GOVERNMENT OF THE DISTRICT OF COLUMBIA DISTRICT DEPARTMENT OF TH ENVIRONMENT Toxic Substance Division Underground Storage Tank Branch

Leaking Underground Storage Tank (LUST) Site Cleanup and Remediation Active Exxon Branded Gasoline Service Station

LUST #: 95057 Facility ID #: 5000360 Current Property Owner: Anacostia Realty, LLC Site Address: 1 Florida Avenue, NW, Washington DC Ward #: 5 Square No: 0668 Lot #: 91 Size: Approximately 22,378 square feet

Site Description:

This facility is an active Exxon branded gasoline service station located at the southeast corner of the intersection of Florida Avenue and North Capitol Street, NW, in Washington, DC (Site). The Site is bordered to the north by Florida Avenue, which is followed by mixed commercial and residential properties, to the south by residential homes followed by mixed commercial and residential properties, to the east by a parking lot followed by residential properties and to the west by North Capitol Street, followed by mixed commercial and residential properties. The Site is an active gasoline service station and there are no future redevelopment plans to change the land use in the near future. The map below details the Site location in respect to surrounding commercial and residential properties.



In November 1994 a 1,000-gallon underground storage tank (UST) was removed from the Site. In conjunction with the UST removal and during construction activities related to the installation of a storm water management system at the Site, petroleum impacted soils were observed. In response to the impacted soils observed at the Site, DDOE issued a Leaking Underground Storage Tank number (LUST Case # 95057) and a directive was issued to ExxonMobil, the responsible party (RP) to complete a site assessment to delineate the hydrocarbon impacts in the subsurface.

Environmental Assessments/Investigations:

In response to the above mentioned LUST case directive, initial assessment activities were completed in June 1995. The initial assessment activities included the drilling of soil borings and groundwater monitoring wells, as well as soil and groundwater laboratory sampling. Based on the results of the Initial Assessment activities, a soil vapor extraction pilot test was completed in October 1995 to determine the vacuum influence in the subsurface soils and on the existing monitoring wells located on-site.

In November 1995 a Comprehensive Site Assessment (CSA) was completed. Based on the data obtained from the above referenced assessment activities, an off-site investigation was completed along Florida Avenue to delineate hydrocarbon impacts to soil and groundwater that had migrated off the property. From May through October 2005, additional subsurface investigative activities were completed to delineate the hydrocarbon impacts both on and off-site and to assess the risk of vapor migration from the subsurface and its potential effects to human health (on-site commercial workers and off-site residents), as well as the potential for soil impacts leaching into the groundwater. In the first quarter 2007, a Corrective Action Plan (CAP) which detailed the installation of a soil vapor extraction/air sparge (SVE/AS) system was submitted to the DDOE for review. The following is a brief summary of an SVE/AS system and how it works.

Soil vapor extraction, is an *in situ* (in place) remedial technology that reduces concentrations of volatile constituents in petroleum products adsorbed to soils in the unsaturated (vadose) zone. In this technology, a vacuum is applied through wells near the source of contamination in the soil. Extracted vapor is then treated as necessary (commonly with carbon adsorption) before being released to the atmosphere. When air sparging (AS) is combined with SVE, the SVE system creates a negative pressure in the unsaturated zone through a series of extraction wells to control the vapor plume migration.

Cleanup Completed

In May 2007, the CAP which detailed the installation of a soil vapor extraction/air sparge (SVE/AS) system was approved by DDOE. From June through September 2007, additional soil borings were drilled throughout the Site to further delineate hydrocarbon impacts and soil vapor extraction wells to be connected to the SVE/AS system were installed at select locations. In November 2008, the SVE/ASA system was turned on and was fully operational. In October 2009, the system was shut down. Based on calculations from the laboratory sampling of the SVE/AS system, the total mass of hydrocarbon recovered at the Site was approximately 3,050 lbs.

Present Site Conditions

In September 2009, and following the system shut down, the DDOE approved a request for post monitoring for a period of four (4) quarters. This post monitoring period allows the DDOE to observe the data for the chemicals of concern to ensure their concentrations do not rise to unacceptable levels following system shut down. Following the post remedial monitoring, a District of Columbia Risk Based Corrective Action (DCRBCA) report was completed for the Site that detailed the concentrations that remain in place are not a risk to human health and the environment. Based on the data observed in the

DCRBCA report, the DDOE issued a No Further Action Letter for the facility in August 10, 2012 and LUST case #95057 was closed. The current use of the Site remains an active retail gasoline service station.

The following photo details the current gasoline service station land use as it relates to the adjacent commercial and residential properties. Due to the efforts of the DDOE, the consultant, and the RP, the remediation implemented at the Site mitigated the risk from the known hydrocarbon impacts and no longer pose a threat to the commercial workers at the Site and the residents adjacent to the Site.





Prepared By: Raymond Montero, UST Branch, DDOE, May 2012



1200 First St. NE, 5th Floor, Washington, DC 20002 | Ph: 202.535.2600 | web: ddoe.dc.gov