



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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

May 10, 2010

Julie Wukelic
Hart Crowser, Inc.
1700 Westlake Avenue North, Suite 200
Seattle, WA 98109-6212

Re: Further Action at the following Site:

- **Site Name:** Block 26 W City Place II LLC
- **Site Address:** 526 Boren Ave N/1100 Republican Street, Seattle WA 98109
- **Facility/Site No.:** 15148
- **VCP Project No.:** NW2259

Dear Ms. Wukelic:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Block 26 W City Place II LLC 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 releases:

- Polycyclic Aromatic Hydrocarbons (PAHs) into the Soil
- Lead, Arsenic, and Chromium into the Soil



- Total Petroleum Hydrocarbons – Diesel-range organics (TPH-DRO) into the Ground Water

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

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the parcel(s) associated with this Site are affected by other sites.

Basis for the Opinion

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

1. Hart Crowser, Inc., *Final Cleanup Action Report, Block 26W (City Place II), 526 Boren Avenue North and 1100 Republican Street, Seattle, WA*, October 1, 2009.
2. Hart Crowser, Inc., *Results for Additional Sampling and Analysis, Soil below Former Railroad Tracks, Block 26W, Seattle, WA*, January 9, 2009.
3. Hart Crowser, Inc., *Construction Contingency Plan (CCP, Specification for Handling Potential Environmental Concerns and Disposing of Environmental Impacts Encountered during Excavation and Construction (Block 26W Site)*, April 30, 2008.
4. Hart Crowser, Inc., *Well Installation Activities and Results of Groundwater Sampling and Analysis, February 2008, Vulcan Rufus Project – Block 26 and 32, Seattle, WA*, March 13, 2008.
5. Hart Crowser, Inc., *MacDonald Property Limited Phase II Results*, October 30, 2000.
6. Hart Crowser, Inc., *Preliminary Environmental Assessment (Phase I) and Limited Asbestos and Lead-Based Paint Survey, MacDonald Property 526 Boren Avenue North, Seattle, WA*, October 3, 2000.

Those documents are kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. You can make an appointment by calling the NWRO resource contact at (425) 649-7190.

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.**

Your characterization is not sufficient because ground water flow direction has not been substantiated sufficiently to determine whether monitoring wells are properly placed, whether the extent of ground water contamination to the north has been adequately defined, and whether remediation of ground water is needed.

2. Establishment of cleanup standards.

Ecology has determined the cleanup levels and points of compliance you established for the Site meet the substantive requirements of MTCA.

Future site plans could include residences or facilities to which the public has access, so unrestricted land use is the appropriate basis for development of soil cleanup levels. The following potential exposure/risk pathways were appropriate to consider:

- Human health protection from direct soil contact pathway exposure
- Human health protection from soil-to-groundwater pathway exposure
- Human health protection from the soil-to-surface water pathway exposure
- Human health protection from soil-to-air pathway exposure
- Terrestrial ecological protection

Method A or Method B cleanup levels can be used for contaminants of concern at this Site.

Appropriate soil cleanup levels are the WAC 173-340 Method A Table 740-1 soil cleanup values of 100 mg/kg for TPH – GRO; 7 mg/kg for Toluene; 6 mg/kg for Ethylbenzene; 9 mg/kg for Xylenes; 2,000 mg/kg for TPH-DRO; 2,000 mg/kg for oil-range organics; 0.05 mg/kg for Tetrachloroethylene (PCE); 0.1 mg/kg for carcinogenic PAHs; 250 mg/kg for Lead; 2,000 mg/kg for Chromium; and 20 mg/kg for Arsenic.

Appropriate ground water cleanup levels are the WAC 173-340 Method A Table 720-1 values of 500 ug/l for TPH – DRO, 0.1 ug/l for carcinogenic PAHs, 800 ug/l for TPH – GRO, 5 ug/l for Benzene, 1,000 ug/l for Toluene, 700 ug/l for Ethylbenzene, 1,000 ug/l for Xylenes, 5 ug/l for Arsenic, 50 ug/l for Chromium (total), and 15 ug/l for lead.

The point of compliance for soil is throughout the site, which is a standard point of compliance.

The point of compliance for groundwater is throughout the site, which is a standard point of compliance.

3. Selection of cleanup action.

Ecology has determined the cleanup action you selected for the Site does not meet the substantive requirements of MTCA.

The cleanup selected consisted of excavation and removal of soil containing concentrations above cleanup levels.

The cleanup action does not meet the substantive requirements of MTCA because sufficient sampling has not been conducted to demonstrate that the ground water cleanup standard for TPH-DRO has been met.

4. Cleanup.

Ecology has determined the cleanup you performed does not meet cleanup standards at the Site.

The cleanup performed consisted of excavation and removal of approximately 663 tons of contaminated soil. Additional soil extending 25 feet below grade was excavated for construction purposes, in addition to the excavation and removal conducted for cleanup purposes.

The cleanup has not yet been shown to meet the ground water cleanup standard for TPH-DRO. Once ground water contamination is confirmed, four consecutive quarters of properly obtained sampling results from properly located wells would be the minimum necessary to conclude that the TPH-DRO cleanup standard has been met for the Site.

Another issue is the entry of sampling data into Ecology's electronic Environmental Information Management (EIM) system, which you will need to do in order to achieve your goal of obtaining a No Further Action opinion letter from Ecology for this Site.

Jenna Durkee (telephone: 509-454-7865) is an excellent source of information on entering data into EIM.

Finally, any engineering, geology, or hydrogeology work will need to be stamped by an appropriately certified professional registered in the State of Washington.

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.

Julie Wukelic
May 10, 2010
Page 6

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 (425) 649-7233 or e-mail at rswa461@ecy.wa.gov.

Sincerely,



Robert D. Swackhamer, PE
NWRO Toxics Cleanup Program

rs/kp

Enclosure: A – Description and Diagrams of the Site

cc: Ada Healy, City Place II

Enclosure A

Description and Diagrams of the Site

Site Description

The Site is defined by the extent of releases of petroleum hydrocarbons, polycyclic aromatic hydrocarbons, lead and arsenic. The releases occurred at a Property comprising King County Tax Parcel No. 1983200585, located in the South Lake Union area of Seattle, Washington. The addresses of 526 Boren Avenue North and 1100 Republican Street have been associated with this Property. The Site is further described in the enclosed figures.

The Property occupies the western half block bounded by Mercer Street, Boren Avenue North, and Republican Street. An alley running between Mercer Street and Republican Street borders the Property on the east.

The specific circumstances of the releases are not known, but they appear to be associated with a former railroad spur in two areas on the east side of the Property and with buried roofing and piping debris in one area on the west side of the Property.

Land use in the vicinity is predominantly commercial. Topography of the Property slopes gently down toward the north and west toward Lake Union, which is located two blocks north of the Property.

In general subsurface soil conditions consisted of an upper fill unit consisting of gravelly, silty sand overlying silt and clay with some organic material present overlying sand. The upper fill unit ranged in thickness from 10 to 20 feet.

Ground water was encountered at 23 to 36 feet during drilling, with a stabilized depth to ground water measured at 23 to 24 feet below ground surface on February 19, 2008.

Site History

A five-story office building with subsurface parking currently is being constructed on the Property.

Prior to the current redevelopment, the Property most recently was used as a commercial furniture retail store and warehouse. Other historical uses have included a wholesale building materials warehouse (1940s to 1990s), an auto wrecking and repair site (to the 1940s), an automobile and wagon business (1917), and a Sunday School and small businesses (1905)..

Soil excavation and removal was conducted during the first half of 2009 in preparation for the current construction. Approximately 663 tons of contaminated soil was excavated. Some of the contaminated soil was taken to CEMEX in Everett, Washington, and some was taken to Waste Management in Seattle, Washington. Additional soil extending 25 feet below grade was excavated for construction purposes, in addition to the excavation and removal conducted for cleanup purposes.

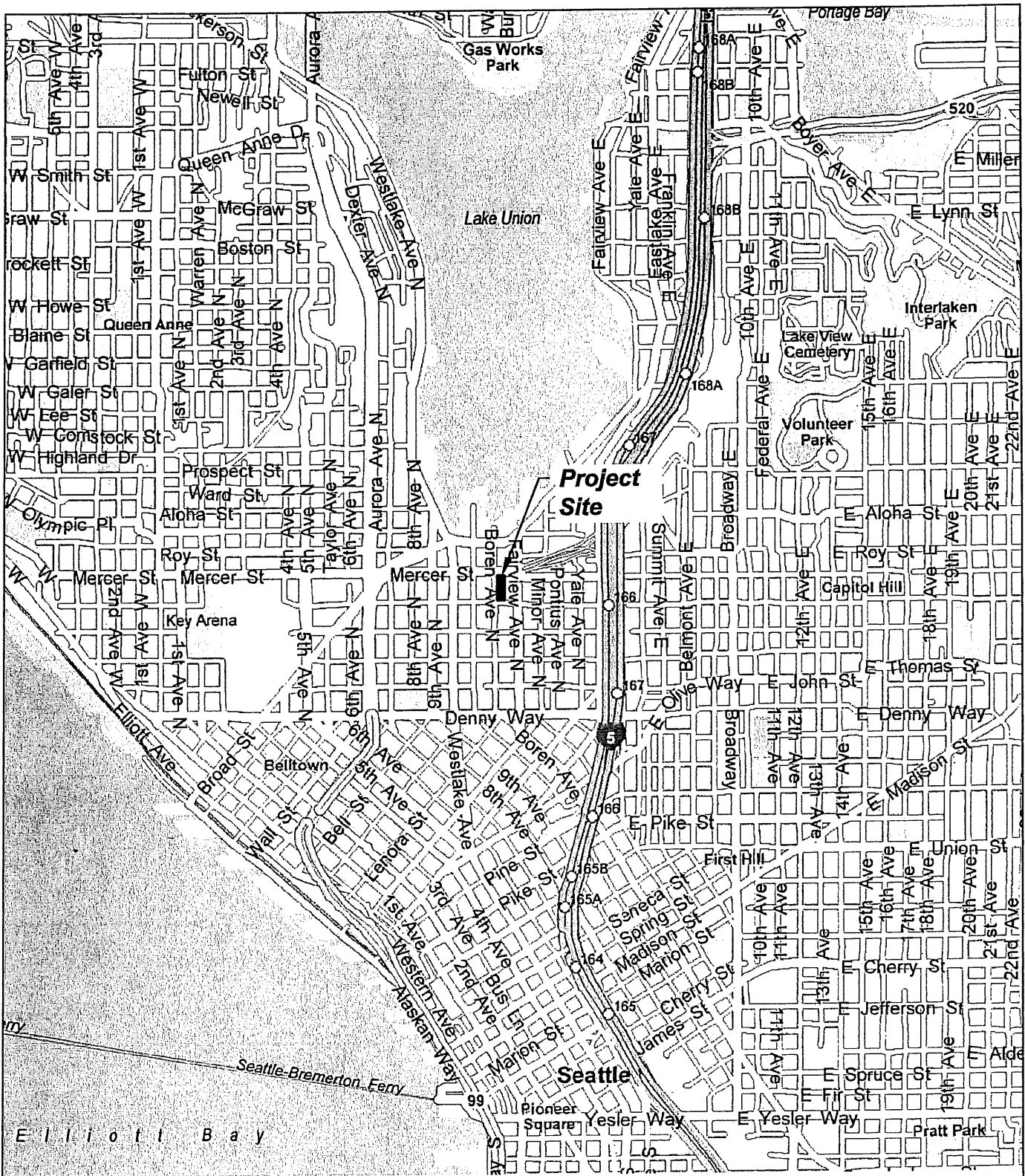
Julie Wukelic
May 10, 2010
Page 2

PAH, lead and arsenic contamination were limited to the upper 13 feet but petroleum contamination (diesel range organics or DRO) was detected as far as 24 feet below ground surface, although at that point the concentration was below the cleanup level.

In 2007, DRO was found at 40 times the cleanup level in a monitoring well near the north property boundary. A subsequent monitoring event in 2008 did not detect DRO in this well.

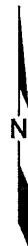
Julie Wukelic
May 10, 2010
Page 3

Site Diagrams



Source: Base map prepared from Microsoft Streets and Trips 2005.

0 2000 4000
Scale in Feet



City Place II, LLC
Seattle, Washington

Vicinity Map

17430-04

8/09



Figure

1

