STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

February 27, 2013

Ms. Miguel A. Ortega
EHS International, Inc.
13228 NE 20th Street, Suite #100
Bellevue, WA 98005

Re: Further Action at the following Site:

- **Site Name:** Clarion Hotel
- **Site Address:** 900 Capitol Way South, Olympia
- **Facility/Site No.:** 9488181
- **Cleanup Site ID No.:** 348
- **VCP Project No.:** SW1266

Dear Mr. Ortega:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Clarion Hotel facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

Issue Presented and Opinion

Is further remedial action necessary to clean up contamination at the Site?

YES. Ecology has determined that further remedial action is necessary to clean up contamination at the Site.

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided below.

Description of the Site

This opinion applies only to the Site described below. The Site is defined by the nature and extent of contamination associated with the following release:

- Petroleum hydrocarbons and related constituents into the Soil and Groundwater.

Enclosure A includes a detailed description and diagram of the Site, as currently known to Ecology.

Please note the parcels of real property can be affected by multiple sites. Petroleum hydrocarbons and related constituents have been detected exceeding MTCA cleanup levels in soil and groundwater beneath the former Unocal Service Station #266, a property located within the same block at the southwest of the Site. Another contaminated site, Washington Grange Parking Lot (Former Chevron Service Station #20-6183) is located across 10th Ave. SE, to the south of the Site and is known to have free product. Local groundwater flow direction is to the north in general though seasonal changes may exist, which could potentially impact the Clarion Hotel Site. Although various remedial actions have been conducted, the two adjacent sites have not been cleaned up to date. However, at this time, we have no information that these adjacent sites have affected Clarion Hotel Site.

Basis for the Opinion

This opinion is based on the information contained in the following documents:

1. Associated Environmental Group, LLC, Phase II ESA – Subsurface Investigation. February 20, 2008.
2. Envitech, LLC, Remedial Action Report, Clarion Hotel. November 4, 2008.
3. Department of Ecology, Environmental Report Tracking System (ERTS) Initial Report, # 609041. October 20, 2008.
4. Department of Ecology, Initial Investigation Field Report, January 21, 2009.
5. Department of Ecology, Early Notice Letter Regarding the Release of Hazardous Substances, located at 900 S Capitol Way S, Olympia, WA 98501. April 10, 2009.
6. Thurston County Health Department – Clarion Hotel Site Hazard Assessment, December 9, 2009.

Those documents are kept in the Central Files of the Southwest Regional Office of Ecology (SWRO) for review by appointment only. You can make an appointment by calling the SWRO resource contact at (360) 407-6365.

This opinion is void if any of the information contained in those documents is materially false or misleading.

Analysis of the Cleanup

Ecology has concluded that **further remedial action** is necessary to clean up contamination at the Site. That conclusion is based on the following analysis:

1. Characterization of the Site.

Ecology has determined your characterization of the Site is not sufficient to establish cleanup standards and select a cleanup action. The Site is described above and in **Enclosure A**.

The Clarion Hotel is a five-story building located amid a commercial district in downtown Olympia, WA. The hotel occupies the majority of the 1.09-acre parcel, and is bounded by 9th Avenue SE to the north, Washington Street SE to the east, 10th Avenue SE to the south, and Capitol Way SE to the west.

Located within the same block and adjacent to the Site is a property occupied by the Washington Grange Building, a confirmed contaminated site previously entered into Ecology's Voluntary Cleanup Program (VCP) (SW0960, facility No. 1439). This site was a former Unocal Service Station # 266 that operated at the location until the 1980s. Petroleum-related products were detected in soil and groundwater in 1986 and subsequent cleanup activities were conducted at the site, including underground storage tanks (USTs) removal, soil excavation, and soil vapor extraction (SVE). Groundwater monitoring was conducted at the site between 1991 and 1994 during the SVE operation. The wells were monitored again from December 2007 to September 2008 for four consecutive quarters. These four quarters of monitoring did not detect any contaminants of concern above the MTCA Method A cleanup levels except that the laboratory used a reporting limit higher than the MTCA Method A cleanup level for 1,2-dibromoethene. On July 18, 2008, Ecology issued a Further Action letter to this site because of inadequate site investigation and undefined soil and groundwater contamination boundaries. The Further Action letter particularly pointed out that, because the groundwater at this site flowed to the north in general, it likely impacted groundwater down gradient beyond its northern property boundary, which borders the Clarion Hotel property. Nevertheless, no further groundwater investigation has been conducted for the former Unocal Service Station #266, and the Site investigation for Clarion Hotel was also conducted in early 2008. Therefore, there is no information to confirm whether the groundwater plume had extended beyond the Unocal Service Station site's northern boundary and had impacted groundwater at the Clarion Hotel Site.

In February 2008, a Phase II Subsurface Investigation was conducted for the Clarion Hotel Site and five borings were advanced to a maximum of 20 feet below ground surface (bgs). Two soil samples and one groundwater sample were collected from each boring. Soil analytical results indicated that diesel-range total petroleum hydrocarbons (TPH-Dx) were present in soil. Elevated concentration of TPH-Dx was at 6,200 milligrams per kilogram (mg/kg) at 7 feet bgs in boring B-3. Boring B-3 is located near the southern border of the Site, where a heating oil UST was located and later removed. Groundwater analytical results from all borings were non-detect for TPH-Dx, gasoline-range total petroleum hydrocarbons (TPH-Gx), and benzene, toluene, ethylbenzene, and xylenes (BTEX).

On March 14, 2008, before a soil excavation activity, an additional 10 soil borings were drilled and 15 soil samples were collected to evaluate the vertical and lateral extent of the soil contamination. The results were presented in Remedial Action Report (Envitech, LLC., November 4, 2008) but the information of this sampling event was not adequately provided (see comment #1 below). Based on Figure 5 of the report, three soil samples were analyzed for TPH-Gx, two detected TPH-Gx above the MTCA Method A cleanup level, at the concentration of 130 mg/kg. These two samples were both from boring S4, at the depths of 7 and 13 feet, respectively. Other soil samples were either non-detect for TPH-Dx, or detected TPH-Dx at lower than the MTCA Method A cleanup level. No sample was collected from deeper locations to indicate that soil contamination did not extend any further.

In October 2008, soil excavation and a UST removal activities were conducted at the Site based on the March 14, 2008 Site investigation. Confirmation soil samples were collected including one from the floor of the excavation pit at 16 feet bgs (see Section 4 of this letter). The floor soil sample detected no TPH-Gx and the extent of soil contamination would have been regarded as sufficiently defined should the appropriate documentation was provided (see comment #1 below).

The March 14, 2008 sampling event also included one groundwater sample (see comment #2 below) and the groundwater sample detected TPH-Dx at the concentration of 4,900, if assume the unit was microgram per liter (ug/L), which was not provided in the report (see comment # 2 below), the concentration was above the MTCA Method A cleanup level

Based on review of Site investigation and confirmation soil sampling during the soil excavation activity, Ecology has determined that the investigations were not sufficient to characterize the extent of contamination at the Site, and has following comments:

1. A sampling event was conducted on March 14, 2008. Envitech (the consultant) did not adequately describe the analytical results for soil and groundwater. Sampling depths, boring logs, laboratory documents including original analytical results, chain of custody, and quality assurance (QA) and quality control (QC). The Detailed Exploration Location Map (Figure 5 in Envitech's Remedial Action Report) did not include units used, and did not have an adequate legend. The report stated that these borings were drilled on March 14, 2008, whereas Figure 5 specified the study was on March 4, 2007. The QA/QC documentation must be submitted to Ecology to ensure the data integrity. In case these documentations cannot be provided, additional soil characterization at the Site is warranted.

2. For the March 14, 2008 sampling event, it appears that one groundwater sample was collected from Boring S5 at the Site during this sampling event according to Figure 5 of the report. This sample was identified as "W", and TPH-Dx was detected at a concentration of 4,900, but no unit was specified. However, according to the legend of the figure, soil and groundwater standards were provided and the values matched the MTCA Method A cleanup levels in their respective units of mg/kg and ug/L, in which

case, the TPH-Dx in groundwater exceeded the MTCA Method A cleanup level of 500 ug/L. Boring S5 is located at the south central part of the Site, close to where the UST was removed. Additional groundwater sampling is warranted to characterize the groundwater plume at this area.

3. The extent of potential groundwater contamination associate with off Site sources has not been adequately addressed for the northwestern portion of the Site. The five borings in February 2008 were all sampled for groundwater and no contaminants were detected above MTCA Method A cleanup levels. However, the samples were collected at about 15 feet below ground surface (bgs), and the borings did not go beyond the Washington Grange Building (Former Unocal Service Station #266) site's northern boundary. Groundwater monitoring wells MW-4 and MW-5 along the northern boundary of Unocal Service Station #266 site were historically found contaminated with petroleum hydrocarbons and the wells screens were located at 30 feet bgs. The groundwater generally flowed to the north and potentially extended beyond its northern boundary. However, no investigation has been conducted to confirm whether the groundwater beneath the northwestern portion of the Clarion Hotel property, immediately north of Washington Grange Building, has been impacted or otherwise meets the MTCA cleanup standards.

4. A Terrestrial Ecological Evaluation (TEE) needs to be completed for the Site. Please fill out the form on our website and submit it to Ecology (along with any supporting documentation, as appropriate) for review. The form can be found at: http://www.ecy.wa.gov/biblio/ecy090300.html.

5. In accordance with WAC 173-340-840(5) and Ecology Toxics Cleanup Program Policy 840 (Data Submittal Requirements), data generated for Independent Remedial Actions shall be submitted simultaneously in both a written and electronic format. For additional information regarding electronic format requirements, see the website http://www.ecy.wa.gov/eim. Be advised that according to the policy, any reports containing sampling data that are submitted for Ecology review are considered incomplete until the electronic data has been entered. Please ensure that data generated during on-site activities is submitted pursuant to this policy. **Data must be submitted to Ecology in this format for Ecology to issue a No Further Action determination.** Please be sure to submit all data in this format. Data collected prior to August 2005 (effective date of this policy) is not required to be submitted; however, you are encouraged to do so if it is available. Be advised that Ecology requires up to two weeks to process the data once it is received.

2. Establishment of cleanup standards.

Ecology has determined the cleanup levels and points of compliance you established for the Site have not met the substantive requirements of MTCA.

The MTCA Method A cleanup levels for soil and groundwater were used for the Site. Standard points of compliance should be used for the Site. The point of compliance for protection of groundwater shall be established in the soil throughout the Site. For soil cleanup levels based on human exposure via direct contact or other exposure pathways where contact with the soil is required to complete the pathway, the point of compliance shall be established in the soils throughout the Site from the ground surface to 15 feet bgs. In addition, the point of compliance for groundwater shall be established throughout the Site from the uppermost level of the saturated zone extending vertically to the lower most depth that could potentially be affected by the Site.

3. Selection of cleanup action.

Ecology has determined the interim cleanup actions you selected for the Site have not met the substantive requirements of MTCA.

Cleanup actions conducted to date included source removal (removal of the heating oil UST) and contaminated soil excavation. The disposal of the contaminated soil was off Site (see Section 4 of this letter for details). Further characterization is warranted prior to selecting a final cleanup action.

4. Cleanup.

Ecology has determined the interim cleanup you performed has not met the cleanup standards at the Site. The cleanup activities conducted so far at the Site included:

- Excavation of the petroleum-impacted soil was initiated on October 16, 2008 at the Site. Olfactory and Photo-ionization Detector (PID) were used during excavation to identify contaminated soil for guidance of excavation and segregation of removed soil. The excavation stopped at 16 feet bgs when PID readings indicated that soil excavated was no longer impacted by petroleum constituents. The final excavation pit was approximately 16 feet by 16 feet, and 16 feet deep. A total of 70 tons of petroleum-impacted soil was transported to Olympic View Transfer Station in Port Orchard for disposal.

- Without previous information, a heating oil UST was discovered during the soil excavation. The single-walled steel UST was at a depth of approximately 4 feet bgs and was approximately 46 inches in diameter and 8 feet long. The UST was removed by Birk Enterprises, Inc. on October 18, 2008. The slurry and heating oil remaining in the UST was removed with vacuum truck by Marine Vacuum Service, Inc. and the UST was disposed of after triple rinses.

Even though confirmation soil samples were collected from the four walls of the excavation pit and bottom, and did not detect any petroleum-related contaminants above MTCA cleanup

levels, further characterization of the soil at the Site maybe needed (see Section 1 of this letter) before a cleanup action can be determined.

No groundwater cleanup action has ever been conducted at the Site. Sufficient groundwater characterization is needed before a cleanup action can be determined.

Additional inconsistency exists with regard to extent of contamination and the volume of contaminated soil disposed of. The Remedial Action Report (Envitech, LLC., Nov. 4, 2008) stated that the excavation pit was 16 feet by 16 feet, and 16 feet deep, which should have yielded a total of 151 cubic yards of removed soil. On page 3, under Section 1.4 of this report, however, it stated that "contamination area was estimated with dimensions of an approximately 40 feet by 15 feet, and a thickness of an approximately 13 – 15 feet. A total of approximately 280 – 330 cubic yards of soil appear to be contaminated with petroleum contaminants." On the other hand, the final amount of soil disposed of was only 70 tons, if assume the bulk density of the soil as 1.65 gram per cubic centimeter, the volume of the 70 tons of soil is only 55 cubic yards, which was significantly less than the estimated volume of 280 – 330 cubic yards, and also significantly less than the volume of the excavated soil (151 cubic yards). Clarification of the amount of soil excavated and disposed of, and the extent of contamination (also see Section 1 of this letter), is warranted.

In summary, the residual contamination in soil and groundwater must be characterized prior to identifying a final cleanup action.

Limitations of the Opinion

1. Opinion does not settle liability with the state.

Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70.105D.040(4).

2. Opinion does not constitute a determination of substantial equivalence.

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you performed is substantially equivalent. Courts make that determination. *See* RCW 70.105D.080 and WAC 173-340-545.

3. State is immune from liability.

The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. *See* RCW 70.105D.030(1)(i).

Contact Information

Thank you for choosing to clean up the Site under the Voluntary Cleanup Program (VCP). After you have addressed our concerns, you may request another review of your cleanup. Please do not hesitate to request additional services as your cleanup progresses. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our web site: www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm. If you have any questions about this opinion, please contact me by phone at (360) 407-6265 or by e-mail at hqiu461@ecy.wa.gov.

Sincerely,

Hans Qiu, L.HG.
Site Manager
SWRO Toxics Cleanup Program

HQ/ksc: Site FA Clarion Hotel

By certified mail: (7010 2780 0000 2503 5529)

Enclosures: A – Description and Diagrams of the Site

cc: Ms. Cynthia Butterfield, Vice President, Whidbey Island Bank
Gerald Tousley, Thurston County Health Department
Dolores Mitchell – Ecology
Scott Rose – Ecology

Enclosure A

Description and Diagrams of the Site

Site Description

The Clarion Hotel is located amid a commercial district in downtown Olympia, WA. The hotel occupies the majority of the 1.09-acre parcel, and is bounded by 9th Avenue SE to the north, Washington Street SE to the east, 10th Avenue SE to the south, and Capitol Way SE to the west.

The Site and vicinity area is underlain by glacial Quaternary age undifferentiated outwash deposits and Vashon Till deposits. Investigation indicated that the subsurface generally consist of a fill layer overlaying the outwash deposits. The fill, ranging up to 12 feet thick in areas explored, consisted of brown, medium stiff, sandy silty clay to clay with pockets of well sorted sand and localized pieces of bricks. The outwash deposits consisted of medium stiff to stiff, sandy clay, silty clay, clay to sandy silt, to the maximum depth explored, at 20 feet bgs. The water-bearing zone appeared to be medium stiff clay with gravel to silty clay. Groundwater was encountered at about 10 feet to 15 feet during exploration in February 2008, yet was not encountered during soil excavation in October 2008 to 16 feet bgs.

Site investigation at adjacent sites indicated that multiple groundwater levels exist at the Site, and groundwater flow is to the north in general (northeast, north, and northwest). Because the Site is located down gradient of two other sites where petroleum and associated hydrocarbons have been confirmed to exist in soil and groundwater, there is a potential that the contaminated groundwater may have migrated to the Clarion Hotel Site; however, there is no information at this time to confirm this has happened.

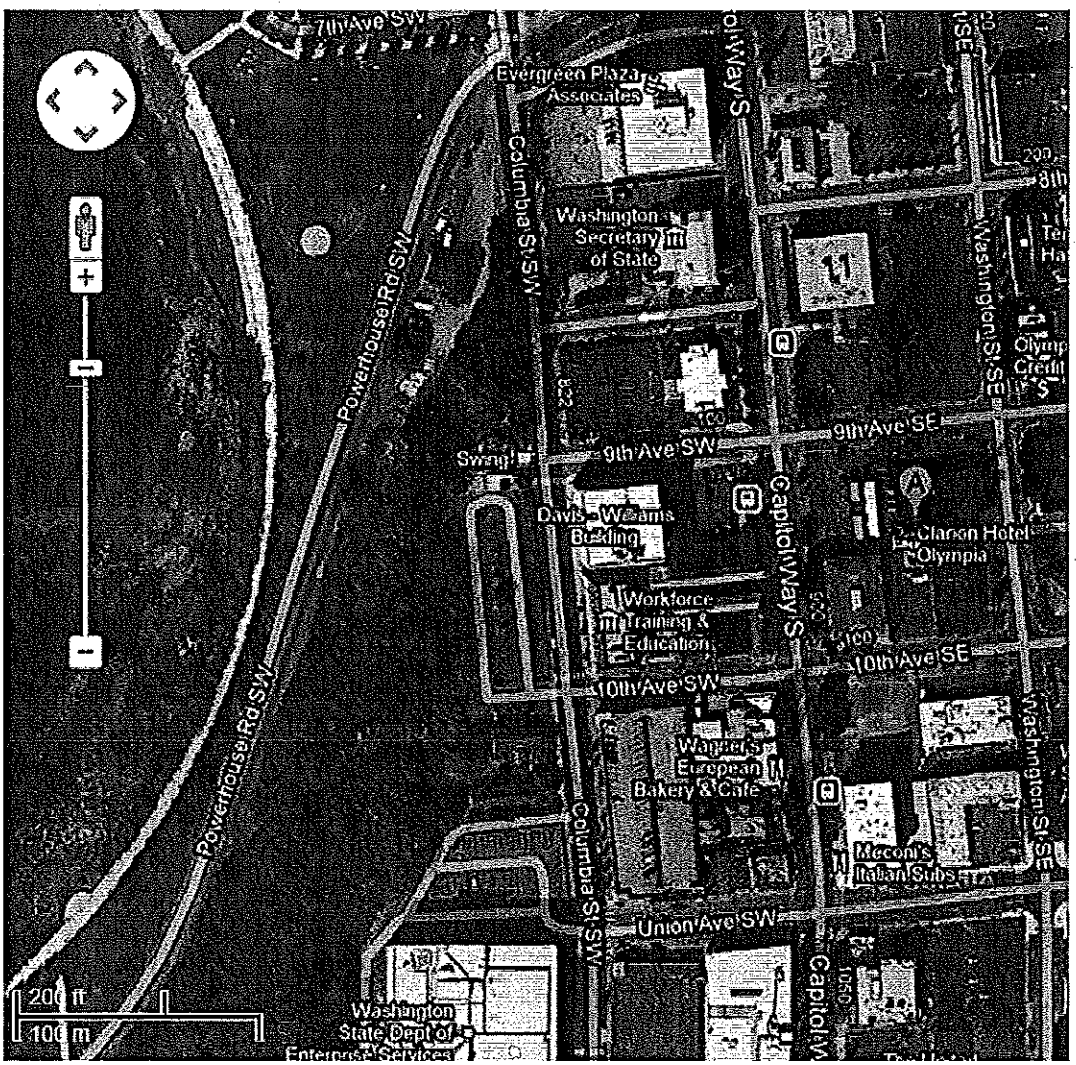
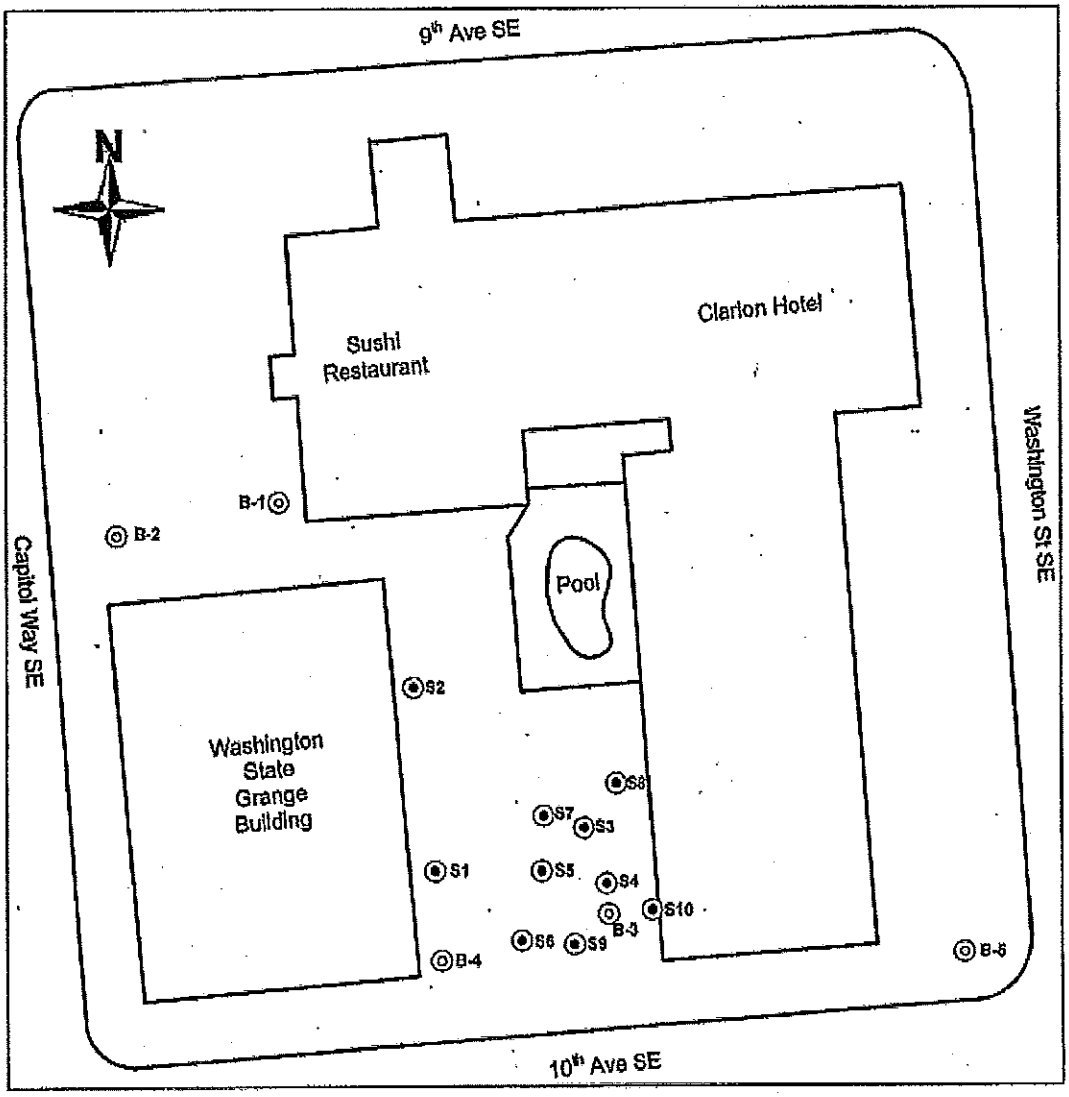


Fig 1. Location of Clarion Hotel Site, in Olympia, WA (Snapped from Google Map)



- The adjacent Washington State Grange Building is also a confirmed petroleum contaminated site; which has not been cleaned up, its facility number is 1439).
- B1 through B5 were advanced by Associated Environmental Group (AEG) on Feb. 12. 2008.
- S1 through S10 were advanced by Envitech, LLC on March 14, 2008 before soil excavation.

Fig. 2 Soil (and groundwater) sampling locations at Clarion Hotel Site (Courtesy of Envitech, LLC)

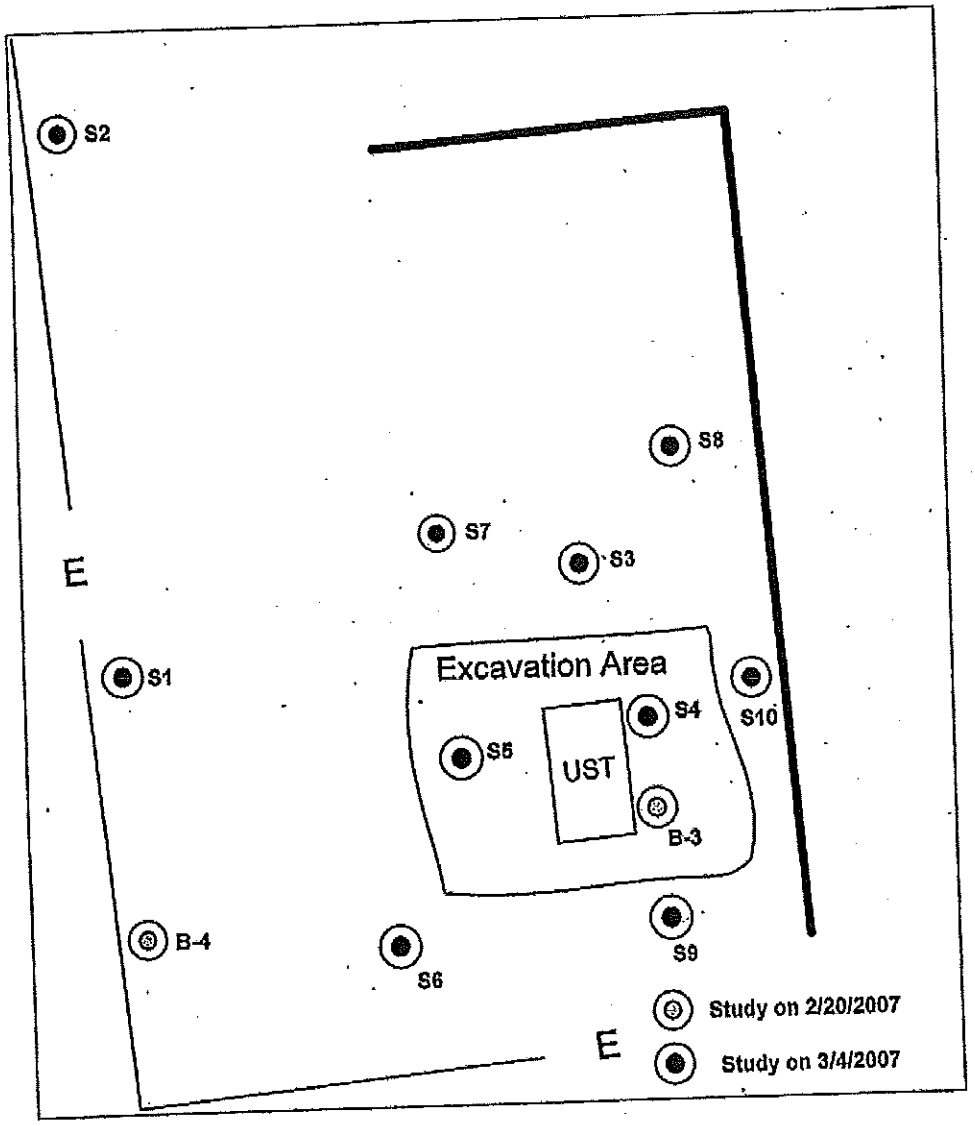


Fig 3. Location map of the heating oil underground storage tank (UST) and the extent of soil excavation. The Excavation started on October 16, 2008, and completed on October 21, 2008