



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 377TH AIR BASE WING (AFMC)

CERTIFIED RETURN-RECEIPT REQUESTED

Colonel Tom D. Miller
377 ABW/CC
2000 Wyoming Blvd SE
Kirtland AFB NM 87117

MAR 31 2014

Mr. Tom Blaine, Manager
Environmental Health Division Director
Environmental Health Division
New Mexico Environment Department (NMED)
1190 St. Francis Drive
Santa Fe, New Mexico 87502

Dear Mr. Blaine

DOD's Environmental Security Technology Certification Program (ESTCP) (<http://www.serdp.org/About-SERDP-and-ESTCP/About-ESTCP/>) was established in 1995 to promote the transfer of innovative technologies that have successfully established proof of concept to field or production use. ESTCP demonstrations collect cost and performance data to overcome the barriers to employ an innovative technology because of concerns regarding technical or programmatic risk. CB&I has received a contract from the ESTCP to evaluate Natural Attenuation and Biostimulation for In Situ Treatment of 1,2-Dibromoethane (EDB) (<http://www.serdp.org/Program-Areas/Environmental-Restoration/Contaminated-Groundwater/Emerging-Issues/ER-201331/>). In light of the presence of EDB at the Bulk Fuels Facility (BFF) and the availability of EDB data, CB&I has requested the AF to permit, and the AF has approved, the installation of a treatability testing well which will support this ESTCP project as well as provide useful information for the remediation of EDB and other LNAPL hazardous constituents (e.g., benzene) at the BFF.

Under the ESTCP contract, separate from the contract for current and ongoing BFF remediation efforts, in approximately mid- to late-April 2014, CB&I will install a treatability study well approximately 25 feet upgradient of existing well KAFB-106079, constructed in an identical fashion to KAFB-106079 except for the following modifications required to perform the treatability study. Because of these modifications, this well will not be used as a monitoring well – it will be used solely to support the treatability study. Soil will be collected from the aquifer at the water table, and contaminated groundwater and NAPL if present, will be collected for laboratory bench-scale testing of potential additives to enhance in-situ biodegradation. This well will also be used for a push-pull test if the bench-scale testing provides positive results.

The main difference in the construction details between the proposed well and KAFB-106079 is that it will have only a 10-foot long screen, to ensure that the entire well screen/sand

pack is below the water table elevation, in an attempt to minimize the injectant entering the vadose zone. The following briefly summarizes the sampling/well installation details (assumes the water table is approximately 487 ft-bgs, as it was in January 2014):

- Soil cores for treatability testing to be collected from 490 to 510 ft-bgs. These cores will be consumed for the treatability testing and not be available for other aquifer property analyses;
- Total borehole depth of 520 ft-bgs (includes an estimated over-drill of 10 feet due to running sands);
- Bottom of 5-foot PVC sump at 510 ft-bgs;
- 10 feet of 10-slot screen from 495 to 505 ft-bgs;
- Top of sand/filter pack at 492 ft-bgs; and
- Well to be sealed/finished in same fashion as KAFB-106079.

Please contact Mr. L. Wayne Bitner at 505.853.3484 or at ludie.bitner@us.af.mil or Ms. Victoria R. Branson at 505.846.6362 or at victoria.branson@us.af.mil if you have any questions.

Sincerely



TOM D. MILLER, Colonel USAF
Commander

cc:

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