility Project Update

Kirtland Air Force Base, N.M.

Keeping the Public Informed



This newsletter is produced regularly to share project progress and information with neighbors of Kirtland Air Force Base (AFB). If you do not wish to continue receiving these updates, please let us know via email at afcec.pa@us.af.mil

PROJECT BOTTOM LINE

- No fuel from Kirtland AFB Bulk Fuels Facility (BFF) leaked into surface soil off-base. The fuel traveled 480-500 feet below the surface, roughly the height of a 45-story building, to the groundwater. The dissolved fuel moved with the groundwater and contaminated about 6,000 feet in length, or 1 mile, of on- and off-Base groundwater.
- Drinking water for neighborhoods near the project area and Kirtland AFB comes from Water Authority and Base water systems that are monitored monthly to ensure contamination is not present. Groundwater sampling continues to show no detections of fuel contaminants in drinking water wells.

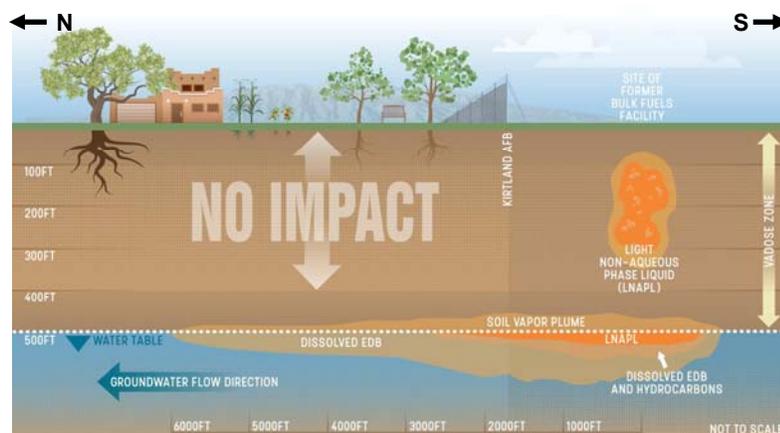
CURRENT PROJECT STATUS

- A gardening information sheet is posted on the project and New Mexico Environment Department's (NMED) websites (see below and on back). Gardening highlights are:
 - BFF-related contamination has never been at the ground surface in residential areas (see figure in upper right).
 - Groundwater contamination is too far below-ground for plant roots to reach and too low for vapors to travel to the ground surface.
- Groundwater Treatment System (GWTS) interim measure continues to operate and treat dissolved ethylene dibromide (EDB)-contaminated water from the off-Base plume.
 - Horizontal-vertical mass & volume capture are evaluated to determine efficiency of treating off-Base EDB.
 - Data results indicate the extraction wells are effectively pulling the EDB mass toward the wells.
 - Treated water is used to irrigate Kirtland Golf Course and added to the aquifer through a gravity-fed injection well on-Base. Kirtland AFB recently received a discharge permit allowing underground injection of treated water to the aquifer which is a sustainable and beneficial use.
- Pilot tests will be conducted in 2017 to evaluate if additional cleanup methods can successfully address contamination remaining in the source area on-Base.
- RCRA Facility Investigation (RFI) report was submitted to NMED for review at the end of January 2017 and can be found on the project and NMED websites (see right and on back).

Calendar of Events

July 27, 2017 – Public meeting at the African American Performing Arts Center, 310 San Pedro NE, 5:30pm-8:30pm

November 14, 2017 – Public meeting at the African American Performing Arts Center, 310 San Pedro NE, 5:30pm-8:30pm



Gardening graphic illustrating how fuel contaminants entered the environment and moved off-Base. For more information, see "Current Project Status".

INTERIM CLEANUP MEASURES UPDATE

- The Air Force has implemented the following interim measures to-date to address fuel-related soil and groundwater contamination:
 - Contaminated soil (4,822 tons) was removed from the on-Base source area in 1999, 2010, and 2014.
 - A pilot skimmer pumping system was used from 2007 through 2008 and removed about 280 gallons of floating fuel product.
 - Soil vapor extraction (SVE), bioslurping, and biodegradation (a process where naturally occurring bacteria breakdown contaminants into non-toxic products such as carbon dioxide, water, and ammonia) have removed approximately 750,000 gallons of fuel from the soil and water table from 2003 through 2015.
 - A pilot air sparging system was used from 2014 through 2015 and removed a limited amount of dissolved EDB and fuel contaminants.
 - As of April 24, 2017, GWTS has pumped over 170 million gallons of EDB-contaminated groundwater from the off-base EDB plume and 53 grams of EDB have been treated.

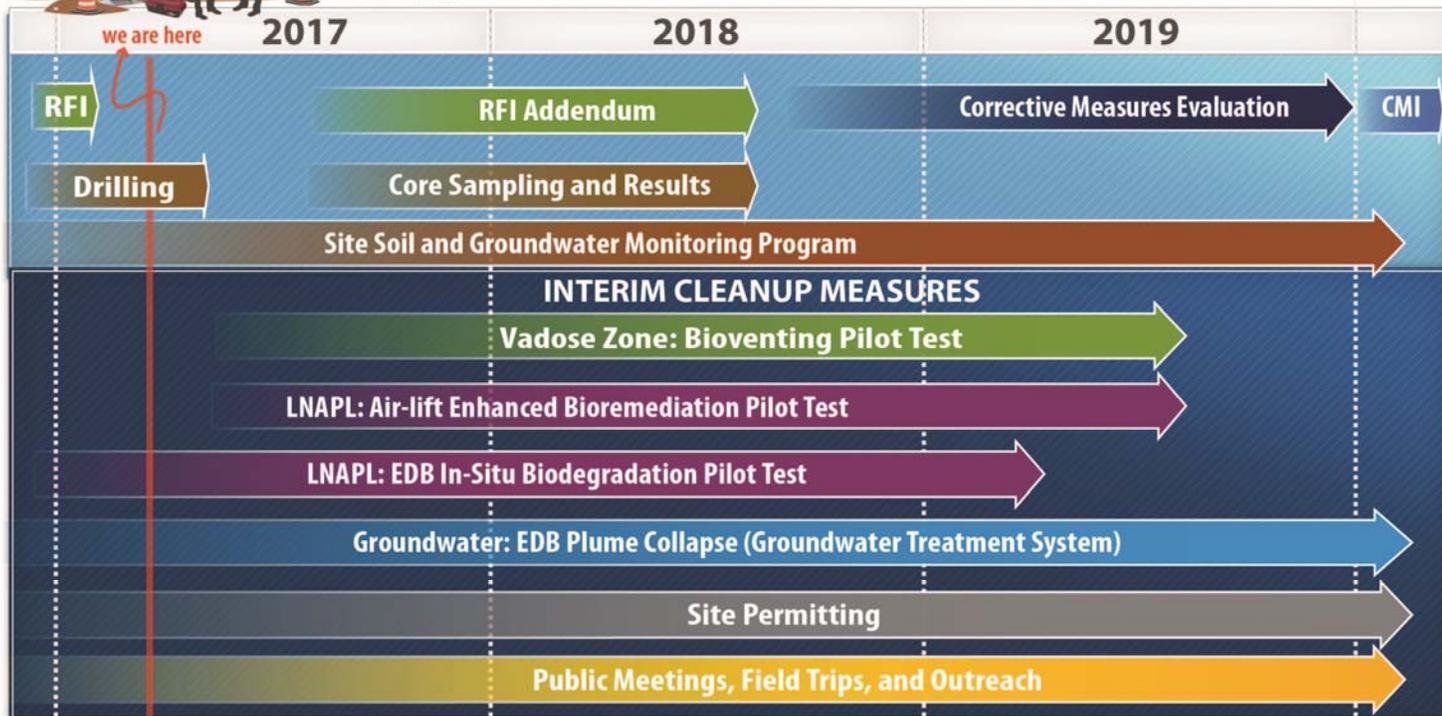
FOR MORE INFORMATION

- www.kirtlandjetfuelremediation.com is a project-specific website available to provide information related to the fuel spill investigation to the public.
- Information specific to the fuel plume investigation is provided at the regular public meetings.
- These meetings are open to the public. Interested community members are encouraged to attend, no RSVP required.

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CS - Complex Site Initiative • EDB - Ethylene Dibromide • LNAPL - Light Non-Aqueous Phase Liquid • RFI - RCRA Facility Investigation Report • SVE - Soil Vapor Extraction • CMI - Corrective Measures Implementation

REGULATORY CORNER

- Resource Conservation and Recovery Act (RCRA) is the public law that creates the framework for the proper management of hazardous and non-hazardous solid waste. The law describes the waste management program mandated by Congress that gave EPA authority to develop the RCRA program.
- RCRA Facility Investigation (RFI) results and quarterly monitoring data, will be used to inform a Corrective Measures Evaluation (CME)
- Interim measures (IM) for early treatment/ remediation are in action at Kirtland AFB; the results of IM operations are used in the CME evaluation and determination of final remedy, and are not end points of remediation
- Permits and other regulatory permissions are obtained from local and state agencies to ensure project work is done per regulations.

Contact the Air Force

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www.kirtlandjetfuelremediation.com or
<http://www.kirtland.af.mil> (Public records in Environmental Issues section)

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www.env.nm.gov/NMED/Issues/KirtlandFuelPlume