

DISTRICT DEPARTMENT OF THE ENVIRONMENT



Underground Storage Tank Program Leaking Underground Storage Tank (LUST) Contaminated Sites LUST Cleanup Success Story

SITE INFORMATION:

Site Name: Anacostia Facility 27707 (SHELL gas station)
Site Address: 4501 Benning Road, NE, Washington DC 20019
LUST ID #: 94-017
Facility ID: 7-000322
Property Owner: Anacostia Realty, LLC
Remediating Party: Anacostia Realty, LLC
Ward #: 7
Square / Lot No: 5085 / 0056
Size: 19,372 SF

SITE DESCRIPTION:

The site is a currently an active Shell gas station, owned and operated by Anacostia Realty, LLC and is located at the intersection of Benning Road with East Capitol Street. The property has historically remained a gas station since 1953. There are currently two 8,000 gallon and one 10,000 gallon underground storage tanks (USTs). The site is surrounded by residential and commercial properties. According to a documented deed restriction, the site is to remain a commercial property. Topographically the site slopes to the northeast.

SOURCE and RECEPTORS:

1. In 1994, an unknown amount of petroleum product release had impacted the adjacent property at 4445 Benning Road. During the same year, DDOE opened a Leaking Underground Storage Tank (LUST) case for the subject site at 4501 Benning Road. Trace amounts of free phase petroleum product was noted at the site in the past.
2. The site is 3,000 feet south of the Watts Branch, a tributary of the Anacostia River.
3. A Washington Metropolitan Transport Authority (WMATA) rail tunnel runs underground along Benning Road, at approximately 100 feet northeast of the property line. The tunnels have passive sump pumps.
4. A Denny's Restaurant is adjacent and northwest of the site.
5. Non-potable groundwater at the site is at an average depth of eleven feet below ground surface.

ENVIRONMENTAL ASSESSMENTS/INVESTIGATIONS:

A comprehensive site assessment and a corrective action plan were completed in December 1995. In 2003, the LUST program issued an additional directive to delineate contamination off-site. In 2005 a subsurface

investigation for delineation was completed. In 2006 additional corrective action plan was requested by DDOE to address potential vapor intrusion into the WMATA tunnel that ran underground along Benning Road. The CAP proposed soil vapor extraction.

In 2009 a Phase-2 Environmental Site Assessment (ESA) was conducted in preparation of a pending sale of the site. The property ownership was transferred to Anacostia Realty, LLC in 2009.

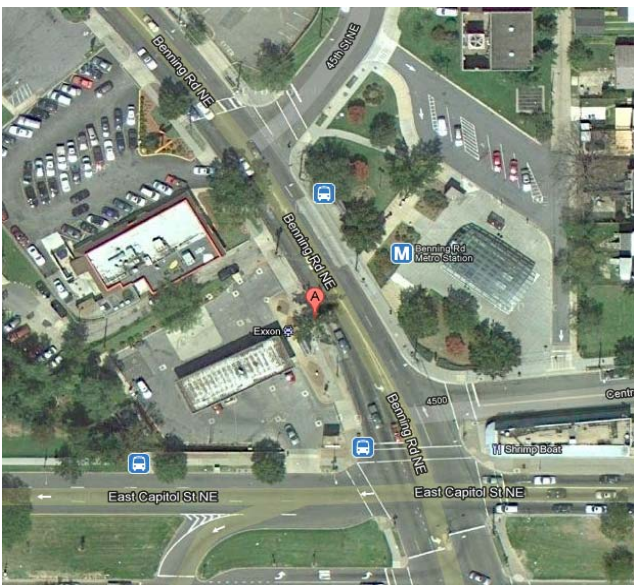
CLEANUP COMPLETED:

1. Enhanced fluid recovery was used to reduce the dissolved phase product to below DDOE’s acceptable risk-based concentration levels, and bring the free phase product to acceptable trace amounts.
2. By 2009 the plans for dual phase extraction was changed to conducting soil vapor extraction due to the nature of the soil. The DPE wells were converted to soil vapor recovery wells. The soil vapor recovery system was completed during period of September 2011 to February 2012. The system was successful in reaching an asymptotic recovery level within six months.
3. Most of the contamination in soil was at groundwater level, and the recovery from soil by enhanced fluid recovery method was successful due to the porous nature of sand and silt at the site.

PRESENT SITE CONDITION:

The site has been awarded a ‘No Further Action’ status, based on a RBCA Tier 2A Report, dated June 31, 2012 submitted by Kleinfelder. The contamination levels were below the Tier 1 risk based levels for all chemicals of concern, except for benzene and ethylbenzene. However, a site specific risk analysis conducted using RBCA - Level 2A, showed residual concentrations left at the site to be within acceptable levels protective of human health and environment. The site will continue to be a gas station in the near future, based on the deed restriction.

PHOTOS:



SITE LOCATION



REMEDIATION SYSTEM ENCLOSURE AT SITE



TRENCHING FOR REMEDIATION SYSTEM



REMEDATION SYSTEM



RECENT SITE PHOTOGRAPH

Prepared by UST Branch: DEEPAK SINGH

Date: September 28, 2012

Please feel free to contact our office at telephone 202-535-2600, fax 202-535-1383 or email ust.doe@dc.gov for additional information.