



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

Northwest Regional Office • 3190 160th Ave SE • Bellevue, WA 98008-5452 • 425-649-7000  
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

January 9, 2014

Mr. Mark Conan  
Plaid Pantries, Inc.  
10025 SW Allen Boulevard  
Beaverton, OR 97005

**Re: Opinion Pursuant to WAC 173-340-515(5) on Proposed Remedial Action for the following Hazardous Waste Site:**

- **Name:** Zip Market & Gas
- **Address:** 10645 16th Ave SW, Seattle, WA 98146
- **Facility/Site No.:** 18113426
- **VCP No.:** NW2585
- **Cleanup Site ID No.:** 8195

Dear Mr. Conan:

Thank you for submitting documents regarding your proposed remedial action for the **Zip Market & Gas** facility (Site) for review by the Washington State Department of Ecology (Ecology) under the Voluntary Cleanup Program (VCP). Ecology appreciates your initiative in pursuing this administrative option for cleaning up hazardous waste sites under the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

This letter constitutes an advisory opinion regarding a review of submitted documents/reports pursuant to requirements of MTCA and its implementing regulations, Chapter 70.105D RCW and Chapter 173-340 WAC, for characterizing and addressing the following releases at the Site:

- Total gasoline-range petroleum hydrocarbons (TPHg), and benzene, toluene, ethylbenzene, and xylenes (BTEX) in Soil;

Ecology is providing this advisory opinion under the specific authority of RCW 70.105D.030(1)(i) and WAC 173-340-515(5).

This opinion does not resolve a person's liability to the state under MTCA or protect a person from contribution claims by third parties for matters addressed by the opinion. The state does not have the authority to settle with any person potentially liable under MTCA except in accordance with RCW 70.105D.040(4). The opinion is advisory only and not binding on Ecology.

Ecology's Toxics Cleanup Program has reviewed the following information regarding your proposed remedial actions:

1. KEE LLC, *UST Closure Action Report, Zip Market & Gas, Seattle, Washington*, January 10, 2007.
2. PNG Environmental, Inc. (PNG), *Site Assessment Report, Former Plaid Pantry Store #324, 10645 16th Avenue SW, Seattle, Washington*, January 25, 2008.
3. PNG, *Former Plaid Pantry Store #324, Seattle, Washington, Site Characterization and SVE Pilot Test Report, October 1, 2008*.
4. PNG, *Supplemental Site Characterization Work Plan, Former Plaid Pantry Store #324, 10645 16th Avenue SW, Seattle, Washington*, November 4, 2008.
5. PNG, *Supplemental Site Characterization-April 2009. Former Plaid Pantries Store #324, 10645 16th Avenue SW, Seattle, Washington* May 18, 2009.
6. PNG, *Site Status Report - Remedial Alternative Screening, Former Plaid Pantries Store #324, 10645 16th Avenue SW, Seattle, Washington*, July 15, 2010.
7. PNG, *Interim Remedial Action Work Plan. Former Plaid Pantries Store #324, 10645 16th Avenue SW, Seattle, Washington*, April 22, 2011.
8. PNG, *Memorandum, Status of Remedial Action Planning, Former Plaid Pantry Store #324, Seattle, Washington*, November 28, 2011.
9. EES Environmental Consulting, Inc. (EES), *Technical Memorandum, Focused Remedial Alternative Screening, Former Plaid Pantries Store #324, Seattle, Washington*, July 27, 2012.
10. EES, *Technical Memorandum, Offsite Characterization Work Plan, Former Plaid Pantries Store #324, Seattle, Washington*, August 6, 2012.
11. Washington State Department of Ecology, *Opinion on Proposed Cleanup of the following Site: Plaid Pantry Store 324 aka Zip Market, 10645 16th Avenue SW, Seattle, WA Facility/Site No. 18113426, VCP Project No. NW2585*, August 16, 2012.
12. EES, *Off-Site Investigation Report, Former Plaid Pantries, Inc. Store #324, 10645 16th Avenue SW, Seattle, Washington*, October 12, 2012.
13. EES, *Technical Memorandum, ISCO Pilot Test Results and Status of Remedial Action Planning, Former Plaid Pantries, Inc. Store #324, White Center/King County, Washington*, September 10, 2013.
14. EES, *Technical Memorandum, Supplemental Site Investigation Work Plan, Plaid Pantries Store #324, White Center/King County, Washington*, October 17, 2013.

The reports listed above will be kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. Appointments can be made by calling the NWRO resource contact at (425) 649-7235 or sending an email to [nwro\\_public\\_request@ecy.wa.gov](mailto:nwro_public_request@ecy.wa.gov).

The Site is defined by the extent of contamination caused by the following release:

- TPHg and BTEX in Soil

The Site is more particularly described in Enclosure A to this letter, which includes a detailed Site diagram. The description of the Site is based solely on the information contained in the documents listed above.

Based on a review of supporting documentation listed above, pursuant to **requirements contained in MTCA and its implementing regulations, Chapter 70.105D RCW and Chapter 173-340 WAC, for characterizing and addressing the following release(s) at the Site, Ecology has determined:**

- The number and proposed locations for collecting Method B samples is generally acceptable. However, some of the proposed locations appear to directly correspond to several ISCO pilot test boring locations. These proposed boring locations should be moved laterally away from the ISCO pilot test locations to ensure that the samples collected are not affected by the 2012 ISCO injections. Samples collected for developing Method B cleanup levels should also be analyzed for the volatile input parameters listed on the Method B calculation spreadsheet (MTCATPH11.1). These include BTEX, naphthalene, n-hexane, methyl tert-butyl ether, ethylene dibromide, and 1,2 dichloroethane. It is also advisable to analyze the samples for TPHg to see how the EPH and VPH results compare to the TPHg results at these sampling locations.
- According to the Draft *Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action*, Ecology Publication No. 09-09-047, October 2009, Tier I soil vapor sample data is needed at developable areas of the Site. Therefore, the soil vapor intrusion evaluation should include consideration of soil vapor sampling locations within the area of contaminated soil to establish that soil vapor is not an issue for potential future uses of the Site. Ecology is aware that soil vapor data was collected at the Site in 2008. However, due to the age and analytical methods used at that time, current soil vapor data should be collected over the contaminated area in addition to the already proposed soil vapor sample locations.
- Review of water well logs can be used to augment Site data regarding the minimum depth to groundwater, but a boring should be advanced at the Site to 50 feet below ground surface (bgs) to confirm that the soil to groundwater pathway at the Site is not complete. Soil sample results in the vicinity of B1/B5, indicate that contamination greater than the MTCA Method A cleanup may exist to approximately 27 feet bgs. Soil below this interval is predominantly sand and gravel. Therefore, this deeper boring is needed to show sufficient vertical separation between the soil contamination and groundwater to eliminate the groundwater pathway and demonstrate that Method B cleanup levels would be protective at the Site. If groundwater is encountered in the boring, it should be sampled and analyzed for TPHg and BTEX.
- A Terrestrial Ecological Evaluation (TEE) may not be necessary at the Site. The Site may qualify for the undeveloped land exclusion on the TEE form found at

Mr. Mark Conan  
January 9, 2014  
Page 4

<http://www.ecy.wa.gov/programs/tcp/vcp/vcp2008/vcpForms.html>. If the Site appears to qualify for this exclusion, describe any undeveloped land in the vicinity of the Site and re-submit the revised TEE exemption checklist with a map showing the 500-foot radius surrounding the Site boundary.

**This opinion does not represent a determination by Ecology that a proposed remedial action will be sufficient to characterize and address the specified contamination at the Site or that no further remedial action will be required at the Site upon completion of the proposed remedial action. To obtain either of these opinions, you must submit appropriate documentation to Ecology and request such an opinion under the VCP. This letter also does not provide an opinion regarding the sufficiency of any other remedial action proposed for or conducted at the Site.**

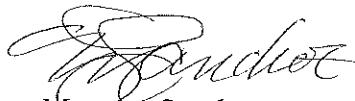
Please note that this opinion is based solely on the information contained in the documents listed above. Therefore, if any of the information contained in those documents is materially false or misleading, then this opinion will automatically be rendered null and void.

The state, Ecology, and its officers and employees make no guarantees or assurances by providing this opinion, and no cause of action against the state, Ecology, its officers or employees may arise from any act or omission in providing this opinion.

Again, Ecology appreciates your initiative in conducting independent remedial action and requesting technical consultation under the VCP. As the cleanup of the Site progresses, you may request additional consultative services under the VCP, including assistance in identifying applicable regulatory requirements and opinions regarding whether remedial actions proposed for or conducted at the Site meet those requirements.

If you have any questions regarding this opinion, please contact me at (425) 649-7257 or by email at [masa461@ecy.wa.gov](mailto:masa461@ecy.wa.gov).

Sincerely,



Maureen Sanchez  
Site Manager  
Toxics Cleanup Program

Enclosures: A: Description and Diagrams of the Site

cc: Paul Ecker, EES Environmental Consulting, Inc.  
Sonia Fernandez, VCP Coordinator, Ecology

## **Enclosure A**

### **Description and Diagrams of the Site**

## Site Description

*This section provides Ecology's understanding and interpretation of site conditions, and is the basis for the opinions expressed in the body of the letter.*

**Site:** The Site is defined as TPHg and BTEX releases to soil. The Site is located on King County tax parcel 6303400316 at 10645 16th Avenue SW in Seattle, WA (Property).

**Area and Property Description:** The Property is 0.37 acres in size. The Property is located west of 16th Avenue SW and north of SW 107th Street (see **Figure 1**) within an area of mixed commercial and residential land uses. Master's Auto & Tire Service is located adjacent to the Property to the north, a Taco Bell restaurant is located across SW 107th Street to the south, a funeral home is located across the intersection to the southeast across SW 107th<sup>h</sup> Street and 16th Avenue SW, a former Blockbuster video store was located east across 16th Avenue SW, and single family residences are located east of the Property across an alley.

**Site History and Current Use:** The Property operated as a retail petroleum facility from 1986 through 2006, and is currently occupied by a convenience store, a restaurant and associated parking. The former gas station was equipped with one 10,000-gallon and two 12,000-gallon capacity underground storage tanks (USTs) that were used to store gasoline. There was no known storage of other fuels or waste oil at the Site during operation of this service station. The previous development of the Property is unknown.

**Source of Contamination:** The source of contamination at the Site includes the former USTs and associated product piping and dispensers.

**Physiographic Setting:** The Site is situated at an elevation of approximately 380 feet above mean sea level on a hilltop area located west of the Duwamish River valley and east of Puget Sound. The land surface at the Site is generally flat, but the area slopes moderately to the southeast.

**Surface/Storm Water System:** Two catch basins are located on the east side of the Property, and likely connect to municipal storm drain lines. Hick's Lake is located approximately ½-mile southeast of the Site, and an un-named lake is located approximately 1/4-mile northeast of the Site.

**Ecological Setting:** The Property is surfaced with asphalt and a building. The Property is surrounded by developed residential and commercial properties and roadways.

**Geology:** Soils at the Site were mapped in 2005 as ice contact deposits comprised of interbedded glacial till and outwash. Borings logs indicate that the Site is underlain by non-native crushed rock backfill up to two feet bgs, underlain by brown sandy silt or silty fine sand that extends to nine to 14 feet bgs. The silt layer is underlain by sandy gravel and sand to the total depth explored of 40 feet bgs.

**Groundwater:** Groundwater has not been encountered at the Site to the total depth explored of 40 feet bgs.

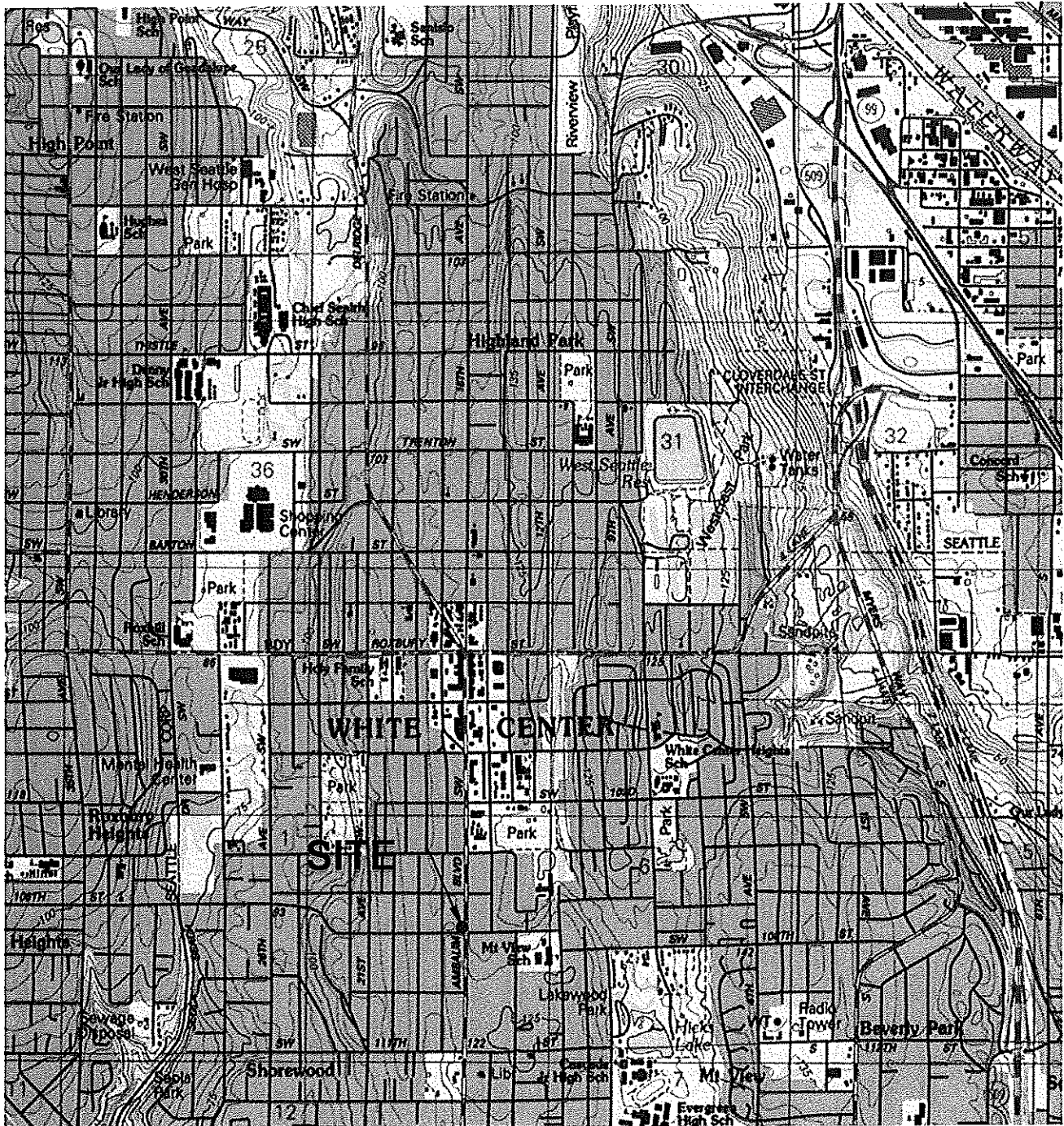
**Release and Extent of Soil Contamination:** Soil sampling conducted during the UST removal activities indicated that elevated concentrations of TPHg and BTEX were present in soil remaining at the Site at the northeast corner of the UST removal excavation. Soil with concentrations of TPHg

and BTEX greater than MTCA Method A soil cleanup levels typically occurred between approximately 4 feet bgs and 14 feet bgs north and east of the former UST nest. Locally near boring B-1, soil with TPHg and benzene concentrations greater than MTCA Method A cleanup levels were detected at 23 feet bgs. A boring advanced immediately adjacent to B-1 did not contain detectable concentrations of TPHg or benzene in the soil sample collected at 28 feet bgs. Soil contamination extends east of the Property beneath 16th Avenue SW at depths up to approximately 14 feet bgs. It appears that the soil contamination is associated with the silt layer present at depths up to 14 feet bgs across the Site.

The extent of soil contamination at the Site is shown on **Figures 3 and 4**. The figures are included in the Site Diagrams.

## Site Diagrams





SOURCE:  
USGS, SEATTLE SOUTH QUADRANGLE  
WASHINGTON - SNOHOMISH CO.  
7.5 X 15 MINUTE SERIES (TOPOGRAPHIC) 1983



APPROXIMATE SCALE IN FEET



**EES**  
ENVIRONMENTAL CONSULTING, INC.

240 N Broadway #203, Portland, OR 97227  
(503) 847-2740

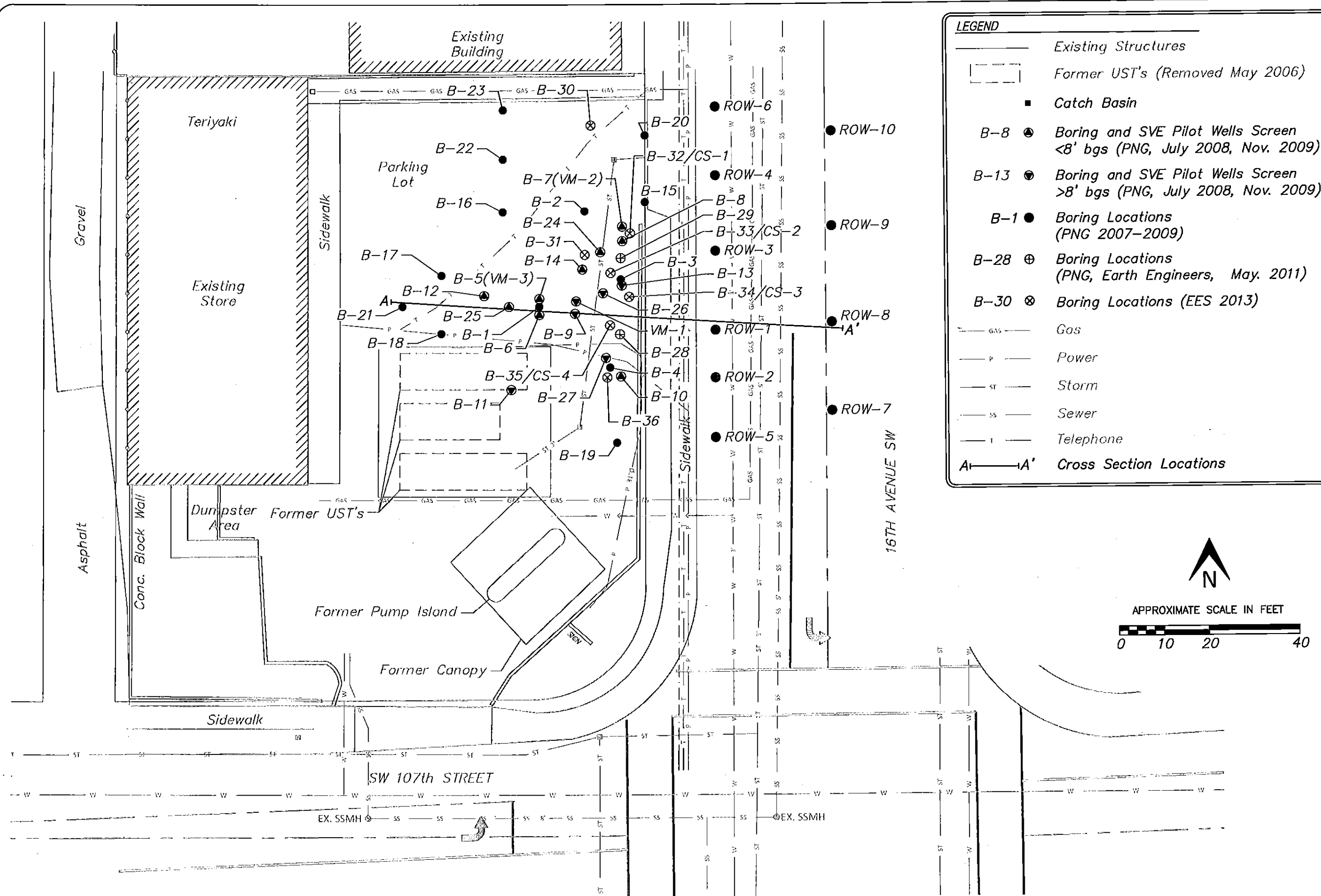
[www.ees-environmental.com](http://www.ees-environmental.com)

VICINITY MAP

PLAID PANTRY #324  
10645 16TH AVE SW.  
WHITE CENTER, KING CO., WA.

DATE: 9-23-13	PROJECT NO. 1133-01
FILE: 1133-01	FIGURE NO. 1
DRAWN: JJT	
APPROVED: DP	

Figure 1



PROJECT NO.	1133-01
DATE: 9-24-13	FILE: 1133-01
DRAWN: JLT	APPROVED: DP
FIGURE NO.	3

HISTORIC SAMPLE LOCATIONS

PLAID PANTRY #324  
10645 16TH AVE SW.  
WHITE CENTER, KING COUNTY, WA.

EES  
ENVIRONMENTAL CONSULTING, INC.  
240 N Broadway #203, Portland, OR 97227  
(503) 847-2740  
www.ees-environmental.com

Figure 2

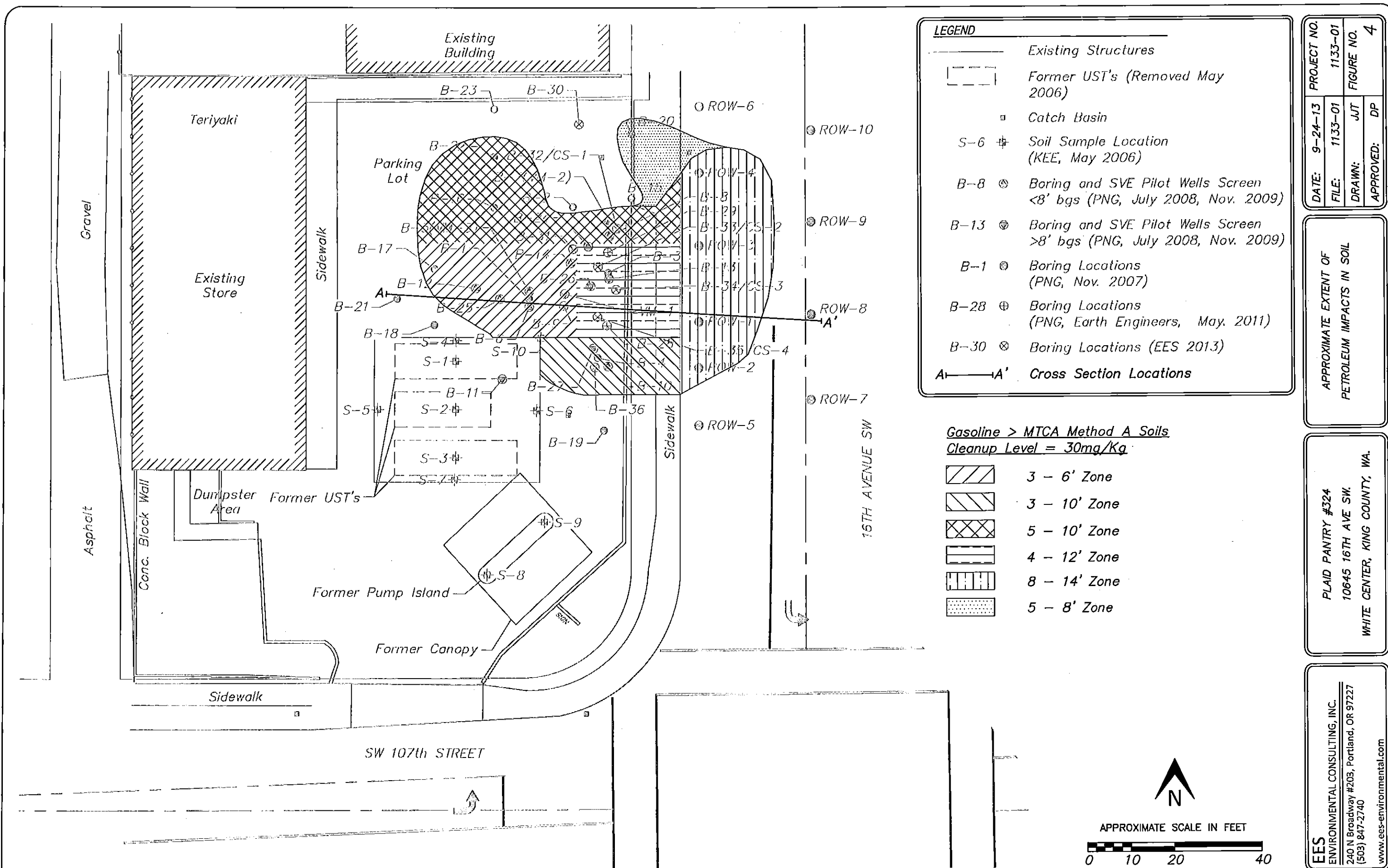


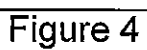
Figure 3

PROJECT NO.	9-24-13	DATE	1133-01	FILE	1133-01	DRAWN	JUT	APPROVED	DP	FIGURE NO.	4
	1133-01		JUT		DP						
	1133-01		JUT		DP						
	1133-01		JUT		DP						

APPROXIMATE EXTENT OF  
PETROLEUM IMPACTS IN SOIL

PLAID PANTRY #324  
10645 16TH AVE SW.  
WHITE CENTER, KING COUNTY, WA.

EES  
ENVIRONMENTAL CONSULTING, INC.  
240 N Broadway #203, Portland, OR 97227  
(503) 847-2740  
www.ees-environmental.com



DATE:	9-24-13	PROJECT NO.	1133-01
FILE:	1133-01	FIGURE NO.	6
DRAWN:	JJT		
APPROVED:	DP		

WEST - EAST  
CROSS SECTION A-A'

PLAID PANTRY #324  
10645 16TH AVE SW.  
WHITE CENTER, KING COUNTY, WA.

**EES**  
ENVIRONMENTAL CONSULTING, INC.  
240 N Broadway #203, Portland, OR 97227  
(503) 847-2740  
[www.ees-environmental.com](http://www.ees-environmental.com)