

Third Periodic Review

Brand – X Station Facility/Site ID #: 521 Cleanup Site ID #: 4934 1705 West Lincoln Avenue Yakima, Washington 98902

Prepared by:
Washington State Department of Ecology
Central Regional Office
Toxics Cleanup Program

February 2019

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1.0 INTRODUCTION

This document is the Washington State Department of Ecology's third periodic review of post-cleanup site conditions and monitoring data to assure that human health and the environment are being protected at the former Brand-X site (Site). The Cleanup at this Site was implemented under the Model Toxics Control Act (MTCA), Chapter 173-340 of the Washington Administrative Code (WAC). The last periodic review for this Site was completed in August 2013. This periodic review will evaluate the period from 2013 through 2018.

Cleanup actions at this Site were completed under the Voluntary Cleanup Program as VCP No. CE0090. The cleanup actions resulted in residual concentrations of gasoline range petroleum hydrocarbons (TPH-G) exceeding MTCA Method A cleanup levels for soil 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 that Ecology conduct a periodic review of a site every five years under the following conditions:

- (a) Whenever the department conducts a cleanup action
- (b) Whenever the department approves a cleanup action under an order, agreed order or consent decree
- (c) Or, as resources permit, whenever the department issues a no further action opinion
- (d) And one of the following conditions exists:
 - 1. Institutional controls or financial assurance are required as part of the cleanup
 - 2. Where the cleanup level is based on a practical quantitation limit
 - 3. Where, in the department'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 the department 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; and
- (f) The availability of improved analytical techniques to evaluate compliance with cleanup levels.

2.0 SUMMARY OF SITE CONDITIONS

2.1 Site History

The Brand X Station Site is located in the City of Yakima, Yakima County, Washington. The station was reportedly constructed by 1971. The station was active for approximately 20 years until its closure in mid-1991. Fuel storage at the Site utilized three 10,000-gallon underground storage tanks (USTs) that contained regular and unleaded gasoline and gasohol. The tanks were located in a common excavation area on the north center portion of the Site. Four dispensing islands and an attendant booth were located south of the UST nest. Each dispensing island contained three pumps, one for each type of fuel. A vicinity map is available as Appendix 6.1 and a Site plan is available as Appendix 6.2.

In 1988, a leaking flange on a submersible pump resulted in a release of 1,200 to 1,500 gallons of gasohol from an underground storage tank at the Site. This release resulted in vapor intrusion into the basement of a nearby residence.

2.2 Site Investigations and Remedial Actions

Following discovery of the fuel release in 1998, interim remedial actions including repair of the leaking flange and the installation and operation of a groundwater pump and treat remediation system were implemented. The groundwater treatment system consisted of a recovery well, granular activated carbon (GAC) units, and a soil vapor extraction system (SVE). The groundwater treatment system pumped water from the recovery well at approximately 40 gallons per minute. The recovered groundwater was passed through the GAC units and discharged to the city sewer system. The SVE system created a vacuum on the recovery well and discharge soil vapors directly to the atmosphere. The groundwater remediation system was operated until 1990 when contaminants were no longer detectable in the discharge from the groundwater extraction well. Approximately 6.4 million gallons of groundwater were extracted and treated with this system.

Groundwater monitoring continued until 1991 when it was halted due to insufficient funding and bankruptcy of the R.H. Bowles Company. The three remaining USTs were closed in the fall of 1992. Following the UST closure, remedial activities were restarted. A total of 3,900 cubic yards of petroleum hydrocarbon contaminated soils (PCS) were removed from the Site and disposed of at the Anderson Landfill in Yakima, Washington. Additional groundwater recovery and treatment was conducted directly from the excavation. Confirmational soil samples collected from the limits of the excavation indicated minor exceedances of TPH-G at the lower south and east sidewalls.

Following the remedial excavation, continued groundwater monitoring did not indicate the presence of contamination exceeding MTCA Method A cleanup levels at the Site or in surrounding groundwater monitoring wells. The Site was repaved with asphalt and returned to commercial use and was eventually used as a fast food restaurant. One monitoring well was left intact at the Site.

2.3 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; however, the MTCA Method A cleanup levels 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.

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.

2.4 Institutional Controls

After entering the Voluntary Cleanup Program in 1999, it was determined that no additional remedial actions were necessary if institutional controls were implemented at the Site in the form of a restrictive covenant. A restrictive covenant would serve to notify future property owners of soil contamination remaining at the Site, and it would restrict property uses that create an exposure pathway to those contaminated soils. A restrictive covenant was recorded for the property, and a No Further Action determination was issued in August 2001.

The restrictions in the restrictive covenant are available below:

- 1. The Southern most portion of the Property contains contaminated soil located under the sidewalk. The Owner shall not alter, modify or remove the contaminated soil area 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 properly written approval from Ecology.
- 2. Any activity on the Property that may interfere with 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 part of the Remedial Action, or create a new exposure pathway, is prohibited without properly 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 is 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 tight 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 I 73-340-440 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.

A copy of the Restrictive Covenant is available as Appendix 6.3.

3.0 PERIODIC REVIEW

3.1 Effectiveness of completed cleanup actions

3.1.1 Direct Contact

The excavation conducted during the interim action eliminated the human exposure pathway (ingestion, contact) to highly contaminated soils and free product at the Site. The asphalt cap on the Site continues to prevent direct contact with the contaminated soils. Based upon the Site visit conducted on July 31, 2018, no repair, maintenance or contingency actions have been required. The wooden cover over the remaining monitoring well at the Site appeared damaged during the July Site visit, but during a subsequent visit in February 2019, it had been replaced with a concrete cover. Details are discussed below. A photo log is available as Appendix 6.4.

3.1.2 Institutional Controls

The Restrictive Covenant for the Site was recorded and is in place. This Restrictive Covenant prohibits activities that will result in the release of contaminants contained as part of the cleanup without Ecology's approval, and prohibits any use of the property that is inconsistent with the Covenant. This Restrictive Covenant serves to assure the long-term integrity of the surface cover.

3.1.3 Protection of Groundwater

A groundwater sample was collected from the remaining monitoring well on the east edge of the Site during the Site visit on July 11, 2008. TPH-G and BTEX were not detected in the sample above laboratory detection limits. This well remains at the Site, but is not maintained. This well is no longer needed to monitor groundwater conditions related to the gasohol release at the Site. If it is not needed for other purposes, it should be properly decommissioned.

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 commercial purposes. There have been no changes in current or projected future Site or resource uses.

3.5 Availability and practicability of higher preference technologies

The remedy implemented included removal/recycling of hazardous substances as well as containment, 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 well below MTCA Method A cleanup levels for the contaminants of concern. The presence of improved analytical techniques would not effect decisions or recommendations made for the Site.

4.0 CONCLUSIONS

- The cleanup actions completed at the Site remain protective of human health and the environment.
- Soils with TPH concentrations higher than the 100 mg/Kg Method A cleanup level are still present, and MTCA Method A 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 Restrictive 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.

Based on this periodic review, the Department of Ecology has determined that the requirements of the Restrictive Covenant are being followed. 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 surface cover is maintained.

5.0 REFERENCES

Delta Environmental Consultants, Inc. Preliminary Hydrogeologic Assessment. 1988

Delta Environmental Consultants, Inc. Phase II Hydrogeologic Assessment. 1988.

Delta Environmental Consultants, Inc. Remedial Action Report. 1989.

Delta Environmental Consultants, Inc. Remedial Action Report. 1989.

Delta Environmental Consultants, Inc. Quarterly Monitoring/Remediation Report. 1989.

Delta Environmental Consultants, Inc. Quarterly Monitoring Report. 1990.

Seacor. Quarterly Monitoring Report. 1990.

Seacor. Semi-Annual Monitoring Report. 1991.

Seacor. Final Status Report. 1993.

Seacor. Final Status Report. 1993.

Chen Northern. Phase II Environmental Assessment. 1993.

GN Northern. Quarterly Groundwater Monitoring Report. 1997.

Pacific Southwest Group. Phase I Environmental Site Assessment and Limited Phase II Subsurface Investigation. 1998.

Pacific Southwest Group. Supplemental Phase II Subsurface Soil and Groundwater Investigation. 1998.

GN Northern. Groundwater Monitoring Status Report. 1999.

Ecology. No Further Action Determination Letter. April 17, 2001.

Ecology. Periodic Review. August 2013.

Ecology. Site Visit. July 31, 2018.

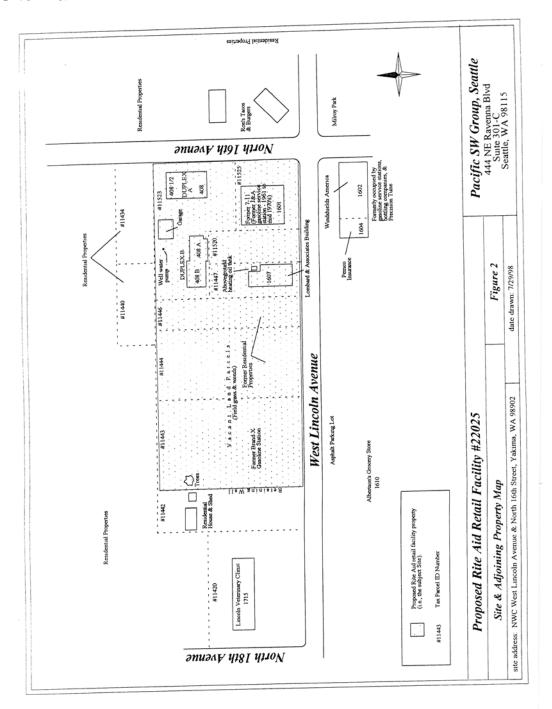
6.0 APPENDICIES

6.1 Vicinity Map

Brand-X Station



6.2 Site Plan



6.3 Environmental Covenant

Return Address			
Herbert I. Bitter			
P. C. Bux 8514			
Spokane, WA 99203			
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Additional refresers #5 on page Grantors:	Christines:		
Mr. Herbert L. Ritter			
Anditional granters on page	addolosel grantetxon jogo		
Persingut 2 1918 1			
Logal Description (abbreviated form: i.e. kd, blk, plat of S.1.R quarter/quorter)			
Portion of Let 40, Levis-Terry Garden Tracts Addition leading ages			
Assessor's Property Tax Parcel/Account Number			
181323-11443			
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Signature:			
the Auditor Recorder will rely on the inflered jungerwised course form. The consolitation of Grands singular materials are related to the sign	Oslif will not read the decrement to verify the accuracy or		

RESTRICTIVE COVENANT

Herbert L. Ritter, owner, 115 W. Lincoln Avenue, Yakima, Washington.

This Declaration of Restrictive Covenant is made pursuant to RCW 70 105D 030(1)(f) and (g) and WAC 173-340-440 by Herbert I. Ritter, its successors and assigns, and 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 Coverant. The Remedial Action conducted at the property is described in the following documents:

- Site Plan, Index & General Noies-Drawing, Written by The Southland Corporation, dated July 2, 1980
- Preliminary Hydrogeological Assessment, written by Delta Rovironmental Consultants, Inc. (Delta), dated June 29, 1988.
- Phase II Hydrogeological Assessment, written by Delta, dated October 13, 1988.
- 4. Remedial Action Report, written by Delta, dated January 5, 1989.
- 5. Remedial Action Report written by Dulta, dated April 5, 1989.
- Quarterly Monitoring/Remedial Action Report, written by Delta, dated July 7, 1989.
- 7 Quarterly Monitoring/Remedial Action Report, written by Delta, dated October 6, 1989 Phase II environmental Site Assessment, written by Chen-Northern, Inc., dated Jurse, 1993.
- Phase II Environmental Site Assessment, written by Chen-Northern, fac , dated June, 1993.
- Final Status Report, written by Secor, dated July 7, 1993.
- Letters written by Underwood, Campbell, Brook & Cerutti, dates November 3, and December 8, 1993.
- 11 Status Letter & Quarterly Groundwater Monitoring Reports, written by CN Northern, Inc., dated May 6, 1996 and Pohruary 3, 1997
- Phase I ESA & Limited Phase II subsurface Investigation, written by Pacific S W Group, dated July 31, 1998.

ESSALD & FELLEN COJ 5.2 SO

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- 13 Supplemental Phase II Subserface Investigation, written by Pacific SW Group, dated October 30, 1998
- Groundwater Sampling Status Letter Report, written by Pacific SW Group, dated January 15, 1999
- 15 Groundwater Sampling Activity Report, written by White Shield, Inc., dated April 9, 2001.

This Restrictive Covenant is required because the Remedial Action resulted in residual concentrations of petroleum contaminated soils which exceed the Model Toxics Control Act.

The undersigned, Herbert L. Rister, is the fee owner of real property (hereafter "Property") in the County of Yakima County, State of Washington, that is subject to this Restrictive Covenant. The Property is legally described as: That portion of Lat 40, the Lewis-Terry Garden Tracts, as recorded in Volume "F" of Plats, Page 15, described as follows:

Beginning at a point on the South line of said lot. 330 Feet West of the SE Corner tharcof; thence Northerly parallel with the Eat line of said lot, 215 Feet, more or less, to the North line of the S½ of said Lot 40; thence Westerly along said line 200 Feet, more or less, to the West line of said Lot; thence Southerly along said West line 215 Feet, more or less, to the South line of said Lot; thence East along the South line of said Lot, 200 Feet, more or less, to the point of beginning.

Except the West 65 Feet thereof; and except the South 7 Feet conveyed to the City of Yakima by instrument recorded June 8, 1984 under Auditor's File No. 2705736

Herhert L. Ritter 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: "The Southern most parties of the Property contains contaminated soil located under the sidewalk. The Owner shall not alter, modify or remove the contaminated soil area 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 properly written approval from Ecology."

Section 2: Any activity on the Property that may interfere with 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 property written approval from Ecology

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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, casement, 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 Restrictive Covenant and notify all leasees of the restrictions on the use of the Property

Section 6: The Owner must notify and obtain approval from Ecology prior to any tise 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 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, and to inspect records that are related to the Remedial Action Section 8: The Owner of the Property reserves the right under WAC 171-340-440 to record an instrument that provides that this Restrictive Covenant shall no longer

to record an instrument that provides that this Restrictive Covenant shall no longer limit use of the Property or he of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs

Helbert | Birray Orons

Date Signed



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State of Washington County of Spokane

I certify that I know or have satisfactory evidence that ि<u>राभित्र स्थिति है। सिरा</u> is the person who appeared before me, and said person acknowledged that (he/she) signed this instrument and admowledged it to be (his/lea) free and voluntary act for the uses and purposes mentioned in the instrument Dated $\frac{M-13}{2}$

(Seal or Stamp)

<u>1270 or hill Maraess</u> (†) Title

My appointment Expires | Co-, Q-OS j





6.4 Photo log

Photo 1: Northeast Corner of Store with Monitoring well in Forefront – from the northeast



Photo 2: West Side of store – from the north



Photo 3: Lincoln Avenue and South Side of Store – from the southeast



Photo 4: Picnic Area North of Store – from the north

