

Second Periodic Review

Davis Construction 24517 26th Place South Des Moines, Washington 98198

> Facility Site ID#: 2237 Cleanup Site ID#: 1161

Completed by:
Washington State Department of Ecology
Northwest Region Office
Toxics Cleanup Program

January 2015

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1.0 INTRODUCTION

This document is a review by the Washington State Department of Ecology (Ecology) of post-cleanup site conditions and monitoring data to assure human health and the environment are being protected at the Davis Construction site (Site). Cleanup at this Site was implemented under the Model Toxics Control Act (MTCA) regulations, Chapter 173-340 Washington Administrative Code (WAC). This is the second periodic review for the Davis Construction Site. This review will evaluate the period from February 2009 through January 2015.

Cleanup activities at this Site were completed under the Voluntary Cleanup Program (VCP). The cleanup actions resulted in residual concentrations of total petroleum hydrocarbons (TPH) and lead in soil that exceed MTCA Method A cleanup levels established under WAC 173-340-740(2). As a result of residual contamination, institutional controls were required for the Site to be eligible for a No Further Action (NFA) determination. WAC 173-340-420(2) requires Ecology conduct a periodic review of a site every five years under the following conditions:

- 1. Whenever Ecology conducts a cleanup action.
- 2. Whenever Ecology approves a cleanup action under an order, agreed order or consent decree.
- 3. Or, as resources permit, whenever Ecology issues a no further action opinion
- 4. And one of the following conditions exists:
 - (a) Institutional controls or financial assurance are required as part of the cleanup.
 - (b) Where the cleanup level is based on a practical quantitation limit.
 - (c) Where, in Ecology's judgment, modifications to the default equations or assumptions using site-specific information would significantly increase the concentration of hazardous substances remaining at the site after cleanup or the uncertainty in the ecological evaluation or the reliability of the cleanup action is such that additional review is necessary to assure long-term protection of human health and the environment.

When evaluating whether human health and the environment are being protected, the factors Ecology shall consider include [WAC 173-340-420(4)]:

- (a) The effectiveness of ongoing or completed cleanup actions.
- (b) New scientific information for individual hazardous substances of mixtures present at the Site.
- (c) New applicable state and federal laws for hazardous substances present at the Site.
- (d) Current and projected Site use.
- (e) Availability and practicability of higher preference technologies.
- (f) The availability of improved analytical techniques to evaluate compliance with cleanup levels.

Ecology shall publish a notice of all periodic reviews in the Site Register and provide an opportunity for public comment.

2.0 SUMMARY OF SITE CONDITIONS

2.1 Site History

The Davis Construction Property consists of approximately 1.1 acres of land located at 24517 26th Place South in Des Moines, Washington. The Site was undeveloped until the early 1990s, when two apartment buildings were constructed at the Site. The Site is located in a residential neighborhood and is surrounded by residential properties on all sides. The Site is bordered by South 26th Place to the east, and State Highway 99 is located two blocks to the east.

A vicinity map is available as Appendix 6.1 and a Site plan is available as Appendix 6.2.

2.2 Cleanup Levels and Point of Compliance

WAC 173-340-704 states that MTCA Method A may be used to establish cleanup levels at sites that have few hazardous substances, are undergoing a routine cleanup action, and where numerical standards are available for all indicator hazardous substances in the media for which the Method A cleanup level is being used.

MTCA Method A cleanup levels for unrestricted land use were determined to be appropriate for contaminants at this Site. The cleanup actions conducted at the Site were determined to be 'routine', few hazardous substances were found at the Site, and numerical standards were available in the MTCA Method A table for each hazardous substance. It should be noted that the current MTCA Method A cleanup level for TPH-D is 2000 milligrams per kilogram (mg/kg). At the time of the cleanup action, the cleanup level for TPH-D was 200 mg/kg. Current MTCA Method A cleanup levels will be used to determine whether the cleanup actions completed at the Site remain protective of human health and the environment.

A summary of Site cleanup levels can be found in the table below:

Analyte	2001 MTCA Method A Soil Cleanup Level (ppm)	2001 MTCA Method A Groundwater Cleanup Level (ppb)
Lead	250	15
TPH-Gas	100/30	1000/800
TPH-Diesel	2000	500
TPH-Oil	2000	500

For soil, the point of compliance is the area where the soil cleanup levels must be attained. For this Site, the point of compliance is established as soils throughout the Site.

2.3 Site Investigations and Remedial Activities

Waste oil and sludge material from a property located across 26th Place South was moved to the Site in the mid-1980s. This material was then encountered during construction of the Victoria Place II apartments in 1989.

The property owner conducted an independent cleanup action at the Site in 1989. During the excavation of the contaminated soils from a 40 X 60 X 12 foot area, numerous drums of buried waste were encountered. These drums were excavated and disposed of at an unknown location by the former property owner, and the associated contaminated soil was moved to the vacant lots located on the opposite side of 26th Place South, to the property known as the Hauser Property where the contamination originated. The placement of the contaminated soil from the Davis Construction Site property, and contaminated soils already at the Hauser Property ultimately led to an Enforcement Order being issued by Ecology for the containment of this hazardous material. A final cleanup report for the Davis Property was then submitted to the King County Housing Authority, who was interested in purchasing the property. The final cleanup verification never included testing for lead, which was known to be present in the material, but was tested for TPH only.

Prior to the purchase of the Site by the King County Housing Authority in 1993, two apartment buildings were constructed at the Site. The buildings, the associated asphalt parking area, and the new landscaping surrounding the Site served to form a cap preventing direct human contact with any remaining contamination. The South King County Multi Services Center contracted with Environmental Associates, Inc. in 1993 to have a Phase I Environmental Inspection and Indoor Air and Soil Gas Survey conducted at the Site. This Inspection concluded that the Site was free from contamination by hazardous, dangerous or toxic substances.

Transglobal Environmental Services Northwest, Inc. conducted soil probe sampling at the Site in 1998. Lead was detected at a maximum concentration of 1,130 mg/kg and TPH was detected at a maximum concentration of 12,000 mg/kg. Contamination was not detected below the depth of 9 feet below ground surface (bgs). Groundwater was not detected in the deepest borings at the Site at a depth of 40 feet bgs. It was determined that the contamination remaining at the Site did not pose a threat to groundwater.

2.4 Institutional Controls

Following Site assessment activities, it was determined that the Site would be eligible for a no further action determination if institutional controls were implemented in the form of a restrictive covenant. A restrictive covenant was recorded for the Site in 2001 and Ecology issued a no further action determination shortly thereafter. The restrictive covenant contained the following limitations:

- 1. The property is zoned Multi-Family residential
- 2. Any activity on the property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited.
- 3. Any activity on the property that may result in the release or exposure to the environment of a hazardous substance that remains on the property as a part of the Remedial Action, or create a new exposure pathway, is prohibited without prior written approval from Ecology.
- 4. The owner of the property must give thirty (30) day advance written notice to Ecology of the owner's intent to convey any interest in the property. No conveyance of title,

- easement, lease, or other interest in the property shall be consummated by the owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action.
- 5. The owner must restrict leases to uses and activities consistent with the Restrictive Covenant and notify all lessees of the restrictions on the use of the property.
- 6. The owner must notify and obtain approval from Ecology prior to any use of the property that his inconsistent with the terms of this Restrictive Covenant. Ecology may approve any inconsistent use only after public notice and comment.
- 7. The owner shall allow authorized representatives of ecology the right to enter the property at reasonable times for the purpose of evaluating the Remedial Action, to take samples, to inspect remedial actions conducted at the property, and to inspect records that are related to the Remedial Action.
- 8. The owner of the property reserves the right under WAC 173-340-440 to record an instrument that provides that this Restrictive Covenant shall no longer limit use of the property or be of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs.

The restrictive covenant is available as Appendix 6.3.

3.0 PERIODIC REVIEW

3.1 Effectiveness of completed cleanup actions

3.1.1 Soil and Direct Contact

Based upon the Site visit conducted on January 14, 2015, the building and asphalt cover at the Site continue to eliminate exposure pathways (ingestion, contact) to contaminated soils. The asphalt appears in relatively good condition with minimal signs of cracking and it provides a sufficient barrier to direct contact exposure with contaminated soils. The Site is still occupied by residential apartment buildings. A photo log is available as Appendix 6.4.

3.1.2 Institutional Controls

The restrictive covenant for the Site was recorded and is active, as required to maintain the Site NFA determination. No instruments have been recorded that amend or rescind this covenant. This restrictive covenant prohibits activities that will result in the release of contaminants at the Site without Ecology's approval, and prohibits any use of the property that is inconsistent with the covenant. This restrictive covenant serves to ensure the long term integrity of the remedy.

3.1.3 Residual Saturation and Risk to Groundwater

The potential for petroleum-containing soils at the Site to release free phase product is minimal. Concentrations of TPH in soil exceed residual saturation screening levels; however, the maximum depth of contamination was 9 feet bgs, and the groundwater was not detected at the maximum depth of soil borings at 40 feet bgs. Since the majority of the TPH source material was removed prior to 1993, and there is significant separation between contaminated soils and groundwater, there is a very low probability that groundwater will be impacted by Site soils.

3.2 New scientific information for individual hazardous substances for mixtures present at the Site

There is no new scientific information for the petroleum contaminants related to the Site.

3.3 New applicable state and federal laws for hazardous substances present at the Site

The cleanup at the Site was governed by Chapter 173-340 WAC (1996 ed.). WAC 173-340-702(12) (c) [2001 ed.] provides that,

"A release cleaned up under the cleanup levels determined in (a) or (b) of this subsection shall not be subject to further cleanup action due solely to subsequent amendments to the provision in this chapter on cleanup levels, unless the department determines, on a case-by-case basis, that the previous cleanup action is no longer sufficiently protective of human health and the environment."

Although cleanup levels changed for gasoline, diesel, and volatile organic compounds as a result of modifications to MTCA in 2001, contamination remains at the Site above MTCA Method A cleanup levels and the cleanup action is still protective of human health and the environment.

3.4 Current and projected Site use

The Site is currently used for residential purposes. There have been no changes in current or projected future Site or resource uses, and the current Site use does not pose a threat to the integrity of the remedial action.

3.5 Availability and practicability of higher preference technologies

The remedy implemented included containment of hazardous substances, and it continues to be protective of human health and the environment. While higher preference cleanup technologies may be available, they are still not practicable at this Site.

3.6 Availability of improved analytical techniques to evaluate compliance with cleanup levels

The analytical methods used at the time of the remedial action were capable of detection below MTCA Method A cleanup levels. The presence of improved analytical techniques would not affect decisions or recommendations made for the Site.

4.0 CONCLUSIONS

- The cleanup actions completed at the Site appear to be protective of human health and the environment.
- Soil cleanup levels have not been met at the Site; however, the cleanup action is determined to comply with cleanup standards under WAC 173-340-740(6)(f), since the long-term integrity of the containment system is ensured and the requirements for containment technologies have been met.
- The covenant for the property is in place and will be effective in protecting public health and the environment from exposure to hazardous substances and protecting the integrity of the cleanup action.
- If the buildings are removed or replaced, contaminated soils beneath the Site must be remediated.

Based on this periodic review, Ecology has determined the restrictions in the restrictive covenant are being observed. No additional remedial actions are required by the property owner. It is the property owner's responsibility to continue to inspect the Site to assure that the integrity of the Site surface is maintained.

4.1 NEXT REVIEW

The next review for the Site will be scheduled five years from the date of this periodic review. In the event that additional cleanup actions or institutional controls are required, the next periodic review will be scheduled five years from the completion of those activities.

5.0 REFERENCES

Site Analysts. Preliminary Environmental Study of Soil for Davis Construction Company. 1989.

Hazcon. Final Report, Environmental Assessment – Phase I. 1992.

Environmental Associates, Inc. Phase I Environmental Inspection and Indoor Air and Soil Gas Survey. 1993.

Ecology. Soil Probe Sampling of the Davis Construction Site. 1998.

Ecology. No Further Action Determination. 1998.

Ecology. Restrictive Covenant. 1998.

Geologics. Subsurface Assessment. 2006.

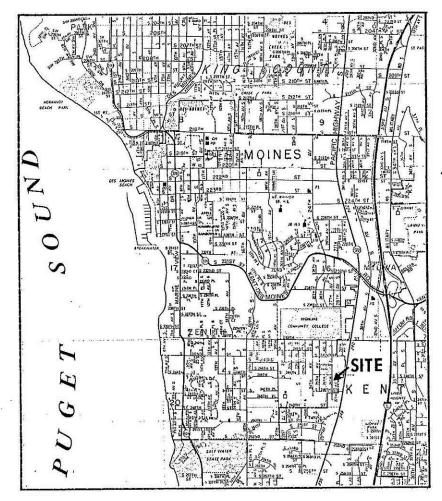
Ecology. Periodic Review. February 2009.

Ecology. Site Visit. January 14, 2015.

6.0 APPENDICES

6.1 Vicinity Map

VICINITY MAP

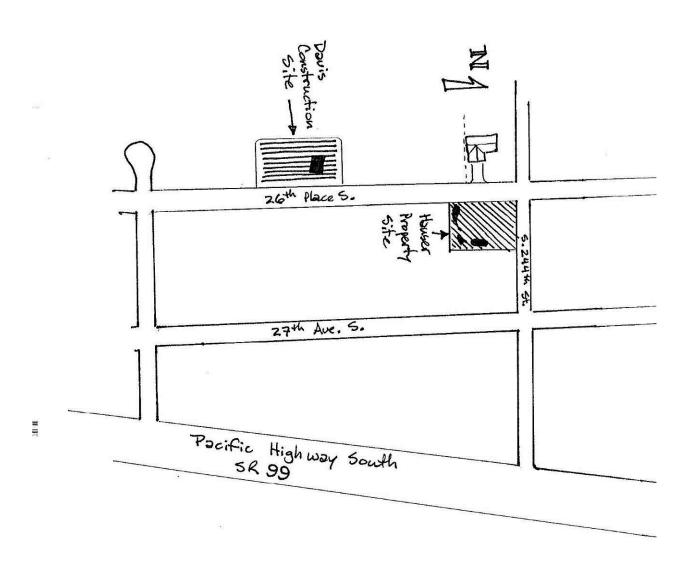


REFERENCE
KING COUNTY/ MAP 47
BY THOMAS BROTHERS MAPS
DATED 1987

SITE ANALYSTS, INC.

DECEMBER 1988
88-116 FIGURE 1

6.2 Site Plan



503 1

10.00

6.3 Environmental Covenant

S17. 2.1

AFTER RECORDING MAIL TO: South King County Multi-Service Center 1200 S. 336th Street Federal Way, WA 98003 Attn: Dini Duclos

RESTRICTIVE COVENANT

Richard M. Farage

This Declaration of Restrictive Covenant is made pursuant to RCW 70.105D.030 (1) (f) and (g) and WAC 173-340-440 by Richard M. Farage, on behalf of himself, and his successors and assigns, and by the State of Washington Department of Ecology, its successors and assigns (hereafter "Ecology").

An independent remedial action (hereafter "Remedial Action") occurred at the property that is the subject of this Restrictive Covenant. The Remedial Action conducted at the property is described in the following documents:

- Phase I, Environmental inspection and indoor air and soil gas survey, August 3, 1993 re Victorian Place II Apartments, 24512/24517 26th Place South, Des Moines, WA.
- Phase one, Environmental Assessment Report, dated August 20, 1991. 2.
- Victorian Place Phase II, Soil Test Report by Transglobal Environmental 3. Geosciences Northwest, Inc. dated June 12, 1998.
- 4. Site Analysts Report SA 88116 (November 1998).
- 5. Roy F. Weston Report #WO 5519-01-01 (May 1989)

These documents are on file at Ecology's Northwest Regional Office.

TX Acct No. 360740.0006
This Restrictive Covenant is required because the Remedial Action resulted in residual concentrations of petroleum and lead which exceed the Model Toxics Control Act Method A Residential Cleanup Levels for soil established under WAC 173-340-740. Residual concentrations of petroleum and lead which exceed the Model Toxics Control Act Method A Residential Cleanup Levels for soil established under WAC 173-340-740 under the sidewalk and possibly areas in the northeast corner of the property.

The undersigned, Richard M. Farage, is the fee owner of real property (hereafter "Property") in the

Recorded in Volume 17 of Plats, Page(s) 87, in King County, Washington;

Together with Lots 5 through 19, Inclusive, Block 15, Interurban Heights, Fourth Section, According to the Plat Thereof, Recorded in Volume 17 of Plats, Page(s) 86, in King County, Washington, Tax ID #360 240 0006-02.

Richard M. Farage (hereafter "Owner") makes the following declarations as to limitations, restrictions, and uses to which the property may be put and specifies that such declarations shall constitute covenants to run with the eland, as provided by law, and shall be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the property:

Section 1: The property is zoned Multi-Family residential

<u>Section 2</u>: Any activity on the property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited.

<u>Section 3</u>: Any activity on the property that may result in the release or exposure to the environment of a hazardous substance that remains on the property as part of the Remedial Action, or create a new exposure pathway, is prohibited without prior written approval from Ecology.

Section 4: The owner of the property must give thirty (30) day advance written notice to Ecology of the owner's intent to convey any interest in the property. No conveyance of title, easement, lease, or other interest in the property shall be consummated by the owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action.

<u>Section 5</u>: The owner must restrict leases to uses and activities consistent with the Restrictive Covenant and notify all lessees of the restrictions on the use of the property.

<u>Section 6</u>: The owner must notify and obtain approval from Ecology prior to any use of the property that is inconsistent with the terms of this Restrictive Covenant. Ecology may approve any inconsistent use only after public notice and comment.

<u>Section 7</u>: The owner shall allow authorized representatives of Ecology the right to enter the property at reasonable times for the purpose of evaluating the Remedial Action; to take samples, to inspect remedial actions conducted at the property, and to inspect records that are related to the Remedial Action.

DONE this 12 day of Albust, 1998.

Richard M. Farage

SUBSCRIBED AND SWORN to before me this 12 day of August, 1998.

Trancaw +a

Print Name: Francine Lagens

NOTARY PUBLIC in and for the State of Washington, residing at

My Commission Expires: 5/21/2002

6.4 Photo Log

Photo 1: Davis Construction Site - from the northeast



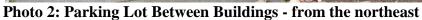




Photo 3: 26th Place and Surrounding Land Use - from the south



Photo 4: Landscaped Areas Around Apartment Buildings – from the northeast

