

## RAINCHECK CLEANERS PLUME, Bothell, WA

Brownfields Assessment Fact Sheet #4

August 2013

<b>Project Name</b>	Former Raincheck Cleaners (aka Ultra Custom Care Cleaners) Solvent Plume.
<b>Location</b>	Within the Right of Way of Woodinville Drive (SR 522) and the adjacent Riverside Parcel between Bothell Way NE (formerly SR 527) and 101 <sup>st</sup> Avenue NE.
<b>Site Description</b>	Major state highway situated hydraulically downgradient from the former Raincheck Cleaners located at 18304 Bothell Way NE.
<b>Site History</b>	<p>The Raincheck Cleaners site was undeveloped until after World War II when a lunch counter restaurant was established at the northeast corner of Bothell Way NE and NE 183<sup>rd</sup> Street. This restaurant was converted into a dry cleaning business in the early 1950s, operating until 1967 when the building was torn down to allow for redevelopment of the parcel. The parcel was developed with a small strip mall on the east side and parking on the west side. An environmental site assessment (ESA) performed in 2004 indicated that groundwater under the area where the previous building had been located, now the southern portion of the parking lot, was contaminated by chlorinated solvents apparently derived from the former dry cleaning operation.</p> <p>In 1990, the City of Bothell acquired a parking lot called the “Riverside” property at 10005 Woodinville Drive. Groundwater sampling on and adjacent to this property has found solvent contamination in excess of state cleanup standards. One boring located just above the bank of the Sammamish River had 50 µg/L (parts per billion or ppb) of the common dry cleaning chlorinated solvents tetrachloroethene (PCE) and 120 µg/L (ppb) trichloroethylene (TCE). The State cleanup standard for both these solvents is 5 µg/L (ppb).</p> <p>In 2009 and 2011, King County Brownfields Program contractor CDM Smith performed two Phase II ESA investigations in support of the City of Bothell Crossroads Redevelopment Project. These assessments determined that PCE/TCE originating from the former Raincheck Cleaners property is predominantly migrating in groundwater southward along utility corridors under Bothell Way NE – the sewer utility being the most likely conduit. However these investigations could not conclusively link contamination from the Raincheck Cleaners to that found on the Riverside property. A sampling “data gap” exists under Woodinville Drive.</p>
<b>King County Brownfields Program</b>	<p>The King County Solid Waste Division has received grant funds from the U.S. Environmental Protection Agency (EPA) to conduct environmental assessment on contaminated Brownfield properties. King County’s Brownfields Program uses the funds to hire consultants to conduct the assessments on behalf of public and nonprofit entities. For more information on the Brownfields Program visit the website at <a href="http://your.kingcounty.gov/solidwaste/brownfields/index.asp">your.kingcounty.gov/solidwaste/brownfields/index.asp</a>.</p>

<b>Assessment Description</b>	<p>King County’s consultant CDM Smith prepared a Quality Assurance Project Plan (QAPP) Addendum, in March 2013 which was an extension of a QAPP filed and approved by EPA in 2011.</p> <p>Field work to further define the downgradient chlorinated solvent plume along SR 522 was conducted overnight on May 9-10, 2013. Eight borings beneath the road and adjacent sewer line trench had been planned, however after coring through asphalt and concrete pavement at one location; it was found that the sewer line trench had been backfilled by controlled density fill. Consequently only seven holes were completed for the collection of soil and groundwater samples.</p> <p>Prior to extending each boring, the asphalt and concrete pavement were cored and the hole cleaned to a depth of 5 feet below ground with a vactor truck to ensure that underground utilities wouldn’t be hit. The borings were advanced with direct push technology (DPT), which utilizes a hydraulically powered percussion/direct push machine that drives a tool string directly into the ground. Soil samples were collected continuously using a 4-foot long macro-core sampler with acetate liner. Soils were examined, logged, and field screened for volatile organic compounds (VOCs) and one representative sample was collected from each hole. One soil sample was additionally analyzed for petroleum hydrocarbons (NWTPH-Gx) based upon field screening observations. A temporary well screen was placed in each borehole to allow for groundwater collection. Soil and groundwater samples were submitted for laboratory analysis for halogenated VOCs by EPA method 8260.</p> <p>A total of 8 soil and groundwater sample pairs were submitted. This included one from each hole plus a duplicate pair from hole B32.</p>
<b>Reason for Assessment</b>	<p>Upon completion of the Bothell Crossroads roadway realignment project, the City of Bothell plans to market the Triangle Block, which consists mostly of the Bothell Riverside and Bothell Landing properties. The city currently has an agreed order with the Department of Ecology to investigate and clean up contamination at the Raincheck Cleaners site. The city sought to fill a data gap that would demonstrate whether the solvent contamination on the Riverside property originates at the Raincheck site and that cleanup of the Raincheck property would eliminate future down-gradient releases of solvents into the Sammamish River. This assessment was planned to demonstrate whether or not the solvent contamination on the Riverside property is indeed connected with the solvent plume emanating from the Raincheck site.</p>
<b>Results</b>	<p>Most of the samples did not contain detectable levels of contamination. Detectable amounts of PCE were found in soil samples from borings B34 and B36 but the levels were well below MTCA Method A cleanup level of 0.05mg/kg. Gasoline range petroleum was found at a depth of 8 feet in boring B30 at 110 mg/kg which is just above the state cleanup level of 100 mg/kg.</p> <p>Similarly, groundwater contamination was not indicated by the sample results. VOCs were found in 3 samples but at levels below established cleanup standards. Gasoline range petroleum and Xylene were found in groundwater from B30, they too were below MTCA Method A cleanup levels.</p>
<b>Conclusions/ Next Steps</b>	<p>The results of this investigation indicate that solvent contamination on the Riverside property is not originating from the Raincheck site. The Riverside contamination may be derived from another source, or it may be that a pathway between the Raincheck site and the Riverside site has yet to be found. Additional sampling will be required to explain the Riverside plume.</p>
<b>Contact Information</b>	<p><u>City of Bothell Contact:</u> Nduta Mbutia, Project Engineer, City of Bothell Public Works Department, 425-806-6829, <a href="mailto:Nduta.Mbutia@ci.bothell.wa.us">Nduta.Mbutia@ci.bothell.wa.us</a>.  <u>King County Contact:</u> Lucy Auster, Senior Planner, King County Solid Waste Division, 206-296-8476, <a href="mailto:lucy.auster@kingcounty.gov">lucy.auster@kingcounty.gov</a>.</p>

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