



King County

Department of
Natural Resources and Parks
Solid Waste Division

**KING COUNTY BROWNFIELDS PROGRAM
FORMER CHUBBY & TUBBY STORE/GAS STATION
BROWNFIELDS ASSESSMENT FACT SHEET #3
FEBRUARY 2010**

Project Name:	Former Chubby and Tubby Store/Historic Gas Station.
Location:	3333 Rainier Avenue South, Seattle, WA 98144.
Site Description:	The site is a half acre commercially zoned lot located at the northwest corner of Rainier Avenue South and South Walden Street. The parcel number is 1282300640. The building currently is empty. Its most recent use was for storage of school supplies.
Site History:	<p>The property was mostly residential from the early 1900s until the late 1930s. A Signal gas station was located at the corner of Rainier and Walden, probably from the 1930s until it was torn down in 1951 when the current retail building was constructed. The gas station had two 550 gallon underground storage tanks (USTs) that were not removed until 1991. The contractor removed the tanks, excavated 65 cubic yards of soil and aerated it on site to volatilize residual petroleum. After aeration, composited soil samples were collected from the excavated soil and found to be either non-detect or less than Model Toxic Control Act (MTCA) cleanup standards for gasoline, diesel and BETX compounds. The soil was then returned to the excavation as fill. The retail building for Chubby & Tubby was constructed in 1950 and the store closed in 2003. The building is a two-story masonry structure with no underground tanks associated with it.</p> <p>In 2004, SouthEast Effective Development (SEED) became interested in buying the property and commissioned Wolfe Environmental Consulting, Inc. to do a Phase I Environmental Site Assessment. Wolfe identified the former USTs as an environmental condition, but based upon the UST removal report, thought it was unlikely that they posed an environmental threat. SEED purchased the site in February 2005. In March 2007, SEED hired an engineer to obtain subsurface data to help in the design of a new multifamily residential development for the site. The engineer completed two 3.5 inch borings on the site, one of which (EB-2) was in the vicinity of the former USTs. A strong petroleum odor was noticed at depths of 10- to 15-feet and a grab sample of soil contained 1,600 mg/kg gasoline range hydrocarbon. This discovery of petroleum contaminated soil (PCS) caused SEED to conduct additional site assessments to determine possible off site impacts to groundwater.</p>
King County Brownfields Program:	The King County Solid Waste Division has received grant funds from the U.S. Environmental Protection Agency (EPA) to conduct environmental assessment and cleanup on contaminated brownfield properties. King County's Brownfields Program uses the funds to hire consultants to conduct the assessment and cleanup work on behalf of public and nonprofit entities. The Brownfields Program website is: http://www.metrokc.gov/dnrp/swd/brownfields/index.asp .
Assessment Description:	Using its consultants, the King County Brownfields Program conducted a Phase II Environmental Site Assessment (ESA) at the site in March 2008 and a supplemental ESA in July 2009. These assessments were conducted under a Sampling Quality Assurance Plan (SQAP) reviewed and approved by EPA, a Cultural Resources Assessment of the site and an Endangered Species Act analysis.

Assessment Description (continued):	<p>The initial ESA consisted of drilling eight soil borings ranging from 9- to 32-feet below ground surface (bgs) and installing two monitoring wells to depths of 20 feet bgs. Four of these borings and one of the monitoring wells were installed in the vicinity of the former gas station USTs. Soil and groundwater samples were analyzed for total petroleum hydrocarbons by Method NWTPH-Gx and benzene, ethylbenzene, toluene, and xylenes (BETX) by EPA Method 8021B. Selected samples were analyzed for total lead by EPA Method 6010B. Fifteen samples were collected from soils between two and sixteen feet deep. Groundwater was sampled in both monitor wells and in two additional borings.</p> <p>The supplemental ESA consisted of three additional borings drilled to 15 feet bgs in the sidewalk east and southeast of the former UST site. Soil samples were collected from each boring at depths of 11 or 12 feet and a groundwater sample taken from screened sections between 10 and 15 feet bgs.</p> <p>After laboratory results were available, ESA Reports were prepared for both the initial and supplemental Phase II ESAs.</p>
Reason for Assessment:	The initial Phase II environmental site assessment was necessary to determine if soil and groundwater were contaminated as a result of historical USTs on the site, and if so, what degree of cleanup would be required to remediate the site as part of the redevelopment. The supplemental ESA was done in response to the Washington State Department of Ecology’s opinion that the “lateral extent” of the contamination beyond the property boundary had not been determined.
Results:	The investigation identified only one soil sample with contamination above the Washington State Model Toxics Control Act (MTCA) Method A soil cleanup standards. This sample was located fourteen feet deep at the southeast corner of the site in the area of the former USTs. Contamination does not appear to extend below sixteen feet. Gasoline range hydrocarbons were detected in two of the four groundwater samples, but at levels below MTCA cleanup standards. The supplemental investigation did not find any contamination south and east of the UST site. This suggests that residual soil contamination is confined to the UST area and does not extend below a depth of about 15 feet.
Conclusions/ Next Steps:	The initial and supplemental Phase II Site Assessments identified a relatively small and confined area with petroleum contaminated soil that exceeds state cleanup standards. The preferred alternative for cleanup includes excavation and disposal of contaminated soils and capping the site with the building foundation. Vapor barriers will be installed to prevent vapor from entering the building and deed restrictions will be put in place to prevent modifications to the cap without permission from the Department of Ecology. The cleanup plan that was submitted and approved by Ecology and the cleanup is underway.
Contact Information:	<p><u>King County Contact:</u> Lucy Auster, Senior Planner, King County Solid Waste Division, 206-296-8476, lucy.auster@metrokc.gov.</p> <p><u>SouthEast Effective Development (SEED) Contact:</u> Patricia Chemnick, Economic Development Manager, SEED, 206-760-4261, pchemnick@seedseattle.org.</p>