



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

4601 N Monroe Street • Spokane, Washington 99205-1295 • (509)329-3400

April 22, 2016

Mr. Ben Scandalis
Greenstone Management, LLC
1421 North Meadowwood Lane, Suite 200
Liberty Lake, WA 99019

Re: No Further Action at the following Site:

- **Site Name:** Geiger Heights Housing Area
- **Site Address:** Grove & Hallett Rd, Spokane, WA
- **Facility/Site No.:** 21455
- **VCP Project No.:** EA0187

Dear Mr. Scandalis:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Geiger Heights Housing Area 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?

NO. Ecology has determined that no 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 into the Soil and Groundwater.



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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:

- *Final Preliminary Remedial Investigation, Geiger Heights Housing Site:* Dames & Moore, September 26, 2000.
- *Final Geiger Heights Housing Area Cleanup Letter Report:* URS Corporation, April 2008.
- *Work Plan Geiger Heights:* URS Corporation, February 19, 2009.
- *Remediation Progress Report:* URS Corporation, September 22, 2011.
- *Windsor Crossing Groundwater Monitoring Event reports:* Fulcrum Environmental Consulting, April 2013 – September 2015.
- *Request for No Further Action Site Designation Geiger Heights Housing Area (Windsor Crossing):* Fulcrum Environmental Consulting, December 29, 2015.

Those documents are kept in the Central Files of the Eastern Regional Office of Ecology (ERO) for review by appointment only. You can make an appointment by calling (509) 329-3400.

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 **no 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 sufficient to establish cleanup standards and select a cleanup action. The Site is described above and in **Enclosure A**.

The lateral and vertical extent of the petroleum hydrocarbons in soil and groundwater was defined in the reports listed above.

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.

For soil, the cleanup levels were established using MTCA Method A and are based on protection of groundwater. The land use is classified as unrestricted. The cleanup levels are as follows:

- Diesel range organics: 2,000 mg/kg
- Heavy Oil range organics: 2,000 mg/kg
- Xylenes: 9 mg/kg
- Naphthalenes: 5 mg/kg
- cPAHs: 0.1 mg/kg

The point of compliance for soil is throughout the soils at the Site. This is the standard point of compliance.

For groundwater, the cleanup levels were established using MTCA Method A and are based on protection of drinking water beneficial uses. The groundwater is classified as potable. The cleanup levels are as follows:

- Diesel range organics: 500 µg/l

For groundwater, the point of compliance is throughout the Site from the uppermost level of the saturated zone extending vertically to the lowest most depth which could potentially be affected by the Site. This is the standard point of compliance.

3. Selection of cleanup action.

Ecology has determined the cleanup action you selected for the Site meets the substantive requirements of MTCA.

The selected cleanup includes the following:

SOIL

- Removal of sources (underground storage tanks).
- Excavation and removal of contaminated soil.

GROUNDWATER

- Removal of sources and contaminated soil.
- Installation of groundwater monitoring wells.

4. Cleanup.

Ecology has determined the cleanup you performed meets the cleanup standards established for the Site.

The sources were removed and contaminated soil was excavated and transported off-site for disposal. Groundwater was monitored until sample results from four consecutive quarters were below cleanup levels.

Listing of the Site

Based on this opinion, Ecology will initiate the process of removing the Site from our lists of hazardous waste sites, including:

- Hazardous Sites List
- Confirmed and Suspected Contaminated Sites List

That process includes public notice and opportunity to comment. Based on the comments received, Ecology will either remove the Site from the applicable lists or withdraw this opinion.

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.**

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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).

Termination of Agreement

Thank you for cleaning up the Site under the Voluntary Cleanup Program (VCP). This opinion terminates the VCP Agreement governing this project (#EA0187).

For more information about the VCP and the cleanup process, please visit our web site at <http://www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm>. If you have any questions about this opinion or the termination of the Agreement, please contact me by phone at (509) 329-3522 or e-mail at patti.carter@ecy.wa.gov.

Sincerely,



Patti Carter
ERO Toxics Cleanup Program

pc:mr

Enclosures: Description and Diagrams of the Site

cc w/enc: Amanda Johnson, Fulcrum

cc w/o enc: Matt Alexander, Ecology

Enclosure A

Description and Diagrams of the Site

Site Description

The former Geiger Heights Housing Area covers approximately 77 acres. The development was constructed to provide base housing for Fairchild Air Force Base in the 1950s and consists of 131 single family and duplex buildings. Each housing unit was heated by fuel oil stored in 300-gallon single-walled steel underground storage tanks (USTs).

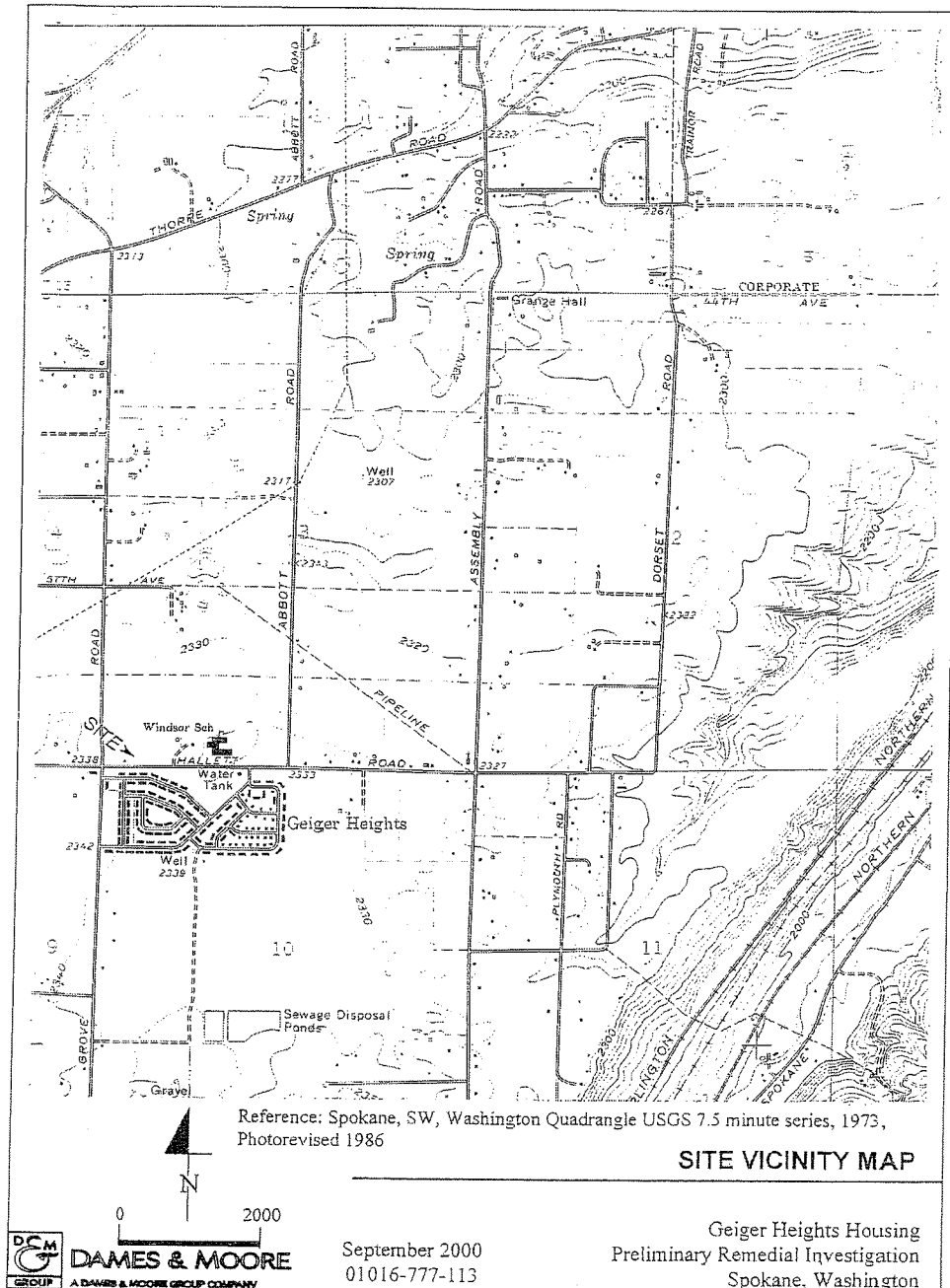
In 1994, all the USTs were removed when heating for all housing was changed to natural gas. Nine USTs were confirmed to have leaked. Soil and excavation water samples collected during UST removal activities indicated diesel concentrations exceeded cleanup levels in soil and groundwater.

Thirty-seven borings were installed in 2000 to determine the extent of contamination. Twelve groundwater monitoring wells were installed and sampled between 2000 and 2015. After 2005, only two monitoring wells still had concentrations above cleanup levels. Results from the final four consecutive quarters were below cleanup levels.

Contaminated soil was excavated from the three housing units identified as impacted. In some cases, sewer lines, driveways, and sidewalks were removed to access contamination. One housing unit was demolished and soil was removed to bedrock. Approximately 1,755 cubic yards of contaminated soil was excavated and transported off-site for disposal.

(Sources: Dames & Moore 2000, URS 2008 – 2011, Fulcrum 2013 – 2015)

Site Diagrams



2000 Boring Locations

