



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000

November 9, 2010

Dan Schreiner  
Stantec Consulting Corporation  
3017 Kilgore Road, Suite 100  
Rancho Cordova, CA 95670

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

- **Name:** Phillips 66 070644
- **Address:** 2800 Martin Luther King Way S., Seattle
- **Facility/Site No.:** 42746846
- **VCP No.:** NW2321

Dear Mr. Schreiner:

Thank you for submitting documents regarding your proposed remedial action for the Phillips 66 070644 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 release(s) at the Site:

- Gasoline-range Total Petroleum Hydrocarbon (TPHg) into the Soil and Ground Water.
- Benzene, toluene, ethylbenzene, and xylene (BTEX) into the Soil and Ground Water.

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 action(s):

1. Groundwater Sampling and Results Report and Work Plan, Former Tidewater Service Station Martin Luther King Way S., Stantec Project 211402639.200.250. July 5, 2010.
2. Cleanup Action Plan Former gas Station, 2800 Martin Luther King Way S., Seattle. G-Logics, Inc. January 22, 2008

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 425.649.7239.

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

- Gasoline-range Total Petroleum Hydrocarbon (TPHg) into the Soil and Ground Water.
- Benzene, toluene, ethylbenzene, and xylene (BTEX) into the Soil and Ground Water.

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 results of the simplified terrestrial ecologic evaluation (TEE) indicate that the Site does not pose a substantial threat to terrestrial ecological receptors. Therefore, soil cleanup standards protective of terrestrial species are not required.
- The Site does not meet the MTCA definition of an industrial property; therefore soil cleanup levels suitable for unrestricted land use are appropriate. For unrestricted land use, direct contact, either Method A or Method B cleanup levels can be used.
- Ground water at this site has been impacted by the identified releases, therefore soil cleanup levels based on leaching (protection of ground water) are appropriate. To establish soil concentrations protective of ground water, either MTCA Method A cleanup levels for soil (Table 740-1) or one or more of the methods described in WAC 173-340-747 may be used.
- Ground water at the Site has been impacted by releases; therefore, either MTCA Method A or Method B cleanup levels for ground water could be used.

- Point of compliance for soil is Site wide throughout the soil profile and may extend below the water table. This is the appropriate point of compliance for the Site.
- Point of compliance for ground water is throughout the site from the uppermost level of the saturated zone extending vertically to the lowest depth which could potentially be affected.
- The location of monitoring wells proposed in your work plan seems appropriate to characterize the down gradient extent of the ground water plume.
- In addition to the soil boring and well installation proposed in the work plan it is recommended that:
  - A confirmation soil boring be located between historical boring P-13 and P-14 to confirm that releases from the tank nest (which was removed in 1989) have been remediated.
  - A soil boring be located west of MW-5 to characterize the lateral and vertical extent of soil contamination. Based on conditions encountered, additional boring locations may be needed to bound soil contamination.
  - Soil samples should be collected every 5 feet, from 5 feet below grade to 5 feet below encountered ground water.

**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.

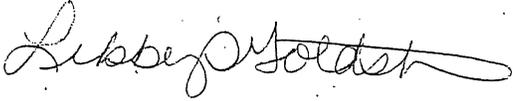
The state, Ecology, and its officers and employees make no guarantees or assurances by providing this opinion, and no cause of action against the state, Ecology, its officers or employees may arise from any act or omission in providing this opinion.

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 425.649.7242.

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Sincerely,

A handwritten signature in cursive script that reads "Libby Goldstein". The signature is written in dark ink and is positioned above the typed name.

Libby Goldstein  
Site Manager Toxics Cleanup Program

lg/kh

Enclosures: 1

## Enclosure A

### Description and Diagrams of the Site

**Name:** Phillips 66 070644

**Address:** 2800 Martin Luther King Way S., Seattle

**Facility/Site No.:** 42746846

**VCP No.:** NW2321

The Property is located at 2800 Martin Luther King Way South in Seattle. It occupies approximately 0.25 acres of the southeast corner of the intersection of Martin Luther King Way S and South McClellan Street. Across South McClellan Street (north of the Property) is a residential house occupying the northeast corner of the intersection. Lowes Home Improvement store occupies the northwest corner of the intersection and an operating gasoline service station occupies the southwest corner of the intersection. The Property is bounded on the east by a dental clinic and by a strip mall directly south of the Property.

The Site is comprised of gasoline-range total petroleum hydrocarbon (TPHg) and benzene, toluene, ethylbenzene, and xylene (BTEX) in soil and ground water associated with the service station that operated on the Property from 1955 – 1989. From the late 1980s to 2004 various auto repair businesses operated on the Property.

The Property is at an elevation of approximately 65 feet above mean sea level and slopes gently down to the southwest corner of the Property. Surface cover on the Property is mainly grass, shrubs and an abandoned auto repair garage building. The ground cover is underlain by approximately 2 – 2 ½ feet of sandy fill material. This is underlain by approximately 15 feet of fine to medium grained sand with some silt which is underlain (to the maximum depth explored, approximately 20 feet bgs) by soil with more silt and is less permeable.

Perched ground water was encountered at approximately nine to 13 feet bgs. Depth to ground water fluctuates seasonally. Wet season depth to ground water averages about 9 – 13 feet bgs and dry season depth to ground water averages 11 – 13 feet bgs. Ground water flows to the southwest.

The underground storage tanks (USTs) which were located in the northern section of the property were removed in 1989. In addition, the pump islands, piping, oil/water separators, a heating oil UST, a floor drain, and two hydraulic hoists were removed.

Soil and ground water sampling indicated that soil and ground water near the dispenser islands had levels of THGg and BTEX above MTCA Method A cleanup levels. The vertical and lateral extent of soil and ground water contamination was not fully characterized along the south and western edges of the property.

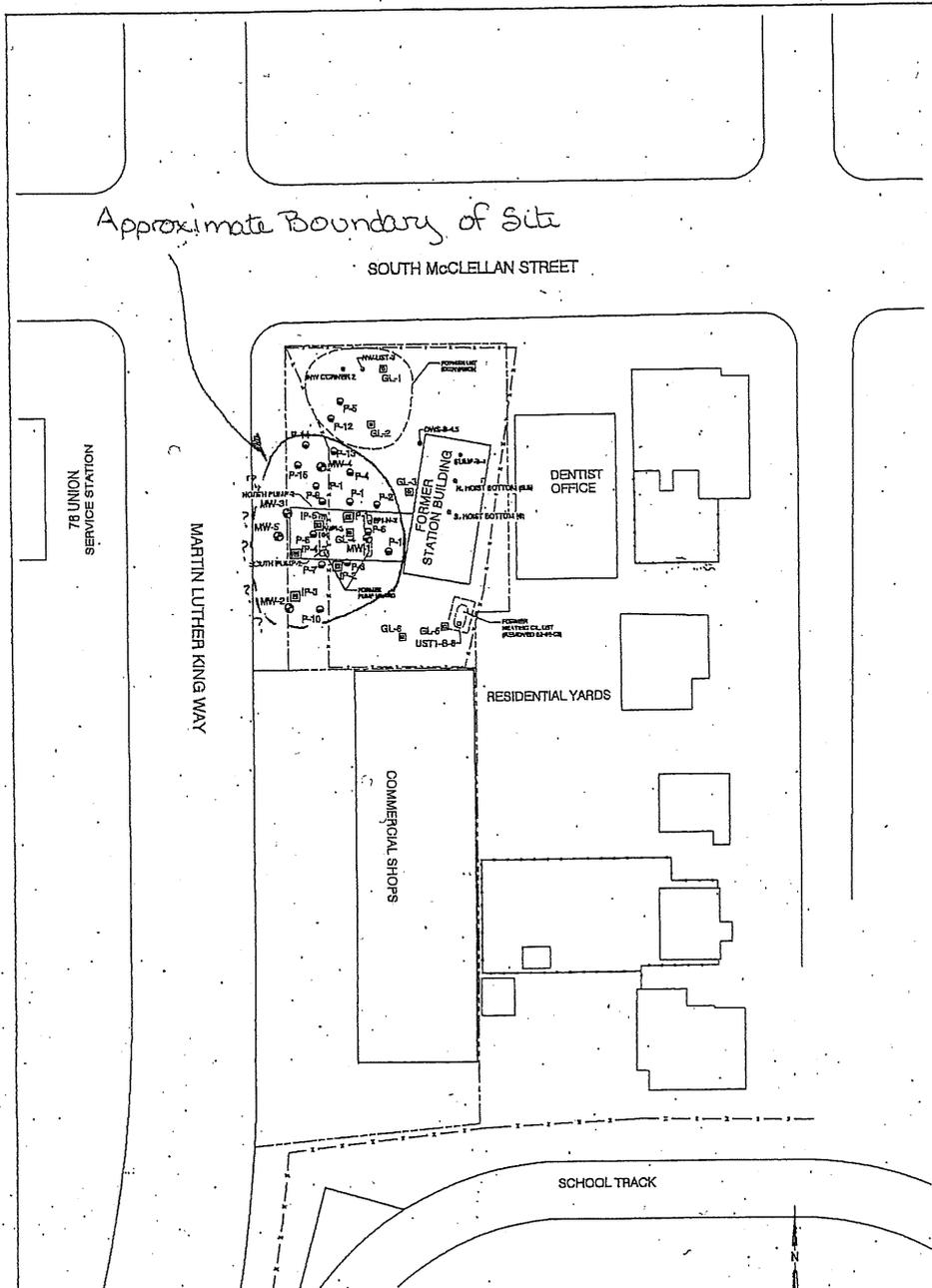
An ozone treatment system was installed in 2005 to treat ground water contamination observed near the dispenser islands. In 2006, in-situ oxidation treatment using Fentons reagent was conducted at the Site. Remediation efforts were discontinued in 2007 without confirmation soil or ground water samples collected to determine the effectiveness of the remediation efforts.

November 2009, ground water samples were collected from the monitoring wells to evaluate current conditions at the Site. The ground water results indicated that the levels of chemicals of concern were lower than before remediation. Ground water at MW-5 was still above MTCA Method A cleanup levels for TPHg.

The proposed sampling approach (Stantec, July 2010) appears reasonable to gather data needed to fully characterize current conditions at the Site. The following are recommendations to the sampling plan:

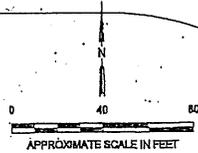
- The location of monitoring wells proposed in your work plan seems appropriate to characterize the down gradient extent of the ground water plume.
- In addition to the soil boring and well installation proposed in the work plan it is recommended that:
  - A confirmation soil boring be located between historical boring P-13 and P-14 to confirm that releases from the tank nest which was removed in 1989 have been remediated.
  - A soil boring be located west of MW-5 to characterize the lateral and vertical extent of soil contamination. Based on conditions encountered additional boring location may be needed to bound soil contamination.
  - Soil samples should be collected every 5 feet, from 5 feet below grade to 5 feet below encountered ground water.

The data collected during the proposed sampling event will be used to characterize the site and if the Site is fully characterized, to determine the appropriate remedial action. If the Site is not fully characterized, these results will be used to determine the next steps needed to complete characterization.



**LEGEND:**

- ⊙ MW-1 GROUNDWATER MONITORING WELL
- ⊙ P-1 GEOPROBE BORING
- ⊙ GL-1 AUGER BORING LOCATION WITH GROUNDWATER SAMPLE
- ⊙ GL-2 AUGER BORING LOCATION
- ⊙ IP-1 INJECTION WELL LOCATION
- B-4 SOIL SAMPLE LOCATION



 <b>Stantec</b>	FOR: FORMER TIDWATER SERVICE STATION 2800 MARTIN LUTHER KING WAY SEATTLE, WASHINGTON	<b>EXTENDED SITE PLAN</b>		FIGURE: <b>2</b>
	JOB NUMBER: 21140038.000.020	DRAWN BY: MDR	CHECKED BY: TG	APPROVED BY: DS