



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

March 20, 2013

Mr. Bruce Bodine
Bodine Enterprises Inc.
9020 Lake Steilacoom Pt Rd SW
Lakewood, WA 98498

Re: No Further Action at the following Site:

- **Site Name:** Pierce Transit Sprague Ave.
- **Site Address:** 1279 S Sprague Ave. Tacoma, WA 98405
- **Facility/Site No.:** 17111391
- **Cleanup Site ID No.:** 3890
- **VCP Project No.:** SW0450

Dear Mr. Bodine:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Pierce Transit Sprague Ave. 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 dependent on the continued performance and effectiveness of the post-cleanup controls and monitoring specified below.~~

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 Constituents in the Soil and Groundwater.

Please note that 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. Phase I/Limited Phase II Environmental Site Assessment Automall Property, 1401 Sprague Avenue South, Tacoma, Washington, dated March 19, 2007 by Adapt Engineering Inc.
2. Site Investigation Activities – 1401 S. Sprague, Preliminary Report of Findings, dated April 17, 2007 by Robinson Noble Saltbush, Inc. (Robinson-Noble).
3. Groundwater Sampling Report and Additional Investigation Work Plan, 1401 South Sprague, Sprague Street Shell, Tacoma, Washington, dated September 8, 2008 by Robinson-Noble.
4. 1401 Sprague Avenue, Tacoma, WA – Sign Area Quarterly Monitoring, dated November 24, 2008 by Robinson-Noble.

These 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 this document 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 below.

The Site is located at 1279 S. Sprague Ave. in Tacoma, Pierce County, Washington. The Site is a nearly rectangular-shaped parcel of land, comprising 3.56 acres. The Site was previously occupied by the former Pierce Transit Maintenance and Operations Facility from approximately 1948 until 1987. According to archive documents, this facility was comprised of underground storage tanks (USTs), a fueling station, two oil-water separators, six service pits, hydraulic hoists, and chemical storage areas. The Site was redeveloped into the current self-storage facility in 1995. In addition, the southwest corner of the Site was developed as a Shell gas station and convenience store with four pump islands and three USTs.

Applied Technology, Inc. (ATI) conducted a subsurface investigation and subsequent remediation in April 1991 associated with a waste oil line leak and other contaminated areas at the Site associated with the maintenance building.

In the process of installing a sign on the northwest corner of the Site, petroleum-contaminated soil (PCS) and groundwater was encountered in the approximate area of one of the previous Pierce Transit Facility oil/water separators. ATI conducted a subsurface investigation and subsequent remediation associated with PCS and groundwater. Based on a review of ATI's Site Remediation activities in 1991 and Robinson-Noble's letter to Ecology in October 2002, Ecology granted the Parcel a *No Further Action* status with a restrictive covenant for the residual PCS that remained in place beneath the maintenance building.

Adapt Engineering conducted a Phase I Environmental Site Assessment (ESA)/Limited Phase II ESA at the Site in March 2007 at the request of a potential buyer. Six geoprobe borings were advanced to depth of up to 12 feet below ground surface (bgs) from which soil and groundwater samples were collected. Groundwater analytical results from a geoprobe boring located in the northwest corner of the Site (GP-1) indicated elevated concentrations of gasoline-range total petroleum hydrocarbons (TPH-Gx), diesel-range TPH (TPH-Dx), and heavy oil-range TPH (TPH-O) (at 3,100 micrograms per liter [$\mu\text{g/L}$], 29,000 $\mu\text{g/L}$, and 63,000 $\mu\text{g/L}$, respectively). These concentrations are above Ecology MTCA Method A groundwater cleanup levels for these constituents at 800 $\mu\text{g/L}$, 500 $\mu\text{g/L}$, and 500 $\mu\text{g/L}$, respectively. This boring was near the former oil/water separator and sign excavation mentioned previously. As a result of this investigation, Ecology rescinded the previously issued No Further Action and the Site re-entered the Voluntary Cleanup Program.

Robinson-Noble advanced eight soil borings in April 2007 near the location of previously detected exceedances (GP-1). At the same time, three groundwater monitoring wells (RNS MW-1 through RNS MW-3) were installed adjacent to and surrounding GP-1. Groundwater flow direction in the sign area was measured and documented to flow to the west with a slight southerly component. Groundwater samples were collected from each of the three wells and none of the tested constituents were found above their respective MTCA Method

A Cleanup Levels. Groundwater samples were collected again in June 2008. None of the tested constituents [TPH-Gx, TPH-Dx, benzene, toluene, ethylbenzene, xylenes (BTEX), and carcinogenic polycyclic aromatic hydrocarbons (cPAHs)] were found above the laboratory method detection limits.

Following discussions with Ecology, it was recommended that a long-term groundwater monitoring plan be prepared and appended to the Environmental Covenant on the Site.

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.

a. Cleanup levels.

MTCA Method A Cleanup Levels for unrestricted land use for soil and groundwater were used to characterize the Site.

b. Points of compliance.

Standard points of compliance were used for the Site. The point of compliance for protection of groundwater was established in the soils 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 was established in the soils throughout the Site from the ground surface to 15 feet bgs. In addition, the point of compliance for the groundwater was established throughout the Site from the uppermost level of the saturated zone extending vertically to the lowest most depth that could potentially be affected by the Site.

3. Selection of cleanup action.

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

Cleanup actions conducted at the Site to date have included the excavation and off-Site disposal of PCS and groundwater.

4. Cleanup.

Ecology has determined the cleanup you performed meets the cleanup standards established for the Site. This determination is dependent on the continued performance and effectiveness of the post-cleanup controls and monitoring specified below.

Approximately 3,700 cubic yards of PCS was excavated and disposed of during the remediation activities. Additionally, an estimated 45,000 gallons of oily water was pumped from on-Site excavations. The original building walls and foundation were left in place and PCS remains at the Site beneath the footings of the maintenance building along the north wall and beneath portions of the west and east walls at the northwest and northeast corners of the maintenance building.

An environmental covenant has been prepared and filed on Title. This covenant documents the location of impacted soils greater than the MTCA Method A Cleanup Levels that were not able to be removed during the cleanup of the Site. In addition, a long-term groundwater monitoring plan has also been appended to the Covenant and outlines an 18-month sampling interval for the three groundwater wells in the area of the remaining PCS (RNS MW-1 through RNS MW-3). The testing regime for these events includes TPH-Gx, TPH-Dx, TPH-O, cPAHs, BTEX, and naphthalene.

Post-Cleanup Controls and Monitoring

Post-cleanup controls and monitoring are remedial actions performed after the cleanup to maintain compliance with cleanup standards. This opinion is dependent on the continued performance and effectiveness of the following:

1. Compliance with institutional controls.

Institutional controls prohibit or limit activities that may interfere with the integrity of engineered controls or result in exposure to hazardous substances. The following institutional control is necessary at the Site:

- Restriction on land and groundwater use.
-

To implement that control, an Environmental Covenant has been recorded on the following parcel of real property in Pierce County:

- 0320057006.

Ecology approved the recorded Covenant. A copy of the Covenant is included in **Enclosure A.**

2. Performance of confirmational monitoring.

Confirmational monitoring is necessary at the Site to confirm the long-term effectiveness of the cleanup. The monitoring data will be used by Ecology during periodic reviews of post-cleanup conditions. Ecology has approved the monitoring plan you submitted. A copy of the plan is included in **Enclosure A**.

Periodic Review of Post-Cleanup Conditions

Ecology will conduct periodic reviews of post-cleanup conditions at the Site to ensure that they remain protective of human health and the environment. If Ecology determines, based on a periodic review, that further remedial action is necessary at the Site, then Ecology will withdraw this opinion.

Listing of the Site

Based on this opinion, Ecology will remove the Site from our Confirmed and Suspected Contaminated Sites List.

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.

Mr. Bruce Bodine
March 20, 2013
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3. State is immune from liability.

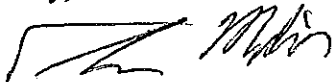
The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. See RCW 70.105D.030(1)(i).

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 (#SW0450)

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 or the termination of the Agreement, please contact me by phone at 360-407-7263 or e-mail at tmid461@ecy.wa.gov.

Sincerely,



Thomas Middleton L.H.G.
SWRO Toxics Cleanup Program

TMM/ksc:Pierce SW0450 Transit Maintenance Shop ENV COV NFA

Enclosures:

Figure 1 – Aerial Map of Property

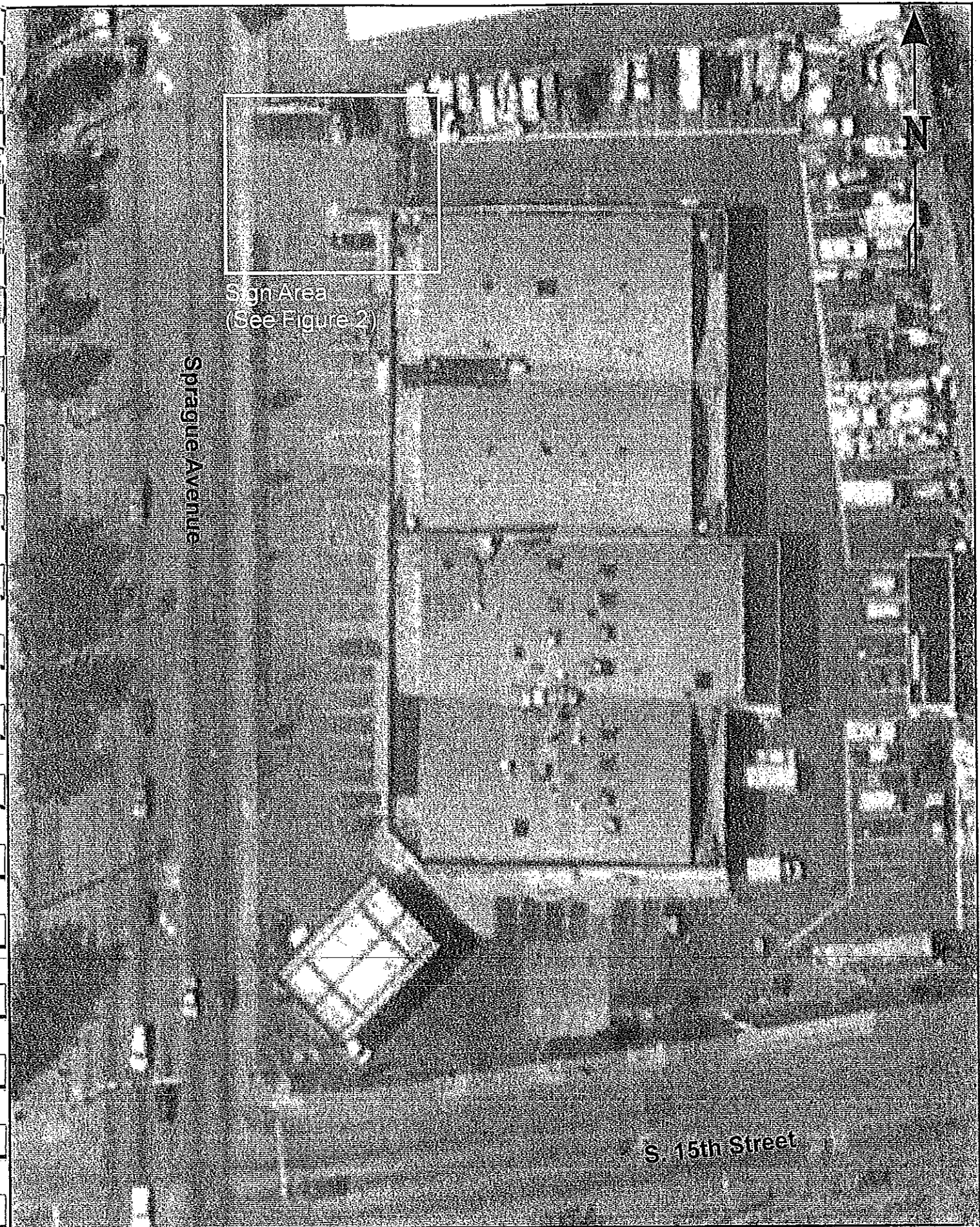
Figure 2 – North End & Sign Area Potentiometric Surface Contour Map

Table 3 – Sign Area Selected Analytical Results

A – Restrictive Environmental Covenant and Long Term Groundwater Monitoring Plan

By certified mail: (7010 0780 0002 3403 4890)

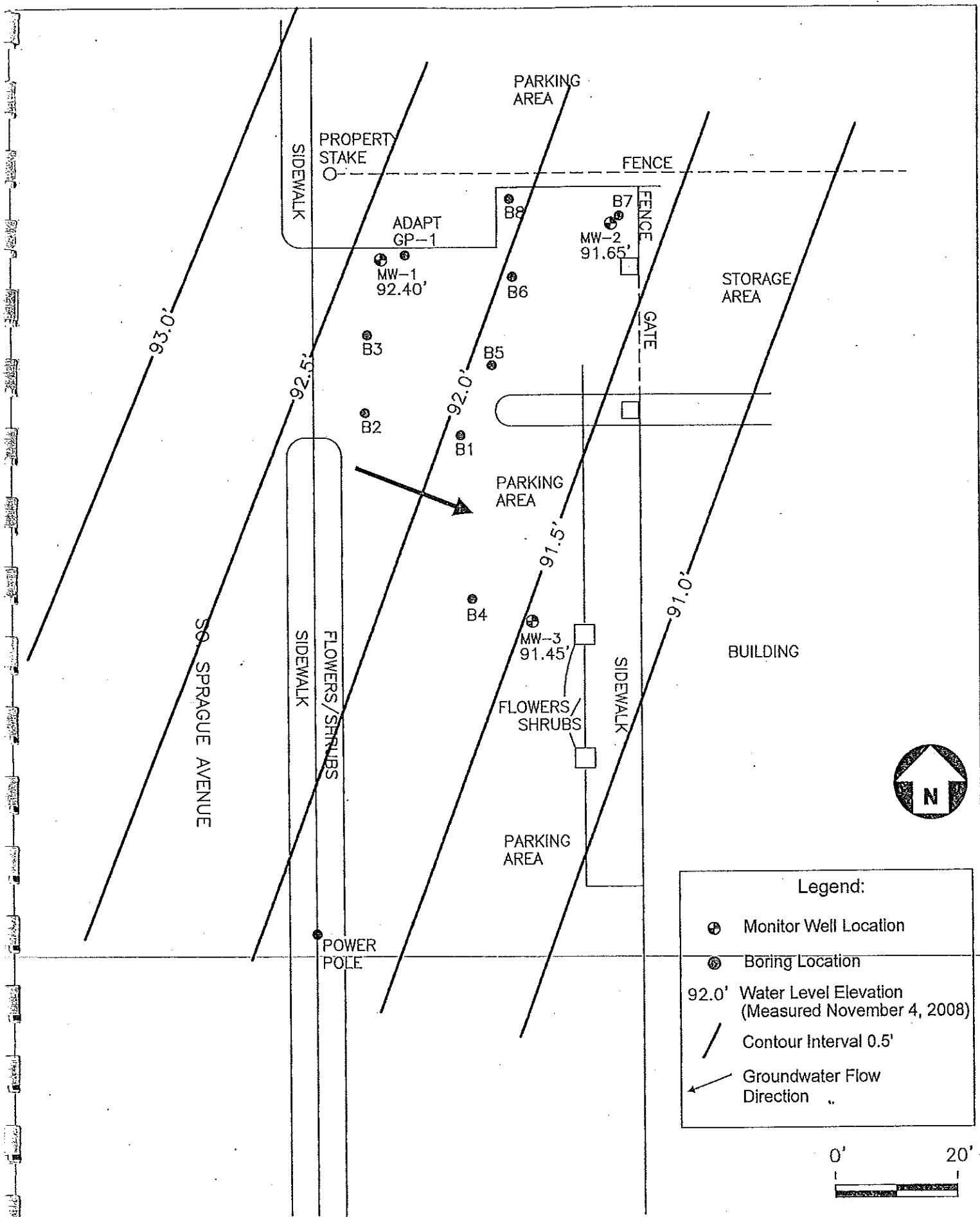
cc: Mr. John Hildenbrand Robinson, Noble, & Saltbush
Rob Olsen Pierce Co Health Dept
Carol Johnston – Ecology
Scott Rose – Ecology
Dolores Mitchell – Ecology (w/o enclosures)



Sign Area
(See Figure 2)

Sprague Avenue

S. 15th Street



three feet due to the recent heavy rainfall occurring in the six-day period between measurements. Although the water levels rose by two feet, the gradient slope of the water table remained largely unchanged. The gradient direction was a bit more southerly.

On November 4th, a peristaltic pump and dedicated tubing was used to sample each well. Samples were collected after at least three volumes of water were purged from the wells and field measurements of temperature, specific conductivity, total dissolved solids, dissolved oxygen, pH, and oxidation-reduction potential had stabilized (within measurement error limits). The groundwater monitoring field sampling records for each monitoring well are attached to this document.

After purging and stabilization, the samples were collected at low flow volumes and placed into laboratory-supplied, pre-cleaned containers. Two volatile organic analysis (VOA) containers and two, one-liter ambers were collected from each monitoring well. The VOA containers were preserved with hydrochloric acid; no preservative was required within the amber glass bottles.

The samples were stored in a laboratory supplied thick-walled cooler containing blue ice. The samples were delivered to Libby Environmental of Olympia, Washington the following day and submitted for analysis using Ecology NWTPH-GX, Ecology NWTPH-Dx/Dx Extended, EPA Method 8021B, and EPA Method 8270C. The complete analytical results for the sign area are attached to this document. Table 3, below, displays a summary of the analysis.

Table 3. Selected Analytical Results - Petroleum Hydrocarbons in Groundwater (µg/L)

Well No. / Analyte	Gas <100	Benzene	Diesel	Mineral Oil	Oil
RNS MW-1	<100	<1.0	<200	<400	<400
RNS MW2	<100	<1.0	<200	<400	<400
RNS MW3	<100	<1.0	<200	<400	<400
MTCA Method A	1,000	5.0	500	500	500

As summarized in Table 3, the analytical results of the November 4, 2008 sampling event indicate no detections of gasoline, benzene, diesel-range hydrocarbons, mineral oil-range hydrocarbons, and oil-range hydrocarbons above the laboratory detection limits, which are below the MTCA Method A cleanup levels for ground water. Additionally, levels of toluene, ethylbenzene, total xylenes, and polycyclic aromatic hydrocarbons carcinogens (benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, and dibenzo(a,h)anthracene) were all reported below laboratory detection limits and below the respective MTCA Method A cleanup levels. These results are consistent with earlier Robinson, Noble & Saltbush monitoring of the sign area and indicate minimal to no contamination within the ground water near the sign area. These results are consistent with the original NFA granted for the cleanup of the sign area.

Sign Area Summary

Monitoring of the first operable unit of the site, the sign area, has not revealed any indication of groundwater contamination. The original "No Further Action" designation appears to have been

201212120236 CCOMITA 14 PGS
12/12/2012 10:43:17 AM \$85.00
AUDITOR, Pierce County, WASHINGTON

RECEIVED

DEC 26 2012

Name & Return Address:

Tom Middleton, WA. Dept. of Ecology, SWRO

WA State Department
of Ecology (SWRO)

PO Box 47775

Olympia, WA 98504-7775

AUDITOR'S NOTE
LEGIBILITY FOR RECORDING AND COPYING UN-
SATISFACTORY IN A PORTION OF THIS INSTRU-
MENT WHEN RECEIVED

Please print legibly or type information.

Document Title(s) Environmental Covenant

Grantor(s) Sprague Maxi-Space LLC

____ Additional Names on Page ____ of Document

Grantee(s) State of Washington , Department of Ecology

____ Additional Names on Page ____ of Document

Legal Description (Abbreviated: i.e., lot, block & subdivision name or number OR
section/township/range and quarter/quarter section)

Section 05, Township 20N, Range 03 E Quarter 3 2

Complete Legal Description on Page 2-3 of Document

Auditor's Reference Number(s)

Assessor's Property Tax Parcel/Account Number(s)

0320057006

The Auditor/Recorder will rely on the information provided on this cover sheet. The Staff will not read the document to verify the accuracy or completeness of the indexing information provided herein.

I am requesting an emergency nonstandard recording for an additional fee as provided in RCW 36.18.010. I understand that the recording processing requirements may cover up or otherwise obscure some part of the text of the original document.

Signature of Requesting Party (Required for non-standard recordings only)

Gpcovst.doc rev 4/02

RECEIVED

OCT 04 2012

Restrictive (Environmental) Covenant WA State Department
of Ecology (SWRO)

After Recording Return to:
Tom Middleton
Toxic Cleanup Program
Southwest Regional Office
Department of Ecology
P.O. Box 47775
Olympia, WA 98504-7775

RECEIVED

DEC 26 2012

WA State Department
of Ecology (SWRO)

Environmental Covenant

Grantor: SPRAGUE MAXI-SPACE LLC

Grantee: State of Washington, Department of Ecology

Legal: The tax legal description is Section 05 Township 20 Range 03 Quarter 32 : PARCEL D OF DBLR 90-02-26-0171 BEG AT SE COR L 4 SP 88-07-12-0354 TH ALG SLY LI OF SD LOT 4 S 80 DEG 59 MIN 00 SEC W 297.55 FT TO SWLY MOST COR SD L 4 TH N 09 DEG 51 MIN 15 SEC W 68.82 FT TH N 00 DEG 44 MIN 49 SEC W 157.25 FT TH N 00 DEG 00 MIN 00 SEC E 137.15 FT TH N 81 DEG 17 MIN 44 SEC E 251.56 FT TH S 08 DEG 00 MIN 53 SEC W 60.03 FT TH N 81 DEG 00 MIN 53 SEC E 4.00 FT TH S 08 DEG 50 MIN 22 SEC E 298.50 FT TO POB FORMERLY POR LOT 4 SP 88-07-12-0354 OUT OF 3-001 SEG A0545BL5-17-90AT

The Real Property or its address is commonly known as 1401 S. Sprague Avenue, Tacoma, WA 98405. The Real Property tax identification number is 032005-7-006

Tax Parcel No.: 0320057006

Grantor, SPRAGUE MAXI-SPACE LLC, hereby binds Grantor, its successors and assigns to the land use restrictions identified herein and grants such other rights under this environmental covenant (hereafter "Covenant") made this day of _____, 2012 in favor of the State of Washington Department of Ecology (Ecology). Ecology shall have full right of enforcement of the rights conveyed under this Covenant pursuant to the Model Toxics Control Act, RCW 70.105D.030(1)(g), and the Uniform Environmental Covenants Act, 2007 Wash. Laws ch. 104, sec. 12.

This Declaration of Covenant is made pursuant to RCW 70.105D.030(1)(f) and (g) and WAC 173-340-440 by SPRAGUE MAXI-SPACE LLC, its successors and assigns, and the State of Washington Department of Ecology, its successors and assigns (hereafter "Ecology").

A remedial action (hereafter "Remedial Action") occurred at the property that is the subject of this Covenant. The Remedial Action conducted at the property is described in the following document[s]:

1. Final Report, Site Remediation, Former Pierce Transit Maintenance Facility, Applied Geotechnology, April 1991
2. Letter Reports, Columbia Environmental, Inc. April 1991, September 1995 and October 1995
3. Letter re: preliminary investigation findings, Robinson Noble, Inc., April 2007
4. 1401 Sprague Street Groundwater Sampling Report and Additional Investigation Work Plan, Robinson Noble inc., September 2008
5. Groundwater Monitoring Report, Robinson Noble, Inc., November 2008
6. Long-term groundwater monitoring Plan, Robinson Noble, Inc, February 2012
(Attachment A)

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

This Covenant is required because the Remedial Action resulted in residual concentrations of oil-range petroleum hydrocarbons which exceed the Model Toxics Control Act Method A Cleanup Level for SOIL established under WAC 173-340-740.

The undersigned, **SPRAGUE MAXI-SPACE LLC**, is the fee owner of real property (hereafter "Property") in the County of Pierce, State of Washington, that is subject to this Covenant. The Property is legally described AS FOLLOWS:

Beginning at the southeast corner of Lot 4, City of Tacoma Short Plat Number 8807120354, according to the Plat thereof, recorded July 12, 1988, in Pierce County, Washington:

Thence along the southerly line of said Lot 4 south 80 59' 00" west, 297.55 feet to the southwesterly most corner of said Lot 4:

Thence north 09 51' 15" west, 68.82 feet;

Thence north 00 44' 49" west, 157.25 feet;

Thence north 00 00' 00" east, 137.15 feet;

Thence north 81 17' 44" east, 251.56 feet;

Thence south 08 50' 22" east, 60.03 feet;

Thence north 81 00' 53" east, 4.00 feet;

Thence south 08 50' 22" east, 298.50 feet to the point of beginning, being a portion of Lot 4 of Short Plat 8807120354

(ALSO KNOWN AS Parcel D of Boundary Line Adjustment recorded under Recording Number 9002260171.) The Real Property or its address is commonly known as 1401 S. Sprague Avenue, Tacoma, WA 98405. The Real Property tax identification number is 032005-7-006

SPRAGUE MAXI-SPACE LLC makes the following declaration 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 land, 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 (hereafter "Owner").

Section 1. A portion of the Property contains diesel-, and oil-range petroleum hydrocarbons contaminated soil located beneath footings along the north wall and beneath portion of the east and west walls at the northeast and northwest corners of the existing building. Additional areas are located near the center of the north room or the former maintenance building near the vicinity of the hydraulic hoist shown in the figures of the final report filed by Applied Geotechnology, Inc. (April 1991) along with a limited amount of contaminated soil in the vicinity of the sign located on the northwest corner of the property. The Owner shall not alter, modify, or remove the existing structure[s] in any manner that may result in the release or exposure to the environment of that contaminated soil or create a new exposure pathway without prior written approval from Ecology."

In addition, long-term groundwater monitoring has been and is being implemented at the Property to ensure that the implemented Remedial Action remains protective of groundwater. Groundwater is being monitored for gasoline, diesel, oil, carcinogenic polycyclic aromatic hydrocarbons, benzene, toluene, ethylbenzene, xylenes, and naphthalene on a schedule consistent with the Ecology-approved Long Term Groundwater Monitoring Plan (Robinson Noble, Inc, February 2012) which is included as Attachment A.

Section 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.

Section 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 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.

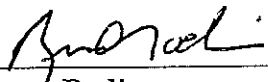
Section 5. The Owner must restrict leases to uses and activities consistent with the Covenant and notify all lessees of the restrictions on the use of the Property.

Section 6. The Owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Covenant. Ecology may approve any inconsistent use only after public notice and comment.

Section 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, to determine compliance with this Covenant, and to inspect records that are related to the Remedial Action.

Section 8. The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this 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.

SPRAGUE MAXI-SPACE LLC



Bruce Bodine

Dated: June 10, 2012

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Rebecca S. Lawson

[Rebecca S. Lawson, P.E., LHG]
Section Manager, Toxics Cleanup Program, SWRO

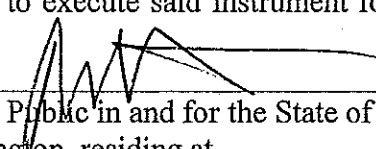
Dated: 10/29/12

[CORPORATE ACKNOWLEDGMENT]

STATE OF WASHINGTON
COUNTY OF PIERCE

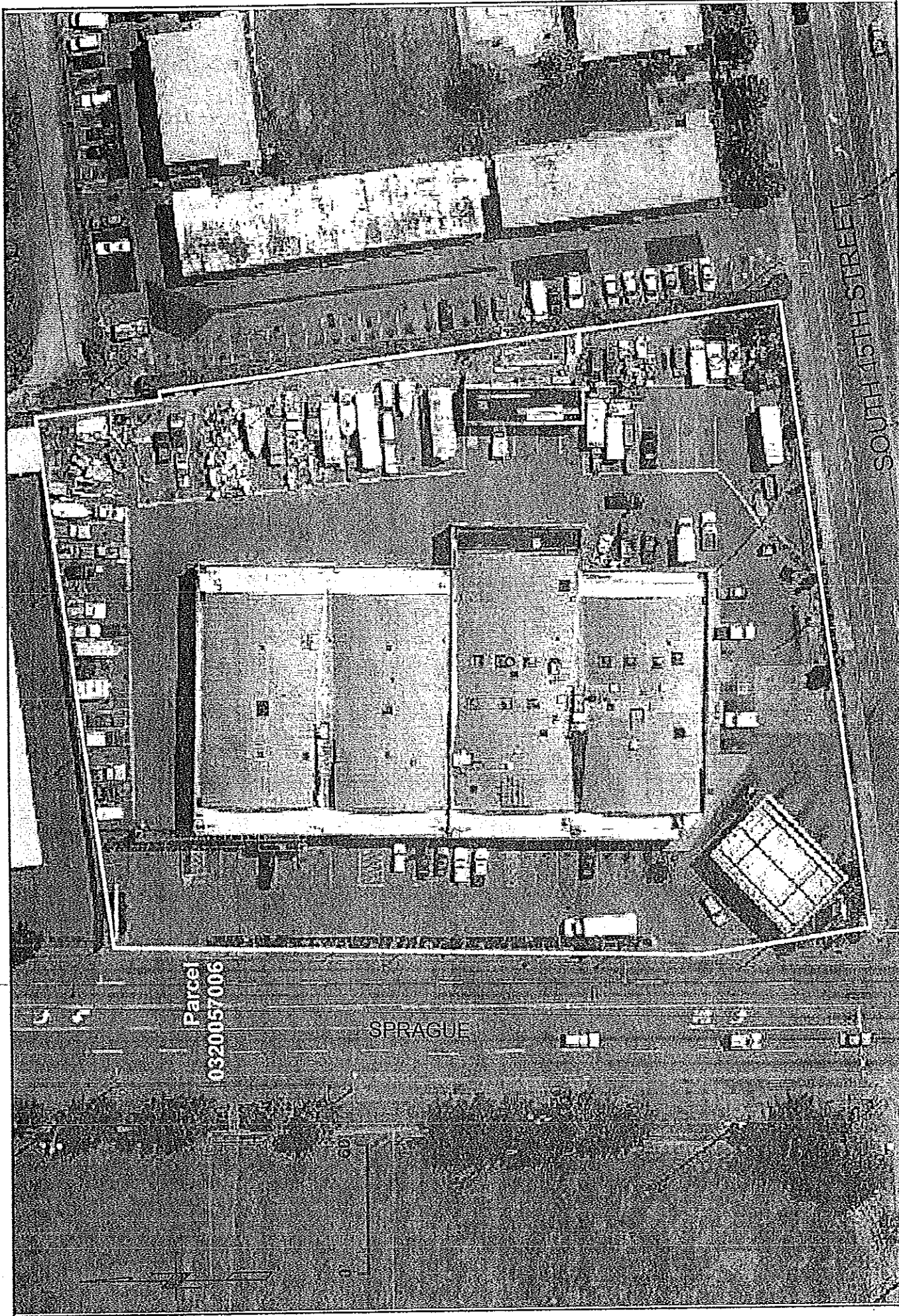
On this 18th day of JUNE, 2012, I certify that BRUCE DODSON personally appeared before me, acknowledged that he/she is the MANAGING MEMBER of the corporation that executed the within and foregoing instrument, and signed said instrument by free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that he/she was authorized to execute said instrument for said corporation.




Notary Public in and for the State of
Washington, residing at

TACOMA WA.

My appointment
expires 7-18-15



 ROBINSON NOBLE	Note: Image taken from City of Tacoma govME website	PM: JFH June 2012 2144-004C	Pierce County T 20 N/R 03 E - 05 Scale 1" = 60'	Figure 1 Former Pierce County Maintenance Facility Parcel Boundary Bodine Enterprises: 1401 S. Sprague/Sign Area
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ENVIRONMENTAL COVENANT - ATTACHMENT A
BODINE SPRAGUE SIGN AREA (VCP SW0450)
1401 Sprague Avenue, Tacoma, Washington
Long-Term Groundwater Monitoring Plan
June 2012

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TABLES

TABLE 1 PROPOSED SAMPLING DATES: FIRST FIVE-YEAR INTERVAL
TABLE 2 CONTAMINANTS OF CONCERN

FIGURES

FIGURE 1 AREAS OF RESIDUAL CONTAMINATED SOIL
FIGURE 2 SIGN AREA MONITOR WELL LOCATION MAP



ENVIRONMENTAL COVENANT - ATTACHMENT A

BODINE SPRAGUE SIGN AREA (VCP SW0450)

1401 Sprague Avenue, Tacoma, Washington

Long-Term Groundwater Monitoring Plan

June 2012

1.0 Introduction

1.1 Purpose and Site Identification

This work plan details the post-no-further-action groundwater monitoring required by environmental covenant for the Bodine Sprague sign area located at 1401 Sprague Avenue, Tacoma, Washington. Figure 1, displays the location of the sign area on the subject site. The sign area is one of the two areas on the subject site being addressed under the Washington State Department of Ecology (Ecology) volunteer cleanup program (VCP). This area contains three monitoring wells. The location of the three monitoring wells is displayed in Figure 2.

2.0 Background

The sign area encompasses portions of the subject impacted by oil-range hydrocarbons in soil previously addressed by a "no-further-action" (NFA) designation. This previous NFA is known to Ecology as being for the Pierce Transit Maintenance Facility. In 2007, Adapt Engineering reported detections of oil-range hydrocarbons in groundwater during a Phase I and Phase II environmental site assessment near the location of the sign area. Subsequent investigations conducted by Robinson Noble, Inc. indicated no contamination occurs within the area addressed by the original NFA. This monitoring plan is designed to comply with long-term monitoring provisions of the environmental covenant required to reestablish the NFA for this area.

Previous efforts have established that groundwater concentrations of oil-range organics do not exceed MTCA Method A groundwater levels. However, some soil contamination has been shown to remain underneath a sign post. Implementation of institutional controls has been selected as the most appropriate closure mechanism for this residual soil impact. These controls are specified in the environmental covenant to which this long-term monitoring plan is appended.

3.0 Periodic Monitoring

3.1 Schedule

The three existing monitoring wells will be sampled at 18-month intervals for a minimum of 5 years. The first monitoring event will occur in June 2012. Each additional sampling event will be completed every 18 months thereafter. The following table shows the anticipated month and year of the sampling events:

Table 1. Proposed sampling dates: First five-year interval

Event *	Date
1	June 2012
2	December 2013
3	June 2015
4	December 2016

*To reoccur on an 18-month interval, unless Ecology approves a change in frequency.

After completion of the first five-year interval, Ecology will be asked to review the data and determine whether or not monitoring can be terminated.

3.2 Methodology

Prior to sampling, water levels will be sounded and the wells opened and allowed to stabilize. Water levels from the three wells will be used to calculate the groundwater gradient which will be presented in the monitoring report.

A peristaltic pump and dedicated tubing will be used to sample each well. Samples will be collected after at least three volumes of water are purged from the wells and field measurements of temperature, conductivity, total dissolved solids, and dissolved oxygen stabilize (within measurement error limits).

The collected water samples will be placed into laboratory-supplied, pre-cleaned containers with proper preservatives for delivery to an accredited laboratory. The samples will be transferred to in a laboratory-supplied, thick-walled cooler containing blue ice. The samples will then be delivered to Libby Environmental, Inc. of Olympia, Washington. The samples will be analyzed using Ecology NWTPH Gx, NWTPH-Dx/Dx Extended, EPA Method 8260C, and EPA Method 8270C for the following contaminants of concern.

Table 2. Contaminants of concern

Analyte	MTCA Method A Cleanup Levels (µg/L)
Gasoline	800
Diesel	500
Oil	500
cPAH	0.1
Benzene	5
Toluene	1,000
Ethylbenzene	700
Xylenes	1,000
Naphthalene	160

4.0 Quality Assurance/Quality Control (QA/QC)

4.1 Daily Field QA/QC

The project manager will review documentation including sample logs, custody forms, and field logs prior to samples being delivered to the laboratory. Review will be done for completeness, accuracy, and consistency.

4.2 Sample Packaging and Shipping

The groundwater samples collected for chemical analysis will be kept out of direct sunlight and checked for label completeness and cap tightness. All samples submitted to the laboratory shall be thermally preserved in the field (four degrees Celsius) immediately after sample collection by placing them upright in a pre-cooled, insulated ice chest containing uncontaminated blue ice. Only coolers constructed of plastic or fiberglass standard to those provided by environmental analytic laboratories will be used. The coolers will not have drains.

4.3 Chain-of-Custody

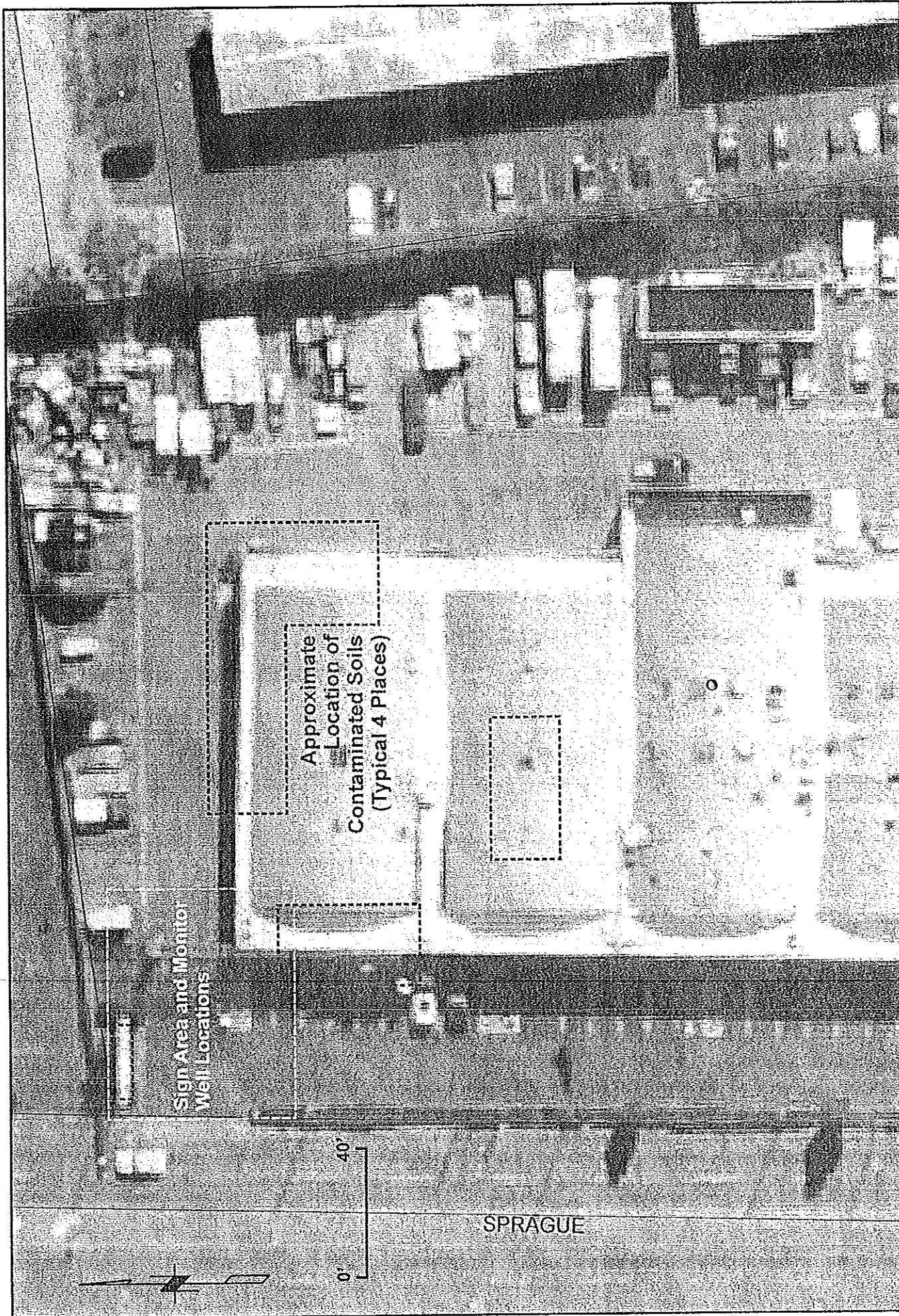
A chain-of-custody form will accompany samples submitted to the laboratory.

4.4 Laboratory QA/QC

A narrative regarding quality assurance and quality control will be provided with the laboratory analysis reports. This narrative will indicate whether or not quality control is within acceptable limits.

5.0 Reporting

Each monitoring event will be documented in a report that will be submitted to Ecology. The report will document the collection and analysis of the samples, present the analytical data, and comment on the quality assurance and quality control for the project. The report will include interpretation of the data and include any recommendations that the data may warrant.



 ROBINSON NOBLE	Note: Image taken from City of Tacoma govME website	PM: JFH June 2012 2144-004C	Pierce County T 20 N/R 03 E - 05 Scale 1" = 40'	Figure 1 Areas of Residual Contaminated Soil Bodine Enterprises: 1401 S. Sprague/Sign Area
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