



**King County**

Department of  
Natural Resources and Parks  
**Solid Waste Division**

**KING COUNTY BROWNFIELDS PROGRAM  
CHRISTENSEN PROPERTY — SUPPLEMENTAL OFF  
SITE ASSESSMENT  
BROWNFIELDS ASSESSMENT FACT SHEET #1  
April 2011 - draft**

<b>Project Name:</b>	Christensen Property — Supplemental Off Site Assessment
<b>Location:</b>	1117 Washington Avenue, Enumclaw, WA 98038
<b>Site Description:</b>	The Christensen property is a 0.41 acre parcel located at the northwest corner of Washington Avenue and Railroad Street in Enumclaw, WA. It is currently empty. Petroleum contamination from this site has migrated off site into the city's right of way on Railroad Street and beneath a paved alley on the west side of the property. These two areas will be assessed by this project.
<b>Site History:</b>	<p>In 1928, Shell Oil Company established a bulk oil distribution facility on the property that included 4 above ground storage tanks (ASTs) and 2 underground storage tanks (USTs) with a combined capacity of over 73,000 gallons. The facility supplied fuel dealers in the area with a variety of petroleum products which were shipped into and out of the facility by truck. Besides leaded gasoline (both regular and high octane ethyl), diesel fuel, heating oil/kerosene and lubricating oils were handled at the site. Hans Christensen purchased the property from Shell Oil Company in 1970 and operated the business until 1983 when he leased it to Associated Petroleum Products (AAP) of Tacoma. The facility was decommissioned in the late 1980s and the last of the tanks removed in 1992. The property has been vacant since then.</p> <p>In 1996, the Railroad Street site it was listed on the Washington State Department of Ecology's list of Confirmed and Suspected Contaminated Sites after petroleum contamination was found during utility work in 1994 to replace an old wooden storm drain in the city's right of way on the east side of the property. In 2006, at the request of the city of Enumclaw, the King County Brownfields Program conducted a Phase II site assessment on the property. Test pit samples and soil borings confirmed the release of gasoline and diesel petroleum products. These hydrocarbons are generally confined to the central interior of the site and the northeast corner of the property. Contaminants that exceed the state's cleanup standards include benzene (0.16-5.2 mg/kg), ethylbenzene, xylenes and diesel range petroleum hydrocarbon (2,300 to 13,000 mg/kg). On site contamination is no deeper than 8 feet below ground surface which puts it well within the range of recovery by excavation. Soil contamination extends off site along Railroad Street in the vicinity of the old abandoned wooden storm drain line. It is also believed that soil contamination has migrated beneath a paved alley on the west side of the property. The offsite contamination was not been delineated in the 2006 assessment.</p> <p>Based upon this study, between 2,700 and 4,500 tons of soil may have to be removed and/or treated to achieve cleanup of the property. The "unrestricted use" cleanup levels for soil set by the state are 2,000 mg/kg for diesel range hydrocarbons, 0.03 mg/kg for benzene, 6 mg/kg for ethylbenzene and 9 mg/kg for xylenes.</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 assessment work on behalf of public and nonprofit entities. For more information on the Brownfields Program visit the Program website at: <a href="http://your.kingcounty.gov/solidwaste/brownfields/index.asp">http://your.kingcounty.gov/solidwaste/brownfields/index.asp</a>.</p>
<b>Assessment Description:</b>	<p>Using its consultant, the King County Brownfields Program will conduct a supplemental Phase II site assessment on city owned rights of way beneath Railroad Street and in the alley west of the property. The supplemental assessment will collect soil and water samples from 8 proposed borings to characterize suspected contamination. It will use a hydraulically powered direct push drilling machine to bore holes in the ground to collect soil and water samples.</p> <p>Prior to mobilizing to the field, the consultant will prepare a Quality Assurance Program Plan (QAPP), that will describe the project scope/objectives, field sampling procedures, analytical methods, and laboratory information (reporting limits, QA/QC information, etc.). The QAPP will be reviewed and approved by EPA. In addition, the consultant will work with the city of obtain requisite street use permits and conduct surveys to adjust the locations of boreholes to avoid any damage to underground utilities.</p> <p>Upon completion of the field work and receipt of analytical data, the consultant will prepare a report describing the results of the assessment and a separate, supplemental planning level cleanup cost estimate.</p>
<b>Reason for Assessment:</b>	<p>The city of Enumclaw wishes to acquire the Christensen property for possible redevelopment. In 2010, the city applied for and was allocated a \$500,000 EPA American Reinvestment and Recovery Act (ARRA) stimulus cleanup grant under the Washington State Department of Commerce’s Brownfields Revolving Loan Fund (RLF) program to cleanup the property. Before proceeding with purchase of the site and acceptance of the grant funds, the city wants to know what the potential liability and cleanup costs might be for contamination that migrated off site, specifically under Railroad Street in the area of the former wooden storm sewer line. The purpose of this assessment is to address those questions.</p>
<b>Results:</b>	Not yet available.
<b>Conclusions/ Next Steps:</b>	Not yet available.
<b>Contact Information:</b>	<p><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>