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*Final*

# U.S. Army BRAC 2005 Environmental Condition of Property Phase I Report Vancouver Barracks, Vancouver, Washington



Prepared for  
**United States Army**

November 10, 2006



**CH2MHILL**

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Portland, OR. 97201

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**U.S. Army BRAC 2005  
Environmental Condition of Property  
Phase I Report  
Vancouver Barracks,  
Vancouver, Washington**

Submitted to  
**United States Army**

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# Acronyms and Abbreviations

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μg/ft <sup>2</sup>	microgram per square foot
μg/L	micrograms per liter
ACM	asbestos-containing material
AEDB-R	Army Environmental Database Restoration
AMSA	Army Maintenance Support Activity
AR	Army Regulation
ARIM	Army Reserve Installation Management
AST	aboveground storage tank
bgs	below ground surface
BMA	Base maintenance activities
BRAC	Base Realignment and Closure
CC	Compliance-related cleanup
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CFR	Code of Federal Regulations
City	City of Vancouver
CORRACTS	Corrective Action Report
CSH	combat support hospital
DOD	Department of Defense
DRMO	Defense Reutilization and Marketing Office
EBS	Environmental Baseline Survey
Ecology	Washington State Department of Ecology
ECP	Environmental Condition of Property
EPA	United States Environmental Protection Agency
EQR	Environmental Quality Report

FORSCOM	United States Army Forces Command
FSA	Farm Service Agency, U.S. Department of Agriculture
ft <sup>2</sup>	square foot
GPS	global positioning system
HBC	Hudson's Bay Company
HEPA	high-efficiency particulate air (filter)
HRR	historic records review
I-5	Interstate 5
ICRMP	Integrated Cultural Resource Management Plan
IRP	Installation Restoration Program
LBP	lead-based paint
MEC	munitions and explosives of concern
MEDCOM	Medical Command
mg/kg	milligrams per kilogram
MMRP	Military Munitions Response Program
MR	Munition Response
MSGP	Multi-Sector General Permit
MTCA	Model Toxics Control Action
NARA	National Archives and Records Administration
NOI	Notice of Intent
NOS	National Geodetic Information Center
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
PA	Preliminary Assessment
PCB	polychlorinated biphenyl
pCi/L	picocuries per liter
POL	petroleum, oils, and lubricants
Property	Vancouver Barracks
RC	Response Complete
RCRA	Resource Conservation and Recovery Act

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RRC	Regional Readiness Command
SCS	Soil Conservation Service
SI	Site Inspection
SVOC	semivolatile organic compound
SWCAA	Southwest Clean Air Agency
TCLP	toxicity characteristic leaching procedure
TPH	total petroleum hydrocarbon
TSD	treatment, storage, and disposal
U.S.	United States
USACE	United States Army Corps of Engineers
USAEC	United States Army Environmental Center
USAR	United States Army Reserve
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	underground storage tank
UXO	unexploded ordinance
VA	Veterans Administration
VOC	volatile organic compound
VSI	visual site inspection
WSDOT	Washington State Department of Transportation

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# Executive Summary

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The United States Army Corps of Engineers (USACE) Louisville District has prepared this Environmental Condition of Property (ECP) report for the Vancouver Barracks, hereafter referred to as the "Property." The Property is situated approximately 0.25 mile north of the Columbia River immediately east of Interstate 5 (I-5) in Vancouver, Washington. The parcel is approximately 47.46 acres.

This ECP report was prepared to support the Department of Defense (DOD) mission to dispose of Base Realignment and Closure (BRAC) 2005 real property in a timely manner. Prior to out-grant or transfer, a reliable assessment of the current environmental condition of the real property must be completed. The assessment is in accordance with United States (U.S.) Army Regulation (AR) 200-1, Environmental Protection and Enhancement. As part of the report preparation, the Property and adjacent properties were inspected (July 6 through July 11, 2006, and July 24, 2006).

This Executive Summary briefly describes the current and former uses of the Property, the areas of potential environmental concern that were evaluated during the ECP process and the DOD Environmental ECP category for this Property.

## Site Description and Historical Use

The property is situated approximately 0.25 mile north of the Columbia River immediately east of I-5 in Vancouver, Washington, at the following coordinates: Latitude 45°37'30.0" N, Longitude 122°39'56.5" W. The property is bounded by the West Barracks to the west and the Vancouver Barracks National Historic Reserve on all other sides.

The property is owned by the U.S. government and is managed by the U.S. Army Reserve (USAR) 70th Regional Readiness Command (RRC) at Fort Lawton, Washington. Current uses include activities conducted by the USAR, the Washington Army National Guard, and a variety of other governmental and public nonprofit organizations. In general, these activities include administrative functions, storage of materials, motor pool activities, community group meetings, and educational programs.

Vancouver Barracks is an open post without a secured perimeter, with the exception of the 400 Series buildings at the South Barracks. When Vancouver Barracks was initially established in 1850, it comprised 640 acres.

The property consists of 47.46 acres of landscaped land and military facilities, including 30 wood frame and brick buildings totaling approximately 242,367 square feet.

## Methodology

Methods employed in conducting the ECP assessment were as follows:

- Specific study sections for the presentation of data in the body of this report were developed, as well as the appropriate category designation in the conclusions of this report.
- A visual site inspection of the Property was conducted (from July 6 through July 11, 2006, and on July 24, 2006).
- A summary of past aerial photographs has been reviewed and incorporated into the findings of this report.
- A review of relevant environmental records and investigations was performed and the findings incorporated into this report.
- A search of local, state, and federal environmental databases for listed facilities within a standard search distance was undertaken for the property.
- Interviews were conducted with key past and current facility employees identified by the U.S. Army Environmental Center (USAEC) and the Louisville District USACE, and with Vancouver Barracks personnel.
- A record of the documents reviewed and individuals contacted was maintained.

Based on analysis of the available data, the Property was classified into one of seven categories

- Category 1** Areas where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas)
- Category 2** Areas where only release or disposal of petroleum products has occurred
- Category 3** Areas where release, disposal, and/or migration of hazardous substances has occurred, but at concentrations that do not require a removal or remedial response
- Category 4** Areas where release, disposal, and/or migration of hazardous substances has occurred, and all removal or remedial actions to protect human health and the environment have been taken
- Category 5** Areas where release, disposal, and/or migration of hazardous substances has occurred, and removal or remedial actions are underway, but all required remedial actions have not yet been taken
- Category 6** Areas where release, disposal, and/or migration of hazardous substances have occurred, but where required actions have not yet been implemented
- Category 7** Areas that are not evaluated or that require additional evaluation

## Property Categorization

The findings of this ECP report were based on readily available environmental information; interviews with site, state, and local personnel; review of previous environmental studies; and federal and state database and file information related to the storage, release, treatment, or disposal of hazardous substances or petroleum products. Results also were based on visual observations of the site and adjacent properties.

Figure ES-1 provides a map of the ECP categories at the Property.

### Category 1 Property

All parcels listed as a Category 1 are considered “uncontaminated property” (as amended by the Fiscal Year 1997 Defense Authorization Act) where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas). The Community Environmental Response Facilitation Act Sections 120(h)(4)(iii) and (iv), an amendment to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, Section 120[h]), was enacted to facilitate the rapid return of uncontaminated properties identified during the BRAC process to the local communities. The following parcels have been classified as Category 1 properties:

- Buildings 400, 401, 402, 404, 405, 406, 408, 409, 410, 422, 704, 710, 721, 722, 725, 728, 733, 746, 749, 750, 752, 753, 754, 786, 787, 987, 989, 991, and 993
- Storage trailers associated with Buildings 400, 402, and 404
- Former Veterans Administration (VA) Laundry Area
- East Barracks Open Areas – This includes parking lots, roadways, and landscaped areas not associated with buildings. Based on available information, there have been no releases reported at these areas.
- Antifreeze and Hydraulic Oil Spill area
- Generator Fuel Spill area
- Building 748, Former Maintenance Facility (VABA-01)

### Category 2 through Category 7 Property

#### Category 2 Areas

The following areas are considered Category 2 properties; these are areas where release or disposal of petroleum products only has occurred:

- Location of former underground storage tanks (USTs) VB-1, VB-2, VB-3, VB-4, 404-1, 404-2, VB-5, VB-6, VB-7, VC-1, VC-2, VC-3, and V-1-A
- Building 402 Storm Drain
- Former UST V-1-B

- Former UST V-1-C
- VABA-02, Former Vehicle Wash Rack
- South Barracks Open Areas – This includes parking lots, roadways, and landscaped areas not associated with buildings.
- Building 408, Former Vehicle Wash Rack
- Building 410, Used Oil Sump

### **Category 3 Area**

No properties are considered Category 3.

### **Category 4 Areas**

No properties are considered Category 4.

### **Category 5 Areas**

No properties are considered Category 5.

### **Category 6 Areas**

No properties are considered Category 6.

### **Category 7 Areas**

The following areas are considered Category 7 Properties. These are areas that have not been evaluated or that require additional evaluation:

- Building 410, Battery Room Drain and associated area



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# 1. Purpose

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As a result of the 2005 Base Realignment and Closure (BRAC) recommendations, the Vancouver Barracks were selected for closure and property transfer. As required by United States (U.S.) Army Regulation (AR) 200-1, an Environmental Condition of Property (ECP) must be prepared for locations that are being considered for acquisition, out-grants, or disposal. This process was formerly referred to as an Environmental Baseline Survey (EBS). The ECP will allow the U.S. Army to meet its obligation under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 United States Code Section 9620(h), as amended by the Community Environmental Response Facilitation Act (Public Law 102-426).

The BRAC 2005 Property for Vancouver Barracks constitutes a part of Vancouver Barracks. Throughout this report, the BRAC 2005 Property for Vancouver Barracks is referred to as the "Property." When "Vancouver Barracks" is discussed, the information applies to Vancouver Barracks as a whole, including the Property.

## 1.1 General

The primary purpose of the ECP is to describe the environmental conditions of the Property to assist in determining the suitability of a lease or transfer of excess BRAC property. This ECP report for the Property meets the Department of Defense (DOD) requirements under Title 40, Code of Federal Regulations (CFR), Part 373, Section 373.1, and the BRAC Supplement to AR 200-1, Environmental Protection and Enhancement. The purpose of the ECP includes the following:

- Provide the Military Department with information it may use to make disposal decisions regarding the property.
- Provide the public with information relative to the environmental condition of the property.
- Assist in community planning for the reuse of BRAC property.
- Assist federal agencies during the property screening process.
- Provide information for prospective buyers.
- Assist prospective new owners in meeting the requirements under Environmental Protection Agency (EPA) "All Appropriate Inquiry" regulations when they become final.
- Provide information about completed remedial and corrective actions at the property.
- Assist in determining appropriate responsibilities, asset valuation, and livability with other parties to a transaction.

The ECP contains the information needed to comply with the provisions of 40 CFR 373, which requires that a notice accompany contracts for the sale of, and deeds entered into for

the transfer of, federal property on which hazardous substances may have been stored, released, or disposed. CERCLA Section 120(h) stipulates that a notice is required if certain quantities of designated hazardous substances have been stored on the Property for one year or more—specifically, quantities exceeding (1) 1,000 kilograms or the reportable quantity, whichever is greater, of the substances specified in 40 CFR 302.4; or (2) 1 kilogram of acutely hazardous waste as defined in 40 CFR 261.5 and 261.30. A notice also is required if hazardous substances have been disposed or released on the Property in an amount greater than or equal to the reportable quantity. AR 200-1 requires that an ECP report address asbestos, lead-based paint, radon, and other substances potentially hazardous to health.

The ECP report is not prepared to satisfy the duty of a real property purchaser to conduct an “appropriate inquiry” to establish an “innocent purchaser defense” to CERCLA 107 liability. Any such use of the ECP report by any party is outside the control of the U.S. Army and beyond the scope of the ECP. The U.S. Army, its officers, employees, or contractors, including CH2M HILL, make no warranties or representations that any ECP report satisfies any such requirements for any party.

## 1.2 Scope

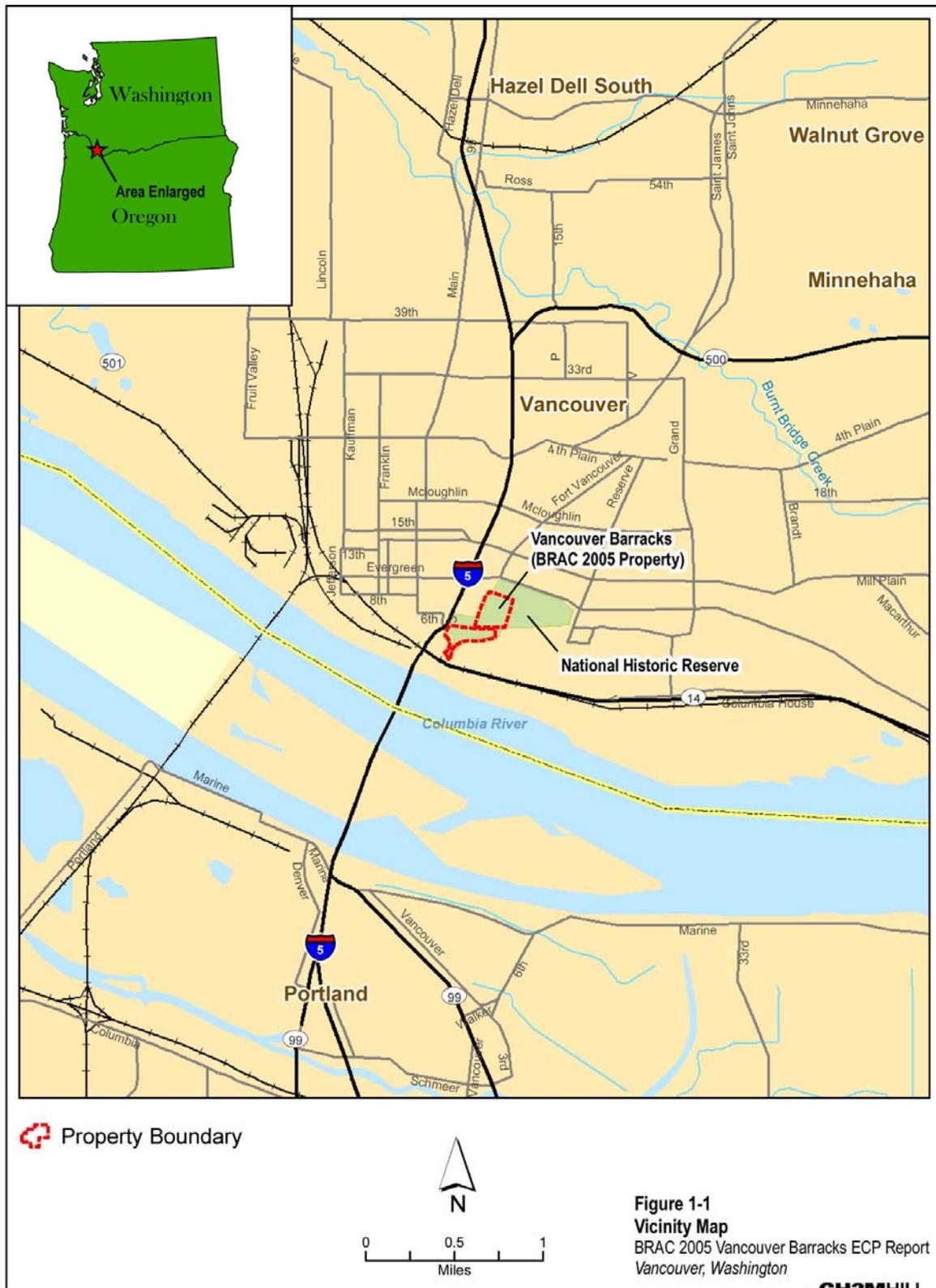
This ECP was prepared by CH2M HILL under contract with the U.S. Army Corps of Engineers (USACE), Louisville District. The scope of work for this ECP was performed in general conformance with Army Regulation “Environmental Quality, Environmental Protection and Enhancements, AR 200-1 (paragraph 15-6), dated February 21, 1997, and CERCLA 120.

This ECP covers the 47.46 acres of the eastern and southern portions of Vancouver Barracks. Vancouver Barracks are located in Vancouver Washington. The site is approximately 0.25 mile north of the Columbia River, immediately east of Interstate 5 (I-5) in Vancouver, Washington. The Property is bounded by the West Barracks to the west and the Vancouver Barracks National Historic Reserve on all other sides. A vicinity map showing the general location of the Property is presented in Figure 1-1; a Property layout map is presented in Figure 1-2. A legal description of the Property is provided in Section 3.1.

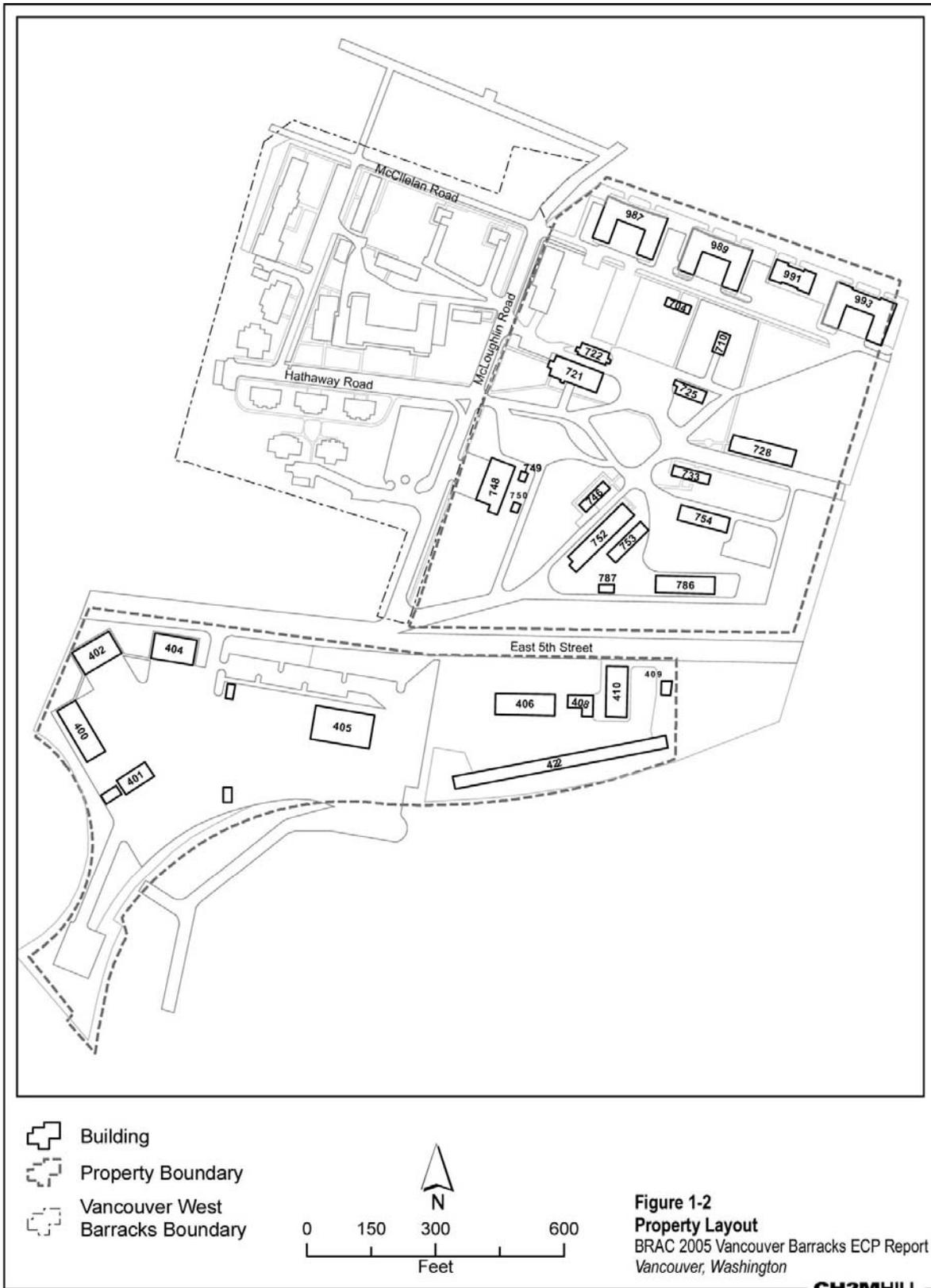
## 1.3 Assumptions

The conclusions drawn in this document are based on the following assumptions:

- The Vancouver Barracks Cemetery, which is located approximately 1 mile north of Vancouver Barracks, is not a part of the Property.
- If a historical document reached the conclusion of “No Further Remedial Action” but the supporting documentation was unavailable for review during this ECP, the “No Further Remedial Action” conclusion was carried forward and not critically reviewed in this report.



File Path: \\Rosa\proj\USACE\Louisville\Distr\343346\Vancouver\_Barracks\GIS\mxds\Figure1-1\_VicinityMap.mxd, Date: August 9, 2006 11:09:51 AM



File Path: \\Rosa\proj\USACE\Louisville\Dist\343346\Vancouver\_Barracks\GIS\mxd\Figure1-2\_Property\_layout.mxd, Date: September 5, 2006 9:52:09 AM

## 1.4 Limitations

This ECP Report presents a summary of readily available information on the environmental conditions of, and concerns relative to, the land, facilities, and real property assets at the BRAC 2005 Property of Vancouver Barracks. Its findings are based on a records search and thorough review of documents, and a visual site inspection (VSI) conducted between July 6 and July 12, 2006, and on July 24, 2006. Extensive environmental investigation reports and site historical documents were reviewed in support of this ECP. Information obtained from these studies is reflected within this ECP report by reference. A list of references is provided in Section 8.

Regulatory interaction and involvement were not conducted in this ECP as directed by the U.S. Army. The U.S. Army will continue to perform coordination with the regulatory agencies and other stakeholders.

The interior and exterior of installation buildings, except the interior of Building 749 and the interior of the arms room in Building 993, were visually inspected during the VSI. No sampling or analysis was conducted during this survey.

## 1.5 Report Organization

The remainder of this report describes the ECP methods and findings. The report is organized into the following sections:

- **Section 2, Survey Methodology:** Describes the methods used to conduct the ECP.
- **Section 3, Property Description:** Describes the Property environment, provides an overview of facility operations and history, and contains a summary of previous environmental investigations on the BRAC portion of the Property.
- **Section 4, Environmental Conditions:** Identifies the environmental condition of the Property including permits, cleanup history, and other environmental regulatory issues. The ECP findings in Section 4 are organized by relevant environmental “issues” (for example, contaminant, contamination matrix, facility, or operation) and include a summary of findings for the buildings and real property.
- **Section 5, Conclusions:** Concludes with a summary of ECP Property categorizations.
- **Section 6, Certification:** Includes a list of preparers.
- **Section 7, References:** Contains a list of references used in the preparation of this report.

The appendixes to this document are as follows:

- Appendix A, Site Photographs
- Appendix B, Historic Aerial Photographs
- Appendix C, Environmental Database Report
- Appendix D, Title Search
- Appendix E, Interview Questionnaires
- Appendix F, Hazardous Materials Inventory
- Appendix G, Environmental Documentation

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## 2. Survey Methodology

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This section describes the methods used to assess the environmental condition of the Property.

### 2.1 Development of Study Sections

To assist in the completion of this report, the Property was organized into *study sections*. Each building and associated environmental feature (i.e., underground storage tank [UST] location) constitutes a study section. The Property contains 30 buildings, 2 Installation Restoration Program (IRP) sites, and 1 Military Munitions Response Program (MMRP) site. Each of the IRP and MMRP sites also constitute a study section. Additional study sections at the Property are characterized as open areas that are not associated with a building or other environmental feature.

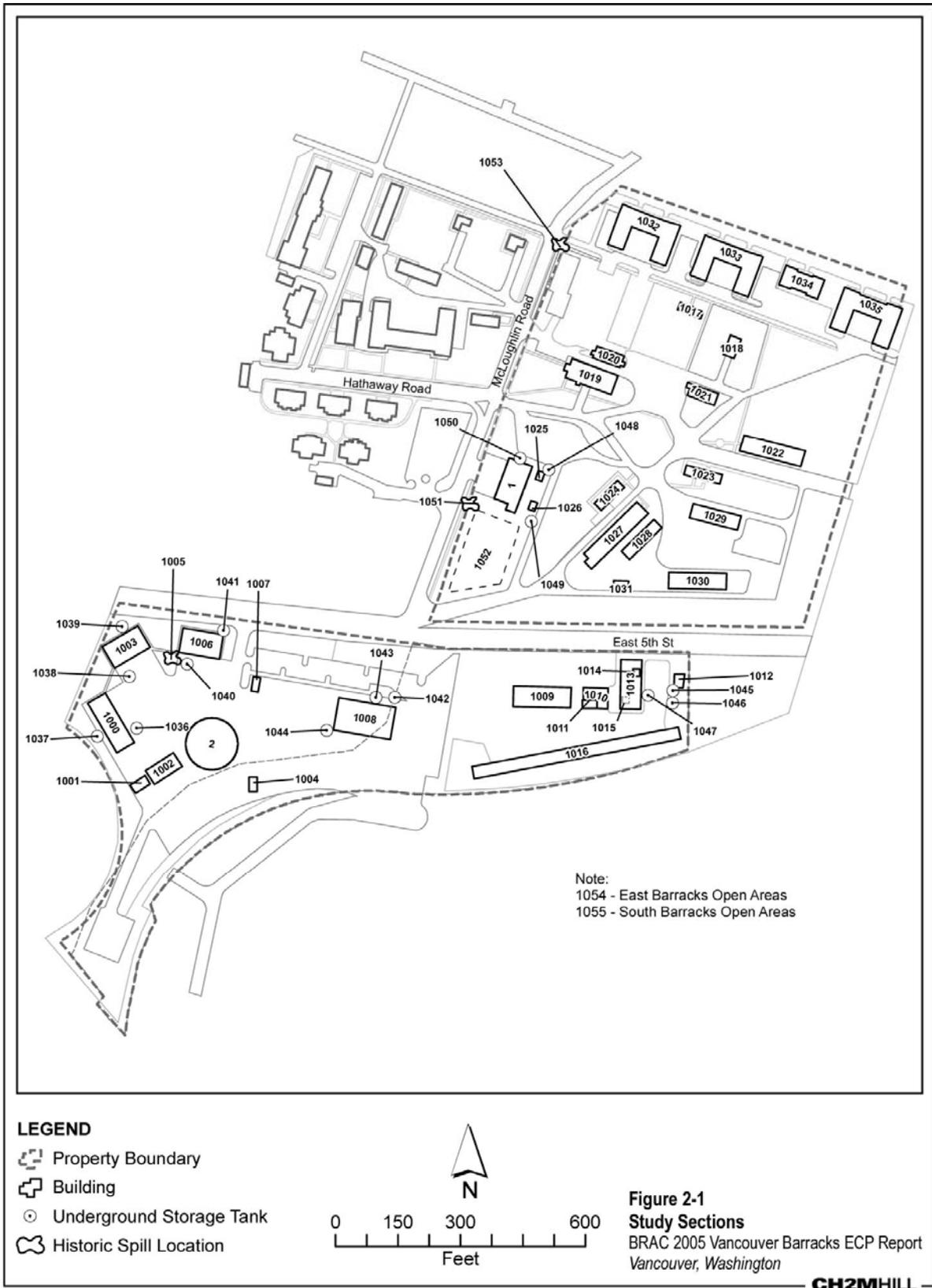
There are three series of buildings on the Property, including the 400 Series, 700 Series, and 900 Series. Most of the buildings in the 400 Series are used for vehicle maintenance and storage; most of the buildings in the 700 and 900 Series buildings are used for administrative offices. Because the functions of most buildings in a series are similar, this report will refer to building series when appropriate, rather than to specific buildings. Open areas that are not associated with a building or other environmental feature have been assigned a study section. Table 2-1 lists the study section associated with each building series. Figure 2-1 shows the study section associated with each building series.

### 2.2 Visual Site Inspection

A VSI was conducted by CH2M HILL staff from July 6 through July 12, 2006, and on July 24, 2006. The purpose of the VSI was to confirm Property documentation and to identify new environmental concerns. The VSI included a walk-through of areas around the exterior of each building, as well as the interior of each building, except Building 749. The interior walk was limited to rooms with areas of potential environmental concern (for example, boiler rooms, hazardous materials storage). The VSI also included a walk-through of open areas around the site. Selections of site photographs are shown in Appendix A.

A representative from each of the following Property tenants accompanied CH2M HILL staff on the VSI of their study area:

- U.S. Army Reserve (USAR) 70th Regional Readiness Command (RRC)
- Washington Army National Guard
- U.S. Army Air Force Exchange Service



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Table 2.1 redacted.

One primary objective of the VSI was to note signs of potential contamination sources, including leaks, spills, and other observable evidence of releases. During VSI activities, information was recorded on forms detailing issues related specifically to the building visited. Environmental conditions observed during the VSI are incorporated into Section 4 (Environmental Conditions) of this report.

Environmental features have been entered into a Geographic Information System, and figures showing the location of these features are currently available. Therefore, CH2M HILL was directed by the USACE Louisville District global positioning system (GPS) to the locations of new environmental features only, not previously identified features. No new environmental features were identified during the VSI; thus, GPS coordinates are not included in this ECP.

A VSI of adjacent properties was conducted on July 12, 2006, to evaluate adjacent property uses that could be a potential source of environmental contamination on the Property. CH2M HILL staff drove on roadways and walked along the perimeter of the Property.

Adjacent properties were identified on a site plan and photographs of adjacent properties were taken. The findings of the adjacent property VSI are presented in Section 4.17.

## 2.3 Aerial Photograph Analysis

Information in this section was obtained from an existing aerial photograph analysis conducted for the EBS (ENSR, 2002) and an aerial photograph analysis conducted by Environmental Research, Inc. (ERI) (2006). Available Results of the aerial photograph analyses and copies of the aerial photographs reviewed are contained in Appendix B. The remainder of this section describes the two aerial photograph analyses.

During the EBS, aerial photographs depicting the areas surrounding Vancouver Barracks were reviewed at the Washington State Department of Transportation office in Tumwater, Washington, on November 28, 2001. The process used to analyze aerial photographs was not documented in the EBS. The aerial photograph review presented in the EBS includes information regarding the presence or absence of buildings, railroad line, and storage areas. Aerial photographs were available from 1966 to 1996 (Table 2-2).

ERI performed an aerial photographic analysis on aerial photographs spanning the period from 1943 to 1960. Photographs were stereoscopically analyzed to locate and document potential contamination sources. Information presented in these photographs includes buildings, building foundations, dark-toned material/stain, probable stain, ground scar, excavation, mounded materials, open storage, possible pads, probable disturbed ground, and railroads. Aerial photographs reviewed by ERI (2006) dated 1943 to 1960 are summarized in Table 2-2.

TABLE 2-2  
Aerial Photographs Depicting Areas Surrounding Vancouver Barracks  
*Environmental Condition of Property Report, Vancouver Barracks, Vancouver, Washington*

Year	Source	Details	Scale
1943	NARA	Aerial photographic site analysis ERI, 2006	1" = 30,000
1945	NOS	Aerial photographic site analysis ERI, 2006	1" = 17,000
1952	NARA	Aerial photographic site analysis ERI, 2006	1" = 25,000
1960	FSI	Aerial photographic site analysis ERI, 2006	1" = 20,000
1966	WSDOT	Aerial photographs were reviewed in ENSR, 2002	1" = 750'
1972	WSDOT	Aerial photographs were reviewed in ENSR, 2002	1" = 750'
1984	WSDOT	Aerial photographs were reviewed in ENSR, 2002	1" = 750'
1988	WSDOT	Aerial photographs were reviewed in ENSR, 2002	1" = 750'
1993	WSDOT	Aerial photographs were reviewed in ENSR, 2002	1" = 750'
1996	WSDOT	Aerial photographs were reviewed in ENSR, 2002	1" = 750'

NARA – National Archives and Records Administration, College Park, Maryland

NOS – National Geodetic Information Center, Silver Spring, Maryland

FSA – Farm Service Agency, U.S. Department of Agriculture, Salt Lake City, Utah

WSDOT – Washington State Department of Transportation

Environmental findings identified in the EBS (ENSR, 2002) and by the preliminary analysis (ERI 2006) are summarized briefly below.

The EBS aerial photograph review indicated that about 12 of the buildings were removed throughout the Property between 1966 and 1984. The EBS noted that building foundations were exposed and evidence of disturbed ground appeared in the form of excavations and material mounds, presumably related to building removal activities. Photographs from 1966 show a railroad spur ending on the southern portion of the 400 Series. The photographs also indicate construction of new buildings and vehicle parking areas, as well as replacement of the 400 Series rail spur with a paved parking area.

The ERI (2006) interpretation of photographs reviewed photographs from 1943 to 1960. Following is a summary of the ERI interpretation of aerial photographs at the Property.

In the July 4, 1943, aerial photograph, probable soil staining was seen within and adjacent to a former vehicle storage area located in the South Barracks north of Building 422. Visible soil staining was seen in soils adjacent to a building that was formerly located in the vicinity of current Building 400. In this photograph of the East Barracks, just north of East 5<sup>th</sup> Street two areas of open storage were visible. Two additional areas of open storage were visible east and south of current Building 753.

In the June 30, 1945, aerial photograph, soil staining, and light-toned material were seen adjacent to a building located in the vacant lot southeast of current Building 728. Probable soil staining emanates from a building formerly located in the vicinity of Building 748. In the South Barracks, probable staining was seen in the former vehicle storage area north of Building 422, where the staining previously was noted in 1943. Areas of liquid were visible in the vicinity of the probable staining. On the western half of the South Barracks, three vehicle storage areas were seen. Dark-toned materials and staining were visible in the easternmost vehicle storage area. Staining was seen in the westernmost vehicle storage area and on dirt access roads to its north and east.

In the October 2, 1952, aerial photograph, a number of buildings in the East Barracks had been removed since 1945. Features noted in the locations of some of these former buildings included mounded material, disturbed ground, and a pit with liquid. In the South Barracks, the probable staining noted in 1943 and 1945 was no longer visible. To the west, probable staining is seen in the vicinity of the building where staining was previously noted in 1943 and 1945.

In the June 4, 1960, aerial photograph, additional buildings in the East Barracks had been removed since 1952. In the South Barracks, two building foundations were noted where buildings had been removed since 1952. Also in this vicinity, dark-toned material and/or staining is visible adjacent to a building where probable staining and staining had been noted since 1943.

## 2.4 Records Review

This ECP uses the historical records reviewed and obtained as a part of the EBS (ENSR, 2002). These historical records were reviewed in order to perform the VSI and were not reviewed to determine the accuracy of the EBS. The EBS had been thoroughly reviewed by

the U.S. Army and is considered accurate. The library records reviewed as a part of the EBS process are summarized in Table 2-3.

TABLE 2-3  
2002 EBS Records Reviewed  
*Environmental Condition of Property Report, Vancouver Barracks, Vancouver, Washington*

Location Visited	Date of Visit
Vancouver Barracks, Washington	October 23 and November 5, 2001
Fort Lawton, Washington	October 23 and November 5, 2001
Fort Lewis, Washington	October 23 and November 5, 2001
Washington State Department of Ecology, Southwest Regional Office, Lacey, Washington	November 6, 2001
National Archives and Records Administration Offices Washington, D.C.	Unknown
National Archives and Records Administration Offices, College Park, Maryland	Unknown
Archaeology and Historical Preservation Olympia, Washington	October 30, 2001

Source: ENSR, 2002

CH2M HILL obtained and reviewed recent (2002-present) documentation published after the EBS was written in 2002. Additional information for features of concern on the Property was gathered through interviews with individuals familiar with the Property. Archived documents relating to the areas of concern on the Property were reviewed at the USACE Seattle District on July 26, 2006.

As the ECP process progressed, additional information was obtained from the following agencies:

- USAR, 70<sup>th</sup> RRC, Vancouver, Washington
- USACE, Louisville District, Louisville, Kentucky
- USACE, Seattle District, Seattle, Washington
- U.S. Army Environmental Center (USAEC)
- USAR, 70<sup>th</sup> RRC, Fort Lawton, Washington
- Washington National Guard, Vancouver, Washington

Relevant primary documents that were reviewed and used for this ECP are presented in Table 2-4. A list of references is included in Section 7.

TABLE 2-4  
 Primary Documents Reviewed  
*Draft Environmental Condition of Property Report, Vancouver Barracks*

Document Title	Author	Date
Lead Investigation Results and Recommendations, Former Indoor Firing Ranges, United States Army Reserve Centers, Vancouver, Washington and Salem, Oregon	Shaw Environmental Research, Inc.	July 2006
Final Historical Records Review, Vancouver Barracks, Vancouver, WA	TechLaw, Inc.	February 2006
Final PCB-Containing Equipment Inventory Summary Report, Vancouver	Engineering Environmental Management, Inc.	March 2005
Draft Survey of Drains, Pollution Control Equipment, and Discharge Points	ICI LLC	September 2004
Environmental Baseline Survey	ENSR	November 2002
Vancouver Barracks Site Inspection	Woodward-Clyde	October 1998
Preliminary Assessment	USACE	March 1996

## 2.4.1 Standard Environmental Record Sources

A search of state and federal environmental databases for listed facilities within standard search distances was undertaken for the Property (Environmental Data Resources, Inc. [EDR], 2006). The findings of the search are summarized in Table 2-5 and subsequent text. The complete search results are provided in Appendix C.

The Property was listed on one database in the record sources, the Washington Underground Storage Tank (UST) Database. The USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the Washington Department of Ecology (Ecology).

TABLE 2-5  
 Summary of Environmental Database Search  
*Environmental Condition of Property Report, Vancouver Barracks, Vancouver, Washington*

Record(s) Source	Number of Sites	ASTM E1527-00 Minimum Search Distance (miles)
Federal NPL Sites	2	1.125
Federal CERCLIS List	1	0.625
Federal CERCLIS No Further Remedial Action Planned List	0	0.625
Federal RCRA CORRACTS Facilities List	2	1.125
Federal RCRA non-CORRACTSTSD Facilities List	0	0.625
Federal RCRA Generators List	20	0.375
Federal Emergency Response Notification System List	0	0.125
WA Washington Confirmed and Suspected Contaminated Sites List	5	1.125
WA State Landfill	1	0.625

TABLE 2-5

Summary of Environmental Database Search

*Environmental Condition of Property Report, Vancouver Barracks, Vancouver, Washington*

Record(s) Source	Number of Sites	ASTM E1527-00 Minimum Search Distance (miles)
Washington Leaking UST Lists	8	0.625
Washington UST Lists	23	0.375

CERCLIS - Comprehensive Environmental Response, Compensation, and Liability Information System  
CORRACTS - Corrective Action Report  
NPL – National Priorities List  
TSD – Treatment, Storage and Disposal

Facilities located within a 1-mile radius of the Property and listed on one or more databases during the record search are listed below. A map and a description of these facilities are contained in Appendix C. The following facilities have a low potential to pose a threat to the Property because groundwater contamination has not been reported and the site is either down gradient or cross-gradient from the facility, contamination was isolated in soil, cleanup actions have been taken or initiated, or a combination of these reasons.

- Admiral Distributing
- Bill Copps, Inc.
- Boise Cascade Vancouver
- Capital Tackel MFG
- Chuck's Tire & Auto Service
- Faulkner USA
- From the Kennels
- General Brewing Company
- Hannah Motor Company
- Hannah Motor Company
- Hannah Motor Company VW
- Hillman Properties
- Hillman Properties Northeast Maritime
- Hoesly Auto Service Individual
- Industrial Fiberglass SVCS, Inc.
- Kyungshin Cho/Matthieu's Car
- Lucky Lager Brewery
- Marshall Vancouver Ford
- Metro Buick Olds Vancouver
- National Park Service Fort Vancouver
- Oltmann's Mobil Service
- Pacific Telecom Corporate Office
- Pearson Airfield
- Quad Investment
- Southwest Deliver Co., Inc.
- Southwest Delivery Co., Inc
- Storage Place
- Texaco-Frank Brickey Aviation
- The Academy
- The Automotive Services, Inc. Carwash
- The City of Vancouver (the City)
- The Whatley Decant Station (Vactor Waste Processing)
- U.S. Department of Transportation Federal Highway Administration
- Vancouver Aviation
- Vancouver Chevron
- Wolf Supply Co. Vancouver

The following sites are located up gradient of the Property's assumed groundwater flow direction. These sites likely have a low potential to pose a threat to the Property because groundwater contamination has not been reported, contamination was isolated in soil, cleanup actions have been taken or initiated, or a combination of these reasons.

- Clark Public Utility District
- Fort Vancouver Regional Library

- Washington State Patrol Vancouver
- Vancouver Police Building

The following facilities are located less than 1 mile from the Property and were listed on the NPL database and/or the Confirmed and Suspected Contaminated Sites List database. Environmental conditions at these facilities have a low potential to pose a threat to the Property because groundwater was affected by site activities and the sites are regulated in a cleanup program. However, given the nature and extent of environmental contamination at these facilities, further details are provided in Section 4.17.

- Brazier Forest Industry
- Emerald Petroleum Services
- PRI Northwest, Inc.
- Frontier Hard Chrome
- Vancouver Water Station No. 1

## 2.4.2 Additional Record Sources

The following agencies were contacted during this review:

- USAR, 70th RRC, Vancouver, Washington
- USACE Seattle District, Seattle, Washington
- USAEC
- USAR, 70th RRC, Fort Lawton, Washington
- Washington National Guard, Vancouver, Washington

During the site visit, a radiological materials warning sign was observed posted in Building 400. This observation prompted further inquiry regarding radiological materials stored on the Property.

Documentation of hazardous materials stored onsite was not readily available. This information has been requested of SFC Spencer Marks, USAR, 70th RRC, Fort Lawton, Washington.

Historical real property records at Seattle District, USACE, Real Estate Division were reviewed on September 16, 2006. According to this review, the current owner of the Property is the War Department, Army Service Forces Corps of Engineers. A summary of actions impacting Army accountability for property at Vancouver Barracks are contained in Appendix D.

In addition to this review, a Chain of Title company prepared a summary to document the historic use of the Property. Records were searched at the Clark County Recorder's office back to 1940, and no conveyances of record transferring fee title ownership were found. This summary identified the current property owner as the USA War Assets Administration. However, the USA War Assets Administration is not the current property owner; the U.S. War Assets Administration owns 512.20 acres of the original 640 acre parcel owned by the USACE. The USACE acquired the 640 parcel prior to 1940 and this information was not obtainable by the Chain of Title company.

The U.S. government has owned the Property for more than 60 years. The past uses of the Property during this time are documented in this ECP Report. No other property uses were identified during the Chain of Title review. Thus, there is a low potential that unknown past property use by others would have affected the environmental quality at the Property.

## 2.5 Interviews

Interviews with key past and current facility employees identified by the USAEC and the Louisville District USACE, and interviews with Vancouver Barracks personnel were conducted to aid in identifying environmental conditions at the installation. The interviews included topics of general environmental interest and specific areas of interest identified during the records review and VSI.

A standard form was used to conduct interviews with the organizations listed below. Interview forms completed during the ECP are provided in Appendix E.

- 70th RRC Army Reserve Installation Management (ARIM)
- National Park Service
- Seattle District USACE

## 2.6 Data Management

The reference documents used in developing the ECP will be placed in the Property's information repository, at the completion of the project. Pertinent environmental information, such as interview forms and VSI records, will be provided to the USACE, Louisville District at the completion of this project.

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# 3. Property Description

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This section includes a description and history of the Property and Vancouver Barracks. The primary sources of information for this section are the EBS (ENSR, 2002) and the *Integrated Cultural Resources Management Plan* (ICRMP) (Parsons, 2000). Because this section relies heavily on these two documents, reference to the EBS and ICRMP is implied throughout, unless otherwise attributed and/or cited.

## 3.1 Property Location and Description

The Property is situated approximately 0.25 mile north of the Columbia River immediately east of I-5 in Vancouver, Washington, at the following coordinates: Latitude 45°37'30.0" N, Longitude 122°39'56.5" W. The Property is bounded by the West Barracks to the west and the Vancouver Barracks National Historic Reserve on all other sides.

Following is a portion of the legal description of the Property, which is currently owned by the U.S. government:

*Two parcels of land located in the northeast quarter of the southwest quarter of Section 26, and the southeast quarter of the northeast quarter of Section 27, township 2 north, Range 1 East of the Willamette Meridian, Clark County, Washington.*

The Property is owned by the U.S. government and is managed by the USAR 70th RRC at Fort Lawton, Washington. Current uses include activities conducted by the USAR, the Washington Army National Guard, and a variety of other governmental and public nonprofit organizations. In general, these activities include administrative functions, storage of materials, motor pool activities, community group meetings, and educational programs.

The Vancouver Barracks site is an open post without a secured perimeter, with the exception of the 400 Series buildings at the South Barracks. When Vancouver Barracks was initially established, the site was 640 acres. Much of the Vancouver Barracks area has been transferred, including the West Barracks in 2005, reducing the Property to approximately 47.46 acres.

The Property contains landscaped land and military facilities including 30 wood frame and brick buildings, totaling approximately 242,367 square feet. Table 3-1 summarizes current and past building use.

Table 3.1 redacted.

## 3.2 Historic and Current Land Use

### 3.2.1 Historic Land Use

Prior to 1825, the land currently occupied by the Vancouver Barracks was inhabited by the indigenous Chinookan tribes. Their economy was based on fishing, gathering, and hunting with a particular emphasis on the salmon resources of the Columbia River. Between 1830 and 1855 the Chinook Indians living near the barracks experienced a dramatic population decline as a direct result of exposure to European diseases (i.e., smallpox, measles, and malaria). Most of the tribal sites were abandoned or the reduced populations consolidated into fewer villages. By 1850, the surviving native people were being negotiated onto reservations in exchange for fishing rights (ENSR, 2002).

Under the terms of the September 27, 1850, Act of Congress, Colonel W.W. Loring by order dated October 31, 1850, defined the limits of Vancouver Barracks, including an area of about 16 square miles, subject to any and all valid claims of Hudson's Bay Company (HBC) and others, as provided for in the treaty between the U.S. and Great Britain, dated July 17, 1846. By order of the War Department dated October 29, 1853, the area was reduced to 640 acres and boundaries were published in General Orders (December 8, 1854).

### 3.2.2 Facility History

#### 3.2.2.1 Occupancy History

##### Vancouver Barracks

Vancouver Barracks was founded by the HBC in 1824 and was their principal depot in the Pacific Northwest from 1825 to 1846. The HBC established the 2,600-acre installation partially to maintain British control of the territory north of the Columbia River.

The installation was named Camp Vancouver prior to 1854 before being renamed Columbia Barracks. In 1853, it was renamed Fort Vancouver. Congress reduced the installation size from 2,600 acres to 640 acres and approved Fort Vancouver as a military reservation in 1854. The fort was headquarters for much of the military in the Pacific Northwest through the end of the 19th century. In April 1879, Fort Vancouver was renamed Vancouver Barracks (ENSR, 2002).

Between World War I and World War II, Vancouver Barracks was the district headquarters for the 1st, 49th, 32nd, and 5th Infantry Regiments and for the Civilian Conservation Corps, a public works program created by Congress to employ young men during the Great Depression. Between 1944 and March 1946, Vancouver Barracks was used by the 9th Service Command as a staging area for cargo and personnel. The Vancouver Barracks was declared excess by the U.S. Army in March 1946, and the installation was closed until the end of the year. At that time, 84.5 of the original 640 acres were reactivated by the U.S. Army as the headquarters for the Organized Reserve Corps of the Oregon Military District (ENSR, 2002).

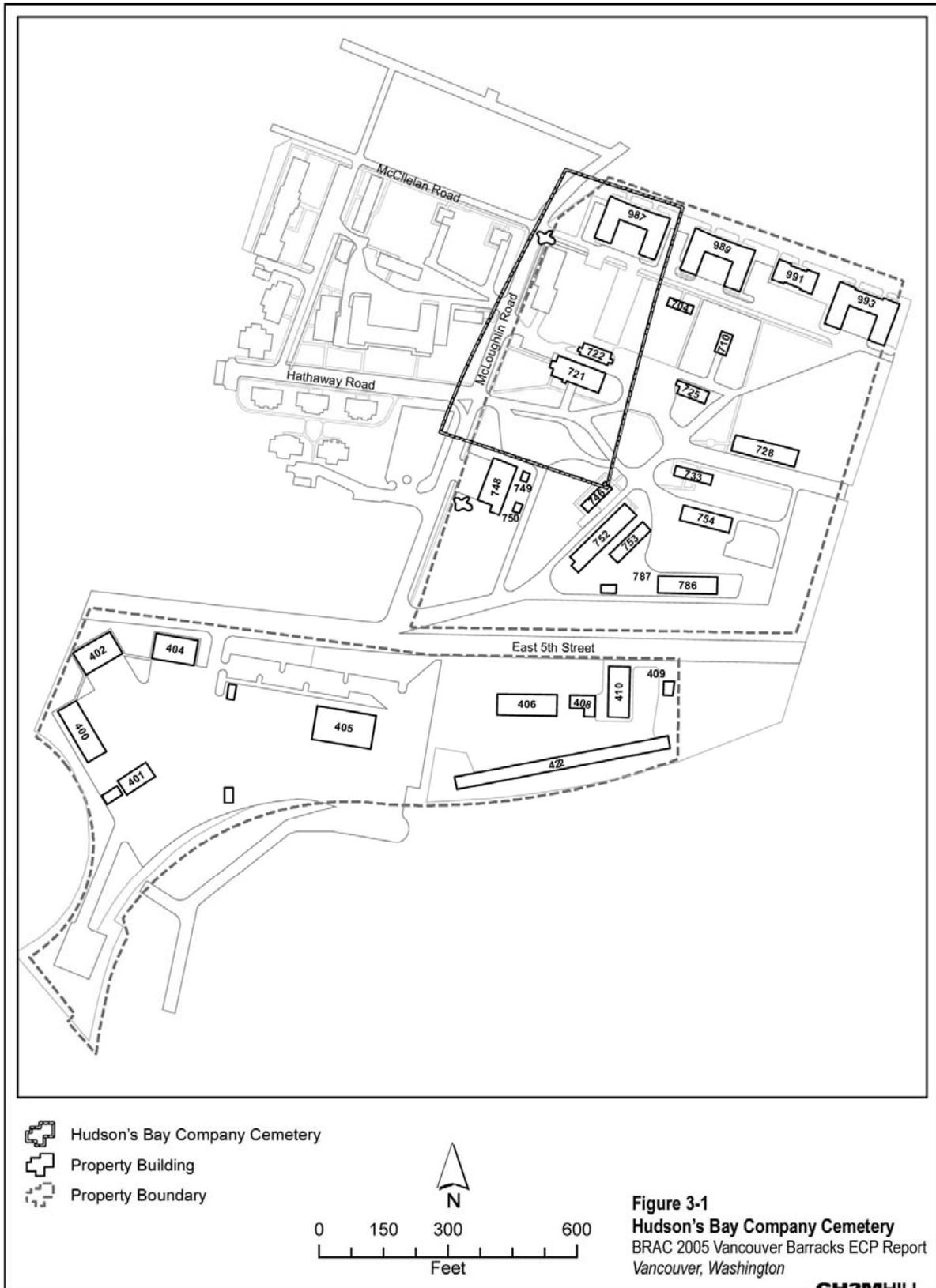
To commemorate the importance of Fort Vancouver, Congress established the Fort Vancouver National Monument in 1948. In 1958, Vancouver Barracks became a subinstallation of Fort Lewis to be used in support of the USAR and the Washington Army National Guard activities on Vancouver Barracks. In 2001, the Army Reserves took real property responsibility for Vancouver Barracks. The active U.S. Army retained real property accountability for Vancouver Barracks, since the USAR was unable to hold property accountability. The U.S. Department of the Interior and the City acquired a portion of the installation for use as a historic preserve in 1994, reducing the size of Vancouver Barracks to 53.6 acres. The USAR was delegated the authority to hold property accountability in 1995. Fort Lewis, in a request to U.S. Army Forces Command (FORSCOM) dated March 23, 1995, asked that FORSCOM initiate actions to transfer all real property at Vancouver Barracks to the USAR. In 2001, Vancouver Barracks became a subinstallation of Fort Lawton under the command of the 70th RRC (ENSR, 2002).

During HBC presence at Fort Vancouver between 1824 and 1860, officers, servants, their families, and other inhabitants of varied ethnicities were buried at the HBC Cemetery established on the Fort. The boundaries of the cemetery are shown in Figure 3-1. Catholic priests from St. James Mission recorded over 200 burials at the cemetery during the 17-year period between 1839 and 1856, but prior burials predate church records (ENSR, 2002).

By the time the U.S. government arrived at Vancouver Barracks in 1849 to participate in a transition from British to American ownership of the Oregon Territory, the boundary of the cemetery was no longer clearly marked. Some graves were relocated to the present Vancouver Barracks Cemetery, located approximately 1 mile north of Vancouver Barracks. No documentation was found to indicate how many graves were relocated or when. By 1900, the location of the original cemetery was lost beneath the expanding Vancouver Barracks, and some buildings were constructed over the gravesites located on the installation (ENSR, 2002).

### **Adjacent Properties**

The following areas were not within the Property boundaries and are provided for historic perspective only.



**Figure 3-1**  
**Hudson's Bay Company Cemetery**  
 BRAC 2005 Vancouver Barracks ECP Report  
 Vancouver, Washington

**CH2MHILL**

File Path: \\Rosa\proj\USACE\Louisville\Dist\343346\Vancouver\_Barracks\GIS\mxd\Figure3-1\_Hudsons\_Bay\_Cemetery.mxd, Date: September 5, 2006 10:13:47 AM

### ***Spruce Production Mill***

During World War I, the Spruce Production Division (U.S. Army Signal Corps) built a saw mill and production facility at the site of Pearson Airpark located southeast of Vancouver Barracks. This facility mass-produced wooden aircraft components. At that time, the saw mill produced more than 1 million board-feet of lumber per day.

### ***Kaiser Shipyard (Also Known as Columbia River Site)***

The waterfront at the Columbia River was a government pier for the U.S. Army from 1849 to 1948 and was used to bring troops and supplies to Vancouver Barracks. In addition, during World War II, this area was a large shipyard called the Kaiser Shipyard. Today, portions of it are within the Fort Vancouver National Historic Reserve, which consists of a walkway along the stream bank and restaurants overlooking the river. Some portions are also part of the Columbia Business Center, a privately owned company.

#### **3.2.2.2 Operational History**

According to the EBS, throughout the existence of Vancouver Barracks, their mission has been mainly one of administration, housing, and training. Between 1849 and World War I, Vancouver Barracks had various ordnance and munitions uses, including a bastion, skirmish ranges, magazine storage buildings, powder storage buildings, an ordnance depot, and a pistol range. During World War I, aside from the above mission, the U.S. Army operated the Spruce Production Mill for the purpose of constructing aircraft components. Between the two world wars, the Vancouver Barracks were used for the training of the Citizen's Military Training Center and the Civilian Conservation Corp.

During World War II, the Vancouver Barracks were used as staging for the Portland embarkation, as a hospital, as an ordnance depot, and for shipbuilding. Following the end of World War II, the operations centered more on administration and training.

Other uses of the Vancouver Barracks included activities conducted by the USAR, the Washington Army National Guard, and a variety of other governmental and public nonprofit organizations. These activities included reserve training, administrative functions, storage of materials, motor pool activities, community group meetings, and educational programs.

In general, potential materials of environmental concern associated with these types of activities include, but are not limited to, petroleum, oil, lubricants, pesticides, polychlorinated biphenyls (PCBs), solvents, degreasers, lead-based paints, herbicides, munitions and explosives, and small quantities of other hazardous materials not listed.

#### **3.2.2.3 Process Descriptions (Industrial Facilities Only)**

The EBS identified industrial operations at Vancouver Barracks that were, and currently are, limited to those associated with light vehicle storage and maintenance. Maintenance consists of fluid change-outs and general repairs. Chemicals typically used include degreasers in parts-cleaning and petroleum, oil, and lubricants. Maintenance activities have occurred mainly in the 400 Series buildings located in the southern portion of the facility. Buildings 406, 408, 410, and 422 operated as maintenance facilities from the time of their construction until the early 1980s when the current maintenance facilities were constructed.

### 3.2.2.4 Occupancy, Lease, and Easement History

A timeline of occupant history at Vancouver Barracks is provided in Table 3-2.

TABLE 3-2

Occupancy History

*Environmental Condition of Property Report, Vancouver Barracks, Vancouver, Washington*

Year	Occupancy
1825	Camp Vancouver established by the HBC encompassing 2,600 acres.
1846	Camp Vancouver became responsibility of U.S. government. First contingency of U.S. troops arrive at camp.
1853	Fort Vancouver reduced to 640 acres.
1948	U.S. Congress establishes Fort Vancouver National Monument.
1958	Vancouver Barracks becomes subinstallation of Fort Lewis.
1960	Establishment of Vancouver Barracks National Historic Preserve.
1994	Vancouver Barracks National Historic Preserve acquires northern portion (Officers Row) of Vancouver Barracks.
2001	Vancouver Barracks under real property* of U.S. Army Reserves.
2005	Eastern and southern portion of Vancouver Barracks incorporated into BRAC 2005 program.

\* Real property consists of lands and improvements to land, buildings, and structures, including improvements and additions, and utilities. It includes equipment affixed and built into the facility as an integral part of the facility (such as heating systems), but not movable equipment (such as plan equipment). In many instances, this term is synonymous with real estate.

Currently, Vancouver Barracks holds three in-grants: one for connection to the City sanitary sewer system, one road access right-of-way, and one aircraft easement for use of land transferred to Department of the Interior. Twenty-two out-grants are currently in effect, primarily for utility and transportation right-of-ways and administrative use of building space.

Today, the Property is primarily occupied by the USAR and is a subinstallation under the command of Fort Lawton. The buildings at the Property are occupied by the 70th RRC, U.S. Army Air Force Exchange Service, and the Washington Army National Guard. The current list of occupants is summarized in Table 3-3.

Table 3.3 redacted.

### 3.2.2.5 Range Operations

There are no operational ranges located at the Property. Historically, three indoor ranges were located in the attics of Buildings 987, 989, and 993. One inactive range is located in the basement of Building 721. Potential contamination of these areas is further discussed in Sections 4.2.4.2 and 4.6.

## 3.3 Installation Utilities (Historic and Current)

### 3.3.1 Water Systems

Vancouver Barracks currently receives its potable water from the City. The source of potable water for the City is the Lower Orchard lower alluvial aquifer. The City conveys water via an 8-inch-diameter pipe to two covered reservoirs. One reservoir has a capacity of 1 million gallons; the second has a capacity of 4 million gallons (ENSR, 2002).

The historical water distribution system used at the Property, prior to the City's water distribution system, is unknown. Water is distributed throughout Vancouver Barracks via underground transmission and distribution lines. The transmission and distribution systems, which consist of piping, valves, and two master meters, provide for both domestic water service and fire protection (including fire hydrants) throughout the installation.

### 3.3.2 Industrial and Sanitary Sewers and Treatment Plants

Vancouver Barracks collects wastewater, most of which is domestic, via underground collection lines and mains located throughout the area. A drain survey was conducted for the Property in 2004 (ICI LLC, 2004).

A site assessment was conducted at three maintenance buildings (Buildings 400, 402, and 404) as a part of the Stormwater Pollution Prevention Plan. Currently, there are no direct connections from the work bays or other interior areas at the maintenance shops (or storage building) into local stormwater conveyances. Trench drains inside the work/storage bays of

Buildings 400, 402, and 404 discharge through respective oil/water separators (one for each building) into the local sanitary sewer system. Most other floor drains inside the shops have been sealed with concrete. The former vehicle wash rack (discussed in Section 4.2.4) has been closed by the 70th RRC, and the wash pad has been sealed with concrete. However, the oil/water separator and some drain lines still remain in place. The area is now fenced and serves as a used/waste material accumulation area for the motor pool (Weston, 2004).

Wastewater from Vancouver Barracks is conveyed by means of a gravity system to the City publicly owned treatment works through connections north of East 5th Street and at Buildings 408 and 410. These connections transmit the wastewater to the City's West Side Water Reclamation Facility, a 22.4-million-gallon-per-day plant, located on Mill Plain west of downtown Vancouver (ENSR, 2002). Wastewater is treated and then discharged from a 168-foot diffuser outfall pipe that is submerged in the Columbia River. The outfall pipe is located approximately 2.5 miles west (on the west side of the City) and south of Vancouver Barracks.

Historical information on sanitary sewers was not available.

### 3.3.3 Stormwater System

Stormwater from Vancouver Barracks is collected in drains and conveyed through underground pipes, ranging in size from 6-inch lateral pipes to 27-inch municipal storm drain pipes, to a connection with the City's stormwater system. The City's stormwater drainage system crosses the boundary of Vancouver Barracks at the intersection of Evergreen Boulevard and Cabell Road and continues southward through the heart of Vancouver Barracks along McLoughlin Road. South of East 5th Street, the City storm sewer leads underneath Building 405, bends to the southwest for 450 feet, then bends due south and continues south from Vancouver Barracks to the Columbia River discharge point. The City's stormwater system discharges directly to the Columbia River approximately 800 feet from the Vancouver Barracks boundary (CH2M HILL, 1998).

As mentioned above, the three maintenance buildings (Buildings 400, 402, and 404) are currently not directly connected into local stormwater conveyances (Weston, 2004). However, Mr. Bill Schell from Vancouver Barracks indicated that other maintenance buildings may have been connected to the stormwater or sanitary sewer in the past. Information on historical connections to the stormwater system was not found during the limited records review for this ECP.

South of East 5th Street, there are 20 outfalls located within the motor pool area (OF-1 through OF-20). Of these, OF-4 through OF-7 and OF-11 through OF-15 are regulated under a National Pollutant Discharge Elimination System (NPDES) permit (refer to Section 4.1.4). Dye tests performed on July 16, 2002, showed stormwater from the parking area south of Building 400 on Vancouver Barracks flowing to the Columbia River. A main outfall is located on the east side of West Washington Street along the Columbia River, approximately 0.25 mile southwest of Vancouver Barracks. However, the outfall that receives stormwater from Vancouver Barracks is located approximately 100 feet east of the main outfall. This outfall is located under a water line and is not visible. Unpaved and graveled areas percolate stormwater to the ground. Some stormwater is collected from

rooftops of large buildings and is discharged to drywells, where it then infiltrates directly into the soil.

There is no record of interior drains discharging into the stormwater system at the Property (ICI LLC, 2004). Historical records on stormwater connections were not available.

### 3.3.4 Electrical System

The electric utility system at Vancouver Barracks is owned by the U.S. Army. Electricity is purchased from the Clark County Public Utility District and transmitted to the installation via a single feed located at the corner of East 5th Street and Vancouver Way. The distribution system on Vancouver Barracks consists of both overhead and buried underground cables. The system includes one master meter that covers the entire Vancouver Barracks.

### 3.3.5 Natural Gas

Heating energy is currently provided primarily by natural gas boilers and forced air systems, although there are some small electric space heaters used on installation. Natural gas is supplied to the installation by Northwest Natural. In fiscal year 2004, the total quantity of natural gas consumed was 111,050 million British thermal units (Fort Lawton, 2005).

Based on past coal storage areas observed during the VSI, coal was historically used to heat Buildings 422, 406, 410, 746, 748, 752, 753, 786, 721, 987, 989, 991, and 993 on the Property. Heating oil also was used to heat the buildings before they were converted to natural gas. See Section 4.4.1 for further information.

## 3.4 Environmental Setting

### 3.4.1 Climate

The EBS identified that the temperate marine climate of the Vancouver, Washington, area is characterized by an annual average maximum and minimum temperature ranging from 62.1 to 42.8 degrees Fahrenheit, respectively. The annual average rainfall for the area is 39.3 inches/year (99.8 centimeters/year), with 6.8 inches/year (17.3 centimeters/year) of snowfall, based on 2005 data (Web site: National Oceanic and Atmospheric Administration, 2005).

### 3.4.2 Topography

Vancouver Barracks is situated along the northern floodplain of the Columbia River. The ground surface gently slopes to the south-southwest toward the river. Surface elevations range from 34 feet above mean sea level at the south end to just over 85 feet mean sea level at the north end (Google Earth, 2006).

### 3.4.3 Surface Water Hydrology

Vancouver Barracks is located in the Columbia River Basin. No surface bodies of water are located on the Property. Significant bodies of water in the vicinity of Vancouver Barracks

include the Columbia River and Burnt Ridge Creek. The Columbia River is approximately 0.25 mile south of the installation, and Burnt Bridge Creek is approximately 1 mile to the northeast.

Surface water drainage on the installation is from the north to the south and appears to be well drained, with runoff controlled by storm drains.

#### 3.4.3.1 Groundwater

Groundwater wells have not been installed at Vancouver Barracks or in the vicinity. Based on a well log from a City well located just across I-5 and limited information on the geology in the immediate area, it is inferred that groundwater could be as shallow as 15 feet below ground surface (bgs) in portions of the Property. The EBS reported groundwater at 60 feet bgs in the Salmon Creek aquifer, but acknowledged a lack of site-specific information and did not report an estimated depth on the Property.

The EBS reports that the alluvial aquifer has an estimated thickness of 40 feet, and the base of the aquifer is on top of the Troutdale formation. Groundwater is inferred to flow to the south-southwest, toward the Columbia River, which constitutes the local and regional hydrologic base level.

The Salmon Creek aquifer has been described as being highly permeable with large quantities of available water. The EBS reports that the most important groundwater aquifer in the region is the Troutdale Gravel aquifer, which is estimated to be 100 feet below Vancouver Barracks, with a thickness of about 150 feet. The Upper Troutdale aquifer has a gradient of approximately 0.01 foot drop per every foot in elevation toward the southwest.

There are no known current or former groundwater wells on Vancouver Barracks. United States Geological Survey (USGS), federal Public Water Supply System, and state water well information databases were searched by EDR in 2002 during the EBS for an area within a 1-mile radius of the parcel. Thirty wells were identified from the USGS well information database. According to the database, 19 of the 30 wells are used for industrial purposes, 1 well is used for air conditioning, 1 is used for public supply, 2 are used for domestic purposes, 1 is unused (it is a test well), and the uses for the remaining 6 wells are unknown. The nearest well identified in the EBS was approximately 0.25 mile to the west-northwest of Vancouver Barracks and has a 35-foot depth to the water table, presumably under nonpumping conditions. One well was identified in the federal Public Water Supply System database. This well is the Port of Vancouver well, located approximately 0.25 mile north-northeast of Vancouver Barracks. Two EPA violations for maximum monthly coliform levels were issued for the well in 1995.

#### 3.4.4 Geology

This section is based on a review of geologic information that was conducted by URS for a site less than 1 mile east of the Property (URS, 2004).

The Property lies within the Willamette Valley physiographic province. The Willamette Valley province is an elongated; roughly north-south trending alluvial plain that pinches out at the northern and southern ends (URS, 2004). The province was created by uplift and

tilting of the Coast Range to the west and by the western Cascade Range to the east, creating the topographically low trough of the Willamette Valley.

The Washington Division of Geology and Earth Resources (1987) maps indicate that the shallow subsurface materials near the site are quaternary alluvium, described as medium to fine sand and silt on the floodplain of the Columbia River. Regionally, the unit is less than 50 feet thick. The alluvium is underlain by late Pleistocene coarse-grained alluvial catastrophic flood deposits associated with the Missoula flood events that occurred from 13,500 to 15,000 years ago. The larger clast sizes evident in the formation are an indicator of the higher energy/velocity waters that carried these gravels and cobbles to, and deposited them in, their present location.

The Property is located in the Sauvie-Puyallup soil association, which is made up of level to gently sloping floodplains of the Columbia River. Drainage ways and shallow depressions are numerous in the area; the soils are classified as somewhat poorly to somewhat excessively drained, and are moderately fine to moderately coarse in texture.

According to the United States Department of Agriculture (USDA) Soil Conservation Service (SCS) Soil Survey of Clark County, Washington, surficial soils at the site are classified as two types: Lauren gravelly loam and fill land (USDA-SCS, 1972). The property is located in the Lauren gravelly loam (8 to 20 percent slopes) map unit. The Lauren gravelly loam soil is described as occurring on terraces. The typical profile is gravelly loam to a depth of about 6 inches, underlain by about 27 inches of very gravelly loam. From 33 to 70 inches, the soil is described as very gravelly coarse sandy loam to very gravelly loamy coarse sand. The permeability is moderately rapid to rapid, the surface runoff is slow, and the erosion potential is slight.

### **3.4.5 Demography and Land Use**

The Vancouver Barracks is located within the limits of the City. Vancouver has a population of 157,493 (2005), which is an increase from the 144,050 reported in 2000. The City covers an area of 43 square miles with a population density of 3,662 people/square mile. In the area immediately surrounding Vancouver Barracks, an estimated population density of 1,548 people/square mile was reported in 2004 (U.S. Census Bureau, 2005).

Surrounding property use includes residential, commercial, recreational (National Historic Reserve) and light industrial. Vancouver Barracks is located in the City's Vancouver Central Park District zoning area and has a comprehensive plan designation of Public Facilities. Permitted uses include those that serve the public and comply with the Vancouver Central Park Design Guidelines, as adopted by City Ordinance M-2011. The Vancouver Central Park Guidelines also provide development standards as adopted by City Ordinance M-2073 (Vancouver Historical Study Commission, 1993).

## **3.5 Biological and Cultural Resources Summary**

### **3.5.1 Biological Resources**

As part of the EBS, a request was submitted to the U.S. Fish and Wildlife Service (USFWS) for a list of plant and animal species potentially occurring in the Property that are

endangered, threatened, or proposed for listing as endangered or threatened. The USFWS responded (November 2001) that wintering bald eagles (*Haliaeetus leucocephalus*), a threatened species, could be found in the vicinity of Vancouver Barracks. In addition, bull trout (*Salvelinus confluentus*; threatened) and coastal cutthroat trout (*Oncorhynchus clarki clarki*; proposed) may occur in the Columbia River located approximately 0.25 mile south of the installation boundary. The National Marine Fisheries Service Web site, which reports, by region, listed species and their current status, also was consulted during preparation of the EBS to determine fish species potentially present in the vicinity of Vancouver Barracks. The Lower Columbia River chinook salmon (*O. tshawytscha*; threatened) Evolutionary Significant Unit, Columbia River chum salmon (*O. keta*; threatened) Evolutionary Significant Unit, Lower Columbia River steelhead (*O. mykiss*; threatened) Evolutionary Significant Unit, and Lower Columbia River/Southwest Washington coho salmon (*O. kisutch*; candidate) Evolutionary Significant Unit also may occur in the Columbia River (ENSR, 2002).

### 3.5.1.1 Wetlands

According to the National Wetland Inventory Maps issued by the USFWS, no designated wetlands exist on or adjacent to the Property. Additionally, no wetlands were observed on the installation during the EBS site visit or during the VSI.

## 3.5.2 Cultural Resources

### 3.5.2.1 Prehistoric Resources

Within the Property, archaeological material relating to prehistoric habitation has not been found.

### 3.5.2.2 Historic Resources

The EBS reports that during Vancouver Barracks principal growth period between 1829 and 1846, Fort Vancouver was the social and cultural center of the region, with the first schools and churches being established on the Fort. The Fort also became the only reliable source for emergency shelter and transportation, as well as a resource for food and clothing.

Native Americans who lived in the vicinity of the present-day Vancouver Barracks resided along the banks of the Columbia River, and spoke the Multnomah dialect of Upper Chinookan. The HBC peacefully coexisted with Native Americans. Marriages between Native American women and non-Native American HBC male employees have been documented. During the 1830s, the entire population of a Multnomah Chinook village, located near Vancouver Barracks, was eradicated during a small-pox epidemic. In addition, during the same time period, an estimated 98 percent of the Chinook Native American population in the Portland basin succumbed to disease.

The Vancouver Barracks area is known to have a high concentration of significant archaeological resources. Beginning in the late 1940s, many archaeological excavations and studies were conducted, with over 1.4 million artifacts related to HBC operations collected. Artifacts pre-dating the 1860s have been found in the area. These include remnants of dwellings, buildings, fence posts, utility and sewage system features, water lines, refuse dumps, boardwalks, a corral, drainage ditches, utensils, buttons, bottles, construction devices, ceramic shards, and World War I railroad features. These artifacts represent the

largest HBC collection in the world. The majority of the investigative work has taken place at the stockade, the Kanaka Village/riverfront area, the parade grounds, the Officers' Row area, and the area southeast of McClellan Road, although work has been performed throughout Vancouver Barracks.

### 3.5.2.3 Former Hudson's Bay Company Cemetery

The EBS reports that construction workers digging for a water pipe in the basement of the auditorium (Building 721) on Vancouver Barracks discovered bones and some coffin remnants in 1982. It was then discovered that the auditorium had been constructed on top of the old HBC Cemetery, where the company buried servants, officers, their families, and Native Americans, among others. The cemetery was subsequently surveyed and is understood to occupy the north western portion of the Property in the vicinity of Building 721. On June 23, 1993, a spiritual cleansing ceremony was conducted on Vancouver Barracks in the basement of the installation auditorium by a Cowlitz tribal holy man. The site was purified in the ceremony and the remnants of coffins and bones were freed of Indian spirits.

The Department of the Army is working to get a commitment by partners in the Vancouver National Historic Site to leave human remains in the former HBC Cemetery undisturbed, and to limit future development in the area. Site protection procedures are currently in effect and can be obtained from the U.S. Army.

### 3.5.2.4 Historic Buildings/Structures

A historical buildings and structures inventory was completed in 2004. The survey identified 42 buildings/structures 50 years old or older, and 40 buildings/structures eligible for the *National Register* (Boes, 2006).

Vancouver Barracks was determined eligible for inclusion on the National Register of Historic Places in 1979. According to the 1986 Historic Properties Report (Building Technology, Inc., 1986), there are no Category I or II properties at Vancouver Barracks and, therefore, none at the Property. Category I and II properties are considered to have higher historical value than Category III properties. However, Vancouver Barracks has a composite value as a historic district because it exhibits the stylistic progression of the general development of Vancouver Barracks. The significance of the district is primarily historical, since all but 11 of Vancouver Barracks' 49 buildings are classified as Category III historic properties. The remaining 11 buildings (Buildings 400, 401, 402, 404, 405, 409, 602, 673, 676, 710, and 787) are not classified as historical because they were constructed within the last 50 years. The 400 and 700 building series are within the Property boundary.

## 4. Environmental Conditions

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### 4.1 Environmental Permits/Licenses

#### 4.1.1 Resource Conservation and Recovery Act Status

Vancouver Barracks was issued a hazardous waste handler permit (WA7210020924) as a small-quantity generator from the federal government. In 2004, Vancouver Barracks was issued temporary large-quantity generator status due to restoration work conducted on the West Barracks. Restoration work included the removal of lead-based paint and debris from a building situated in the West Barracks.

#### 4.1.2 Solid Waste Permits

Vancouver Barracks does not have any solid waste permits. All solid wastes are handled through a contract with Waste Management, Inc.

#### 4.1.3 Underground Storage Tank/Aboveground Storage Tank Permits

The known regulated and unregulated USTs and aboveground storage tanks (ASTs) at the Property have been removed (refer to Section 4.4). The potential still exists for unregulated tanks that were used for heating oil to be found on the Property, but no documentation was readily available that described the location of unregulated tanks, if any exist, on the Property. Heating oil tanks that are less than 250 gallons in capacity are exempt from federal and state UST regulations under RCRA Subtitle I, but can be regulated under the Clean Water Act in the event of a violation, such as a leaking tank. The documentation reviewed and interviews conducted as part of this work did not identify any unregulated tanks.

#### 4.1.4 National Pollutant Discharge Elimination System Permits

Vancouver Barracks currently works under an EPA NPDES Permit (Number WAR 05A46F dated October 14, 2004) that encompasses the area south of East 5th Street, which is referred to as the Vancouver Barracks Motor Pool. The State of Washington does not have NPDES permitting authority for federal facilities (Weston, 2004).

Vancouver Barracks has been covered in the past under Sector P of the EPA Multi-Sector General Permit (MSGP) – Motor freight transportation facilities, passenger transportation facilities, petroleum bulk oil stations and terminals, rail transportation facilities, and U.S. Postal Service transportation facilities. According to the EPA and 70th RRC records, the U.S. Army I Corps and Fort Lewis Public Works submitted a Notice of Intent (NOI) for Sector P of the MSGP on September 23, 1998. The NOI tracking number for the submittal was WAR 05A46F and covered all of Vancouver Barracks. However, the MSGP was revised (renewed) on October 30, 2000, during which time the 70th RRC was required to reapply for coverage under the new MSGP. No record exists at the 70th RRC or EPA of a reapplication or any other NOI submittal during that time or since. In May 2004, the 70th RRC submitted an NOI for coverage of the motor pool area as opposed to the entire installation, because the motor pool area is the only location with regulated industrial activity (Weston, 2004).

### 4.1.5 Drinking Water Permits

No drinking water permits were identified. Potable water is provided by the City.

### 4.1.6 Air Permits

The air emission sources at the Property that were registered with the Southwest Clean Air Agency (SWCAA) as of 2005 (SWCAA ID 984) included 12 natural gas-fired heating units. Air emission sources at the Property include natural gas-fired boilers and heaters, painting operations, mobile sources, and other small sources.

The 2005 emissions summary for Vancouver Barracks, prepared by Fort Lawton for the SWCAA, based on EPA AP-42, reported 0.31 ton of nitrogen oxides, 0.26 ton of carbon monoxide, 0.02 ton of volatile organic compounds (VOCs), and 0.02 ton of particulate matter (SWCAA, 2005). The levels of sulfur dioxide and hazardous air pollutants were negligible according to the emission statement. The emission statement identified that no other significant emission sources are located on the Property. The boilers are not subject to new source performance standards, as described in 40 CFR 60.

### 4.1.7 Nuclear Regulatory Commission Licenses

Vancouver Barracks does not hold a Nuclear Regulatory Commission license for radiological materials. The use of radiological materials has been confined to low-light-level rifle sight containing promethium-147 or tritium, compasses containing tritium, and luminous dials and instruments containing low levels of tritium, radium, and iridium. These items are used by various units during training and are transported with the units when they return to their assigned installations.

No disposal of radiological materials has been reported at the Property.

### 4.1.8 Other Permits/Licenses

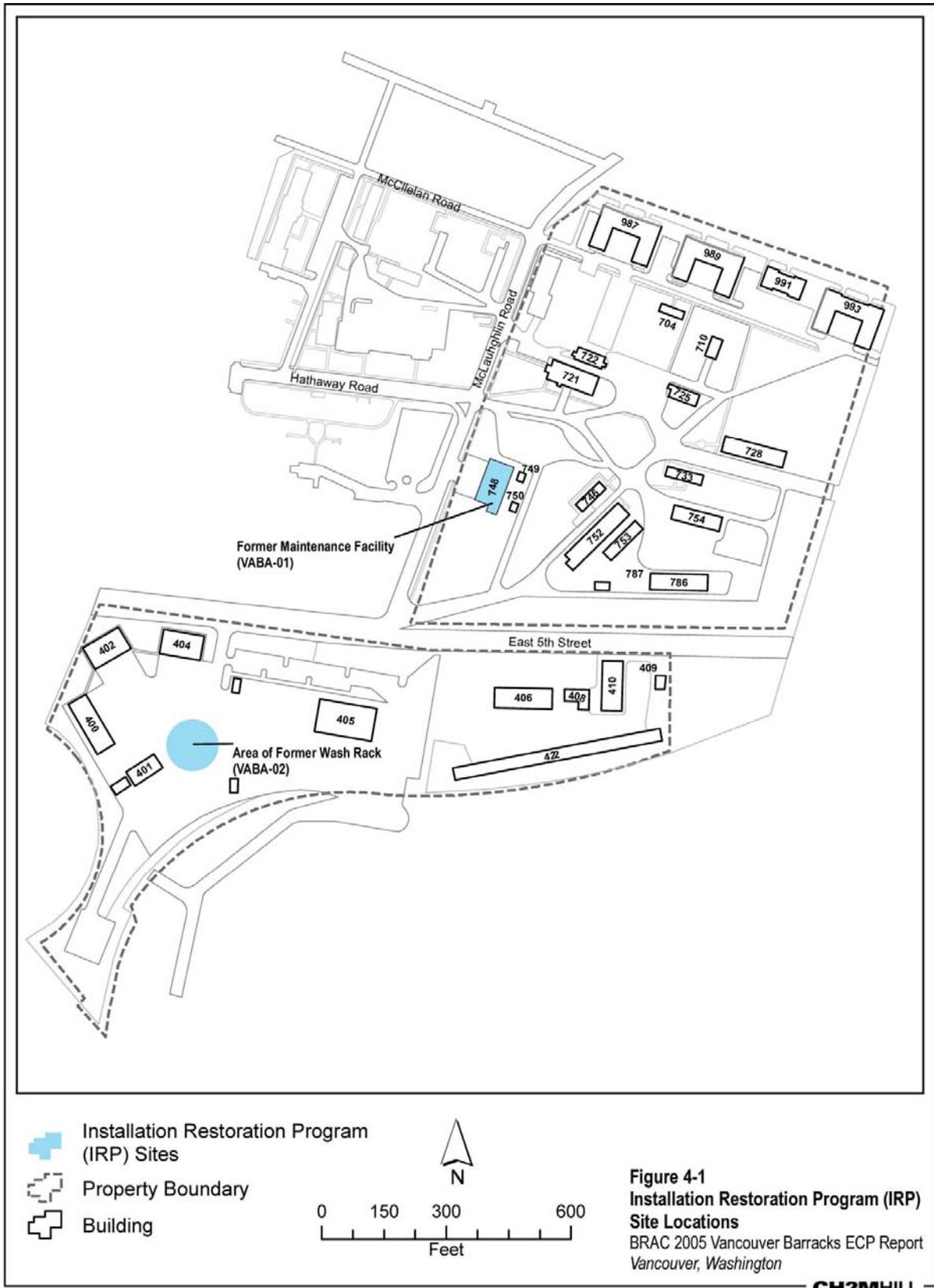
None identified.

## 4.2 Environmental Cleanup

### 4.2.1 Installation Restoration Program

There are two sites listed in the Army Environmental Database Restoration (AEDB-R) that are included in the U.S. Army DOD IRP. These include the former maintenance support Building 748 (site VABA-01) and the former wash rack (site VABA-02) at Building 400 (Figure 4-1).

A release of 0.5 quart of a mixture of diesel and oil from a vehicle parked in Building 748 to the Columbia River was reported to the EPA in 1995. As a result, a Preliminary Assessment (PA) was completed at the former maintenance support Building 748 (VABA-01) in 1996. The PA included records review, personnel interviews, and site visits. Environmental sampling is not within the scope of a PA. The PA concluded that the release of oil had not caused a release to the environment that negatively affected human health or the environment, and the report recommended no further action.



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It is inferred that this recommendation was made due to the small quantity of oil spilled and that environmental controls that were in place at the time. The site was considered Response Complete (RC) in AEDB-R as of March 1996.

The 1996 PA also addressed the former wash rack (VABA-02) at Building 400 (USACE, 1996). The PA reported that because of its design, release of process water from the wash rack would cause a discharge to the Columbia River through the stormwater system. A follow-on Site Inspection (SI) was recommended and completed in 1998. Information regarding the SI is presented in Section 4.2.4.1. Based on the SI data (primarily documentation that concentrations of contaminants met regulatory cleanup levels), no further action was considered necessary. This site was declared Remediation Complete in December 1998 (Woodward-Clyde, 1998).

## 4.2.2 Military Munitions Response Program

One area on the Property has the potential for munitions and explosives of concern (MEC) to be present. This area of 8.15 acres is located south of East 5th Street and currently is included in the MMRP (see Figure 4-2). Known historic uses of the MEC site (sometimes referred to as the Western Portion Site) include powder storage, ordnance depot, ammunition storage buildings, and firing ranges. This site had various ordnance and munition use on it from 1849 to 1960 (TechLaw, 2006). Section 4.12 describes this site in further detail.

## 4.2.3 Compliance Cleanup

Compliance-related cleanup (CC) refers to the cleanup of contamination resulting from operations that have occurred since October 1986. The Property currently does not have any CC sites.

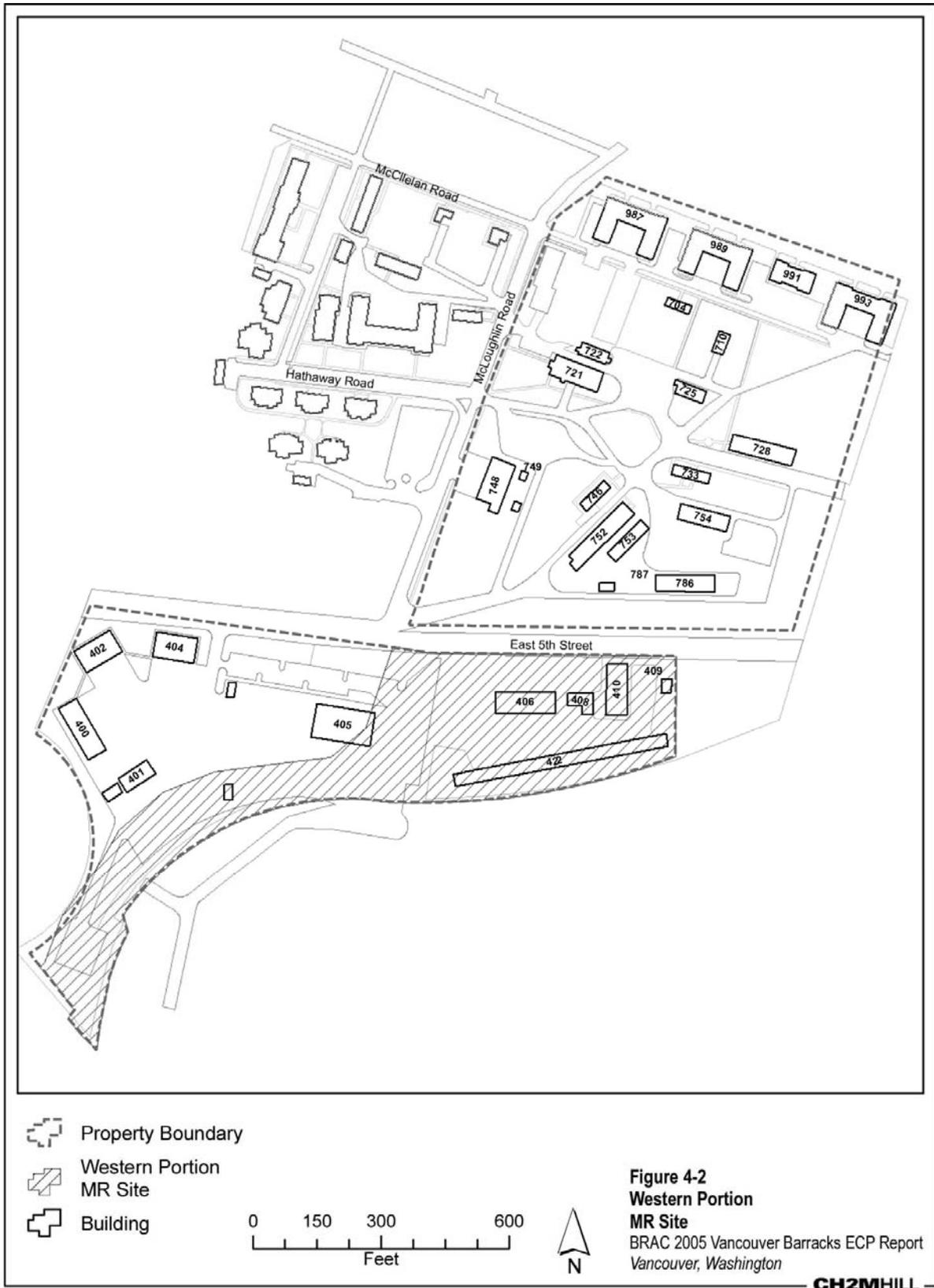
## 4.2.4 Previous Environmental Investigations

### 4.2.4.1 Preliminary Assessment

As discussed in Section 4.2.1 above, the U.S. Army conducted a PA at Vancouver Barracks in 1996 (USACE, 1996).

This PA was conducted in response to a spill of approximately 0.5 quart of motor oil at the former maintenance support Building 748 (site VABA-01). This spill reportedly reached the site storm drain system. Because of the spill, Vancouver Barracks was placed on the Federal Agency Hazard Waste Compliance Docket on April 11, 1995. The PA concluded that the reported oil spill and past practices had not caused a release to the environment through soil, air, groundwater, or surface water pathways that adversely affected human health or the environment. No further action was recommended for the former maintenance facility.

Although the PA recommended no further action at the site, an EPA evaluation required additional investigation of the abandoned vehicle wash rack and Building 402 where dry cleaning solvents were stored in bulk (EPA, 1996). Results of these investigations are summarized below.



**Figure 4-2**  
**Western Portion**  
**MR Site**  
 BRAC 2005 Vancouver Barracks ECP Report  
 Vancouver, Washington

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### Former Wash Rack Area (Site VABA-02)

Six soil borings were advanced with a hand auger within the abandoned vehicle wash rack area, located east of Building 400, including two borings through the bottom of the concrete-lined drain. The drain extended approximately 4 feet bgs. Each soil boring was advanced to approximately 2 feet below the base of the concrete (Woodward-Clyde, 1998).

Two soil samples were collected from each boring. One soil sample was collected from the 0- to 1-foot interval (surface) beneath the concrete, and the second was collected from the 1- to 2-foot (subsurface) interval. The analytical results presented in the report showed that four VOCs (acetone, methyl ethyl ketone, methyl isobutyl ketone, and toluene) were present in both the surface and subsurface wash rack area samples. Acetone was detected in all but one wash rack sample with concentrations ranging from 0.011 milligrams per kilogram (mg/kg) to 0.041 mg/kg. Methyl ethyl ketone was detected in eight samples ranging in concentration from 0.003 mg/kg to 0.010 mg/kg. Three samples contained concentrations of methyl isobutyl ketone ranging from an estimated 0.006 mg/kg to 0.007 mg/kg. Toluene was detected at concentrations ranging from an estimated 0.002 mg/kg to 0.004 mg/kg in 10 samples, which is below the state screening value of 7 mg/kg. This screening level is provided in the Ecology's Model Toxics Control Action (MTCA), Method A. One semivolatile organic compound (SVOC) was detected in two samples at different depths. Di-n-butylphthalate was detected in two samples at concentrations of 0.19 and 0.22 mg/kg (Woodward-Clyde, 1998). This SVOC is a common laboratory contaminant and likely is not attributable to Property contamination.

Aluminum and chromium were detected in both sample intervals at one location at concentrations slightly exceeding twice the standard deviation added to the mean for each metal (the comparison criteria used in Woodward-Clyde [1998]). Beryllium was detected in one shallow sample at a concentration of 1.1 mg/kg. Barium was detected in one sample at a concentration of 440 mg/kg. Magnesium also was detected at a concentration of 6,820 mg/kg (Woodward-Clyde, 1998). Review of the SI Report and other pertinent documents by EPA Region 10, Ecology, and Fort Lewis has resulted in a decision that remediation was not necessary at the site and no further remediation action was planned (Woodward-Clyde, 1998). There are no plans for further sampling or cleanup at in this area (ENSR, 2002). The AEDB-R states that the IRP response at the former wash rack is complete.

### Building 402, Former Dry Cleaning Solvent Use and Storage Area

EPA identified Building 402 as a historic dry cleaning practice point of concern. The dry cleaning solvent stored in Building 402 was used as a degreaser in the vehicle repair and maintenance shops. Why the solvent was used is not known because other more appropriate chemicals exist, but the inference is that an ample or leftover supply of solvent existed. The EPA and USACE agreed that additional investigation of Building 402 would consist of solids sampling from floor drains and analysis for VOCs and metals (ENSR, 2002).

Three soil borings were advanced near Building 402, an active vehicle maintenance facility. Two soil borings were advanced with a hand auger along each drain line from Building 402 to a former oil/water separator, and one soil boring was advanced along the drain line from the former oil/water separator to the location of the UST. One soil sample was collected from each boring at a depth that was estimated to be beneath the drain lines (Woodward-Clyde, 1998).

The full suite of analysis is not known. Eight VOCs were detected in the four samples collected near the drain lines at Building 402 (Woodward-Clyde, 1998). Acetone was detected in two of the samples at concentrations of 0.06 mg/kg and 0.069 mg/kg. The compound methyl ethyl ketone was detected in all four samples at concentrations of 0.004 mg/kg, 0.008 mg/kg, and two at 0.015 mg/kg. The compound methyl isobutyl ketone ranged from concentrations of 0.004 mg/kg (estimated) to 0.006 mg/kg in three of the samples. The meta and para xylene isomers were detected in two samples at estimated concentrations of 0.002 mg/kg and 0.003 mg/kg, which are well below the Ecology MTCA Method A Cleanup Level of 9 mg/kg for unrestricted land use. Toluene was detected an estimated concentration of 0.002 mg/kg in three of the samples, which is lower than the Ecology MTCA Method A Cleanup Level of 7 mg/kg. Calcium was the only metal detected in samples from the area around Building 402. The trichloroethene concentration detected in each of the samples was 0.003 mg/kg, which is below the Ecology MTCA Method A cleanup level of 0.03 mg/kg. The 1,1,1-trichloroethane concentration detected in all of the samples measured was 0.003 mg/kg, which is below the Ecology MTCA Method A cleanup level of 2 mg/kg. The tetrachloroethene concentration in each of the samples was 0.003 mg/kg, which is below the Ecology MTCA Method A cleanup level of 0.05 mg/kg (Woodward-Clyde, 1998).

Additional sampling was conducted at the site of a former UST near Building 402 resulting in the detection of five VOCs (acetone, methyl ethyl ketone, methyl isobutyl ketone, toluene, and meta and para xylene isomers). Acetone was detected at concentrations of 0.037 mg/kg and 0.025 mg/kg. The compound methyl ethyl ketone was detected at concentrations of 0.011 mg/kg and 0.008 mg/kg. The compound methyl isobutyl ketone was detected in both samples at a concentration of 0.006 mg/kg. Toluene was detected at concentrations estimated at 0.001 mg/kg and 0.002 mg/kg, which are below the Ecology MTCA Method A cleanup level of 7 mg/kg. Lastly, meta and para xylene isomers were detected at a concentration of approximately 0.001 mg/kg, which is below the Ecology Method A cleanup level of 9 mg/kg. No SVOCs or metals were detected in the samples collected from these soil borings (Woodward-Clyde, 1998). No plans exist for further sampling or cleanup in this area (ENSR, 2002). The AEDB-R lists that the IRP response is complete.

#### 4.2.4.2 Former Firing Ranges

Four buildings (721, 987, 989, and 993) previously housed firing ranges. The attics of these buildings and the basement of Building 721 are contaminated with lead dust from former small arms firing ranges. During the 2006 VSI, the attics in building 987, 989, and 993 were locked and warning signs for lead exposure were posted.

Each building was built in the shape of a "U", with each leg extending 102 feet long by 38 feet wide (3,900 square feet [ft<sup>2</sup>]). Support beams that span the width of the ranges are set on 16-inch centers at a height of approximately 7 feet. Two of the three wings of each building had previously been used as a firing range, for a total of six indoor firing ranges. The ranges, including the two sets of stairs leading from the second floor, are constructed entirely of unsealed wood. Each range also contains two abandoned ventilation ductwork runs that support historic exterior roof ductwork caps. The types of materials used as backstops and bullet traps for these former firing ranges are unknown (Shaw Environmental, 2006).

Lead dust abatement activities were performed in 1998. This cleanup was followed by an investigation that consisted of a combination of qualitative and quantitative lead dust wipe/swab sampling, as well as monitoring air for lead dust conducted in July 2004 (Shaw Environmental 2006). These activities are described below.

Abatement activities consisting of surface cleaning were performed in the summer of 1998, to minimize exposure. Surface cleaning consisted of removing all items stored in these areas and either vacuuming the items with a high-efficiency particulate air (HEPA) filter or washing them with a trisodium phosphate solution upon removal to remove lead dust. The areas were then HEPA-vacuumed, a surface coat of latex with grit was applied to the floors to reduce slipping hazards, and all nonwood surfaces were wet mopped.

The lead dust investigation was conducted by Shaw Environmental in July 2004 included Buildings 987, 989, and 993 (Shaw Environmental, 2006). Qualitative sampling of these buildings included collecting lead dust with wipe and swipe samples of the administrative offices adjacent to the ranges, as well as air samples from the attics (of the firing ranges) (see Section 4.7). Three wipe samples, out of a total of 66 samples taken, had lead concentrations higher than the U.S. Army cleanup goal of 200 micrograms per square foot ( $\mu\text{g}/\text{ft}^2$ ).

The lead-dust wipe survey found that lead concentrations in administrative office areas ranged from less than 10 up to 350  $\mu\text{g}/\text{ft}^2$ . Lead-dust wipe sampling results showed average lead concentrations that ranged from 2,253 to 5,800  $\mu\text{g}/\text{ft}^2$ , which are higher than the U.S. Army cleanup standard of 200  $\mu\text{g}/\text{ft}^2$ .

Two swab samples were collected in each of the three administrative office areas (typically the hallway in front of the doors leading to the attic stairs) for a total of six sampling swabs. None of the swab samples taken indicated the presence of lead dust above the 2 micrograms of lead on solid surfaces (Shaw Environmental, 2006).

The six lead dust air samples taken in the former indoor firing ranges (two samples in each of the three ranges) did not show lead dust concentrations above the laboratory's reporting limit 6.2 micrograms per cubic meter of air sampled (Shaw Environmental, 2006).

The Shaw Environmental (2006) Investigation concluded that lead concentrations on vertical surfaces, such as walls, support beams, and trusses in the attics were as high as levels found on the floors. Additionally, wooden floorboards are loosely fitted and dust and lead contamination have sifted through onto the lath and plaster below (Shaw Environmental, 2006).

### 4.3 Hazardous Substances

Hazardous materials are stored in several buildings including 400, 402, 404, 405, 408, 709, 410, 422, 710, 721, 728, 733, 748, 749, 750, 752, 753, 786, 987, 989, 991, and 993. A listing of available information on hazardous materials stored at the Property is provided in Appendix F.

According to the 2005 Dangerous Waste Annual Report Verification Form, the Property is a medium-quantity generator under RCRA Site Identification Number WA7210020924. Vancouver Barracks used Burlington Environmental Research, Inc. (RCRA ID No.

WAD991281767 and WAR000001743) and Safety-Kleen Corp. (RCRA ID No. ORD981766124 and TXR000050930) to dispose of hazardous waste from the installation.

The following description is based on the 2006 VSI and information from the EBS site visit.

### 4.3.1 Building 400

Building 400 is the Army Maintenance Support Activity (AMSA) 82 Motor Pool. General automotive repair and maintenance operations such as welding, changing of antifreeze and oil, and painting are conducted in vehicle bays in this building. Vehicles are not fueled at this facility. Potentially hazardous wastes associated with this building include used oil and oil filters, used antifreeze and waste brake/hydraulic fluid.

A trench drain is located along the front of the vehicle bays (northwest side of the building). The trench drain flows through an oil/water separator located outside of the building and then to the sanitary sewer system. The oil/water separator was formerly connected to a 500-gallon waste oil UST; however, the UST was removed in 1993 necessitating more frequent inspection and maintenance of the oil water separator.

Building 400 houses two cabinets for flammable materials. The cabinets contain cans of spray paint and some small quantities of petroleum, oils, and lubricants (POLs); solvents; and degreasers.

A solvent parts cleaner is located inside Building 400. This unit is equipped with a filter and drum, allowing the solvent to be reused. Safety Kleen, Inc. maintains this unit by periodically collecting the used solvent and replacing it with new solvent. A POL storage room is located on the west side of the building, which can be accessed only from the exterior of the building. Inside this room is a dispenser unit for several 55-gallons drums of oil, grease, and antifreeze. Small storage containers of hazardous materials including lubricants, carburetor cleaner, degreaser, and brake fluid are also stored in this room. There is a drain in the center of the room that once drained first to an oil/water separator, and then to a UST for retention of spilled hazardous materials. The oil/water separator tank has been removed and the drain has been filled with concrete.

Recycling of used oil and disposal of oily rags are coordinated through the Defense Reutilization and Marketing Office (DRMO) or through private contractors.

A battery storage room is located in Building 400, with a drain that leads to a lime pit. The lime pit, which is composed of a cell with lime in it, is intended to neutralize acid that could leak from batteries prior to discharging it to the sanitary sewer system. The pit has not been maintained and is believed to have never been used (ENSR, 2002). The pit was inspected during the 2004 Drain Survey (ICI LLC, 2004) and no media was observed inside the pit. Small quantities of POLs, cleaners, and batteries are stored in the battery storage room.

To the south of Building 400 are two small outdoor storage trailers with secondary containment. Several 55-gallon drums of lubricating oils, diesel fuel, gasoline, and brake fluid are stored in the trailers for use in Building 400.

To the southeast of Building 400 are two yellow poly-packs (each holds two 55-gallon drums) and a 55-gallon tank behind a locked gate. These drum packs are used for waste oil, waste oil filters, and waste antifreeze.

### 4.3.2 Building 402

Building 402 is a Motor Pool used by the 396<sup>th</sup> Combat Support Hospital (CSH) and the 104<sup>th</sup> Division Institutional Training. The 396<sup>th</sup> CSH occupies the east portion, and the 104<sup>th</sup> Division of Institutional Training operates the west portion of the building. General automotive repair and maintenance operations, such as changing of antifreeze and oil are conducted in vehicle bays in this building. Potentially hazardous wastes associated with this building include used oil and oil filters, used antifreeze and waste brake/hydraulic fluid.

A trench drain is located along the front of the vehicle bays on the south side of the building. The trench drain flows through an oil water separator located outside of the building and then to the sanitary sewer system. The oil/water separator was formerly connected to a 500-gallon waste oil UST; however, the UST was removed in 1993, necessitating more frequent inspection and maintenance of the oil water separator.

Two flammable materials cabinets in the building store cans of spray paint, 1-gallon cans of paint, and some small quantities of solvents and degreasers.

A solvent parts cleaner is located inside Building 402. This unit is equipped with a filter and drum, allowing the solvent to be reused. Safety Kleen, Inc. maintains this unit by periodically collecting the used solvent and replacing it with new solvent.

A POL storage room is located on the east side of the building. Inside this room is a dispenser unit for several 55-gallon drums of oil, grease, and antifreeze. Small storage containers of hazardous materials including lubricants, carburetor cleaner, degreaser, and brake fluid are also stored in this room. A floor drain in this room drains to a lime pit composed of a cell with lime in it. This room previously had been used for battery storage and the lime pit was intended to neutralize acid that may leak from batteries prior to discharge to the storm sewer system.

South of Building 402 are two small outdoor storage trailers with secondary containment associated with the building. One storage trailer houses several 55-gallon drums of diesel fuel and gasoline for use in the Building 402 shop. The other storage trailers houses empty hazardous material containers (including two empty 55-gallon drums used to store waste oil). Used materials remain in storage until they are removed by the 70<sup>th</sup> RRC or Fort Lewis.

### 4.3.3 Building 404

A POL storage room is located on the north side of the building and can be accessed only from the exterior of the building. This room was empty during the 2006 VSI. A drain in the center of the room once drained first to an oil/water separator and then to a UST for retention of spilled hazardous materials. The oil/water separator tank has been removed and the drain has been filled with concrete.

In the battery storage room of Building 404, there is a floor drain that has been filled with concrete (Schell, 2006). During the 2006 VSI, this room was observed to be a storage space for small containers of hazardous materials.

A trench drain is located on the interior of the building along the front of the vehicle bays. The trench drain flows through an oil/water separator located outside the building and then to the sanitary sewer system. The oil water separator once had an associated UST for

waste oil; however, the UST has been removed. The oil/water separator formerly was connected to a 500-gallon waste oil UST; however, the UST was removed in 1998 necessitating more frequent inspection and maintenance of the oil water separator.

A storage trailer was observed to the east of Building 404. During the 2006 VSI, no hazardous materials were stored in this trailer; however, in the past, 5-gallon containers of gasoline had been stored in this trailer (Rossi, 2006). Anecdotal evidence indicated that a lead battery was stored in a gassy area near this storage trailer (Rossi, 2006). Signs of contamination were not observed in this area during the 2006 VSI.

#### 4.3.4 Building 405

Building 405 is used as a supply room. Most of supplies in the building are stored in locked cages.

During the EBS site visit, a janitorial supply room and biomedical storage area were observed. The janitorial supply room is used to store small quantities of various cleaners and has a drain that leads to a lime pit. The lime pit is a cell with lime in it to neutralize spilled liquid prior to discharge to the sewer. The lime pit is believed to have never been used and has not been maintained (Rossi, 2006). Most of the supplies in the building are stored in locked cages. One locked cage contains used needles (in sharps containers), immunizations, segregation locker for immunizations past expiration dates, and cleansers such as alcohol. Small cylinders of oxygen were also stored in the locked cage. Used needles and immunizations that are past expiration dates are disposed in an incinerator at Madigan Army Medical Center on Fort Lewis. A floor drain is in the center of the medical storage cage.

To the south of the building are two small outdoor storage trailers with secondary containment. Several 5-gallon containers of hydraulic oil and antifreeze were observed in these trailers during the 2006 VSI.

A fuel truck with a secondary containment area is stored in a parking lot east of the building.

#### 4.3.5 Building 406

No hazardous materials were observed in the building during the 2006 VSI. However, due to historical use as a garage, the potential for past storage of hazardous materials exists.

#### 4.3.6 Building 408

No hazardous materials were observed in this building during the 2006 VSI, except small quantities of general cleaning supplies and one can of paint. A floor drain is in the boiler room. This drain is suspected to discharge into the ground or to flow north off the property to join the City sanitary sewer (ICI LLC, 2004). Minor staining was observed on the concrete floor in the boiler room.

On the exterior south side of the building is a concrete area (previously a vehicle wash facility) with a steel plate covering a sump with a drain. This drain flows south through an abandoned line; the outlet pipe acts as a separator/grit trap (ICI LLC, 2004). During the 2006 VSI, liquid was observed in the sump.

### 4.3.7 Building 409

No hazardous materials were stored in this building during the time of the 2006 VSI, except small quantities of hydraulic fluid and antifreeze. This building has a concrete floor with a sump used as secondary containment (the sump has no discharge). This building was originally built to store hazardous materials but has never been used for this purpose (Baerncopf, 2006)

### 4.3.8 Building 410

No hazardous materials were observed in this building, except small quantities of general cleaning supplies. A sump filled with used oil was observed inside the garage. The sump appeared to be constructed of metal, and the integrity of the sump was not inspected during the 2006 VSI. A trench drain is located inside the building along the front of the vehicle bays on the east side of the building. The trench drain flows into the ground (ICI LLC, 2004).

A floor drain that is suspected to drain to the ground was observed in the former battery room (ICI LLC, 2004).

A floor drain that is suspected to drain into ground was observed in the former boiler room (ICI LLC, 2004). Rust and etching was observed in the concrete around the drain. This drain collects condensate from the Co Ray Vac System (ICI LLC, 2004).

### 4.3.9 Building 422

A flammable materials cabinet in the building housed small containers of hazardous materials. No floor drains were observed during the 2006 VSI.

### 4.3.10 Building 710

Hazardous materials are not typically stored in this building. At the time of the 2006 VSI, small quantities of spray paint and lubricant were observed. No floor drains were observed in this building. No ordnance was stored at this location.

### 4.3.11 Building 721

No hazardous materials were stored in this building at the time of the 2006 VSI. The drain in the boiler room is suspected to drain into the ground (ICI LLC, 2004). This drain collects boiler blow down. During the 2006 VSI, water was observed in the sump located in the southeast corner of the boiler room.

A can wash drain flows into a grease trap, which is located on the exterior northeast corner of the building, this drains to the sanitary sewer (ICI LLC, 2004).

The floor drains in the shower rooms in the basement are filled with concrete. Several floor drains in the kitchen drain to the sanitary sewer (ICI LLC, 2004).

In December 1996, a spill involving approximately 5 gallons of antifreeze and approximately 25 gallons of hydraulic oil was reported southeast of the McClellan Road/McLoughlin Road intersection near the old Chapel (Building 701, which has been demolished) and Building 721. No fuel oil or motor oil was spilled, and the antifreeze and hydraulic oil were immediately soaked up using Ecology cleaning pads, which were put

into barrels along with the contaminated soil, as directed by the hazardous material official. The contractor disposed of the spill cleanup debris, and none of the spill material reached the storm drains (ENSR, 2002).

#### **4.3.12 Building 728**

A flammable materials cabinet is located in the restroom on the east side of the building. This cabinet contains small quantities of plastic polish, enamel, rifle cleaner, and dry cleaning solvent. A floor drain is located in the boiler room, and a condensate return tank is in the boiler room.

#### **4.3.13 Building 733**

No hazardous materials were stored in the building, except small quantities of enamel paint, leather dressing, and lubricating oil in the basement. This building was not included in the 2004 Drain Survey (ICI LLC, 2004), and it is unknown where the drain in the boiler room discharges. During the 2006 VSI, a stain was observed in the concrete floor of the boiler room.

#### **4.3.14 Building 748**

Hazardous materials stored in Building 748 at the time of the 2006 VSI included 12 bags of fertilizer, 50 pounds each; 3 bags of salt, 50 pounds each; 1 bag of 60 pounds of ferrous sulfate; approximately 20 bags of dolomite, 50 pounds each; and several 50-pound bags of Rice Hull Ash.

A flammable materials cabinet contained several gallons of floor varnish, paint lacquer, semi-gloss paint, and latex paint.

During the 2006 VSI, a locked corrosive materials storage cabinet was observed adjacent to the restroom.

The basement boiler room has a floor drain that drains to an unknown location.

#### **4.3.15 Building 749**

This building could not be accessed during the 2006 VSI. According to onsite personnel, no hazardous materials are currently in the building, and the building has a cement floor with no floor drains (Schell, 2006). During the EBS site visit, hazardous materials stored in this building included 1 bag of Snapshot, 3 bags of Casaron 4G, 2 bags of Ronstar, and approximately 10 bags of dolomite (ENSR, 2002).

#### **4.3.16 Building 750**

No hazardous materials were found in the building during the 2006 VSI. This building has a wooden floor and no floor drain. During the EBS site visit, hazardous materials stored in this building included small quantities (less than 5 gallons each) of motor oil and tank cleaners (ENSR, 2002).

#### 4.3.17 Building 752

Various hazardous materials and supplies are sold at the exchange, and inventory at the time of the final environmental baseline survey included (ENSR, 2002): canisters of propane; 1-gallon cans of Coleman fuel; approximately 100 cans of spray paint; 9, 8 ounces each, of drip strip; 9 cans, 8 ounces each, of Brasso; 10-pound bags of lawn and garden insect killer; 18-pound bags of weed and feed; 20-pound bags of rose and flower food; 32-ounce bottles of charcoal lighter fluid; 78-pound bags of starter fertilizer; 7 bags, 20 pounds each, of 16-16-16 fertilizer; 2 bags, 40 pounds each, of 16-16-16 fertilizer; 9 bags, 20 pounds each, of Turf Supreme fertilizer; 12 bags, 17 pounds each, of lawn fertilizer; 5 bags, 5 pounds each, of Preen fertilizer; 4 bags, 5 pounds each, of Preen and Green weed control and lawn fertilizer; and small quantities of containers (fewer than 10 of each) of various pesticides, herbicides, insecticides, rodenticides, and fungicides, including gopher mix, Isotox, Diazinon Ultra, Orthene, Malathion, Garden & Pest Dust, Slug & Snail Killer, Moss B-Ware, Brush B-Gon, Dursban, Deadline, Diazinon, ant killer, home pest killer, weed and grass killer, weed and broadleaf killer, Bug B-Gone, Stump Remover, Fung-Away, fertilizer spikes, houseplant insect spray, cockroach killer, and household cleaners. No change was observed during the 2006 VSI.

No floor drains were observed in the building.

#### 4.3.18 Building 753

The building is being used as a warehouse for storage of furniture and supplies, including cylinders of helium gas used to charge a weather balloon. The helium canisters are stored in a locked cage in the building. No floor drains were observed in this building at the time of the 2006 VSI.

#### 4.3.19 Building 754

Small quantities (less than 10 of each) of various hazardous materials are sold at the Shoppette, including propane, Coleman white gasoline fuel, spray paint, lawn and garden maintenance materials, automotive maintenance products, household pesticides and insecticides, and household cleaners. No floor drains were observed in the building.

#### 4.3.20 Building 786

The building currently is used as a woodwork and repair shop, office space, barbershop, and storage area. Hazardous materials in the building are stored in cabinets for flammable materials.

No floor drains were observed in this building at the time of the 2006 VSI.

#### 4.3.21 Building 987

Small quantities of household cleaners are stored in the bathroom of the men's locker room and in the kitchen area. There are floor drains in the shower rooms.

Two boiler rooms are in the basement (one in each wing). The boiler rooms have drains that are suspected to discharge into the ground, and they collect hot water heater and boiler blow down (ICI LLC, 2004). No hazardous materials are stored in the boiler rooms.

A potential coal storage room is adjacent to the boiler room in the west wing. No drain was observed in this room during the 2006 VSI.

#### **4.3.22 Building 989**

No hazardous materials were stored in the building, and no floor drains were observed in this building at the time of the 2006 VSI.

Two boiler rooms are in the basement (one in each wing). The boiler rooms have drains that are suspected to discharge into the ground, and they collect condensate (ICI LLC, 2004). A locked storage cabinet for flammable materials is in the west wing boiler room. No hazardous materials are stored in the east wing boiler room.

#### **4.3.23 Building 991**

No hazardous materials were stored in the building during the 2006 VSI. A sump is located inside the boiler room. At the time of the 2006 VSI, a sump pump was observed in the sump. The contents of the sump are reported to be pumped to the sanitary sewer.

#### **4.3.24 Building 993**

A boiler room on the east side of the building contained various types of unused or partially used containers of hazardous materials, including nine 1-gallon cans of epoxy. A floor drain in the boiler room is suspected to discharge into the ground (ICI LLC, 2004).

Two vaulted "arms rooms" are located in the basement, one in each wing. These rooms were not accessed during the 2006 VSI. According to the National Guard representative, small-caliber ammunition and small quantities of armory cleaner were stored in this room (Spencer Marks, 2006).

Two storage areas were located in the south side of the basement at the time of the EBS site visit. The storage area on the southwest side of the building in the basement contains small quantities of paints and some new fluorescent light ballasts. The storage area in the southeast portion of the basement is used by the Special Forces Detachment and contains various hazardous materials, including small quantities of wasp killer, powdered insecticide, and degreaser; six 50-pound bags of fertilizer; several 1-gallon cans of paints and adhesives; one 55-gallon drum of asphalt patch; three 5-gallon buckets of blacktop; a 5-gallon bucket of ice-melting compound; and small quantities of paints, seals, and stains (ENSR, 2002). These storage areas were not inspected during the 2006 VSI.

A cabinet for flammable materials is in the hallway of the west wing basement and contains small quantities of spray paints and degreasers (ENSR, 2002).

## 4.4 Petroleum Products (Underground and Aboveground Storage Tanks)

Regulated and unregulated USTs have been removed from the Property. A total of 15 USTs were removed between 1992 and 1998 (Table 4-1). Twelve of the USTs were removed from the 400 Series buildings located south of East 5th Street (CEcon, 1993; ENSR, 2002). The remaining three USTs along the east and north sides of Building 748 were removed (ENSR, 2002). Figure 4-3 shows the former locations of the USTs. Appendix G contains UST closure documentation.

The potential exists for unregulated tanks that were used for heating oil to be found on the Property, but no documentation is available on the location of any such tanks. Heating oil tanks that are less than 250 gallons are exempt from federal and state UST regulations under RCRA Subtitle I, but they can be regulated under the Clean Water Act in the event of a violation, such as a leaking tank.

### 4.4.1 Veteran's Administration (VA) Pump Station

This former pump station was located to the east of Building 748. Records indicated that, at one time, two fuel pumps associated with a gasoline UST and Diesel UST were operated by the VA. During the 2006 VSI, no evidence of potential environmental contamination was observed.

### 4.4.2 VA Laundry Facility

A laundry facility operated by the VA (former Building 778 located directly south of Building 748) was believed to be in operation between 1927 and 1985. This building was demolished in 1993, and the lot it previously occupied is being used to store equipment for the 396th CSH. No records of any spills at this facility exist (USACE, 1996), and the 2006 VSI did not reveal signs of potential contamination.

This facility used a steam generator for power, with the boiler located in the basement. Chemicals used at the facility include bleach, detergents (1 percent mixture), an alkaline product, a neutralizer of alkalinity, and a softener. The exact constituents of these chemicals are unknown. Chemicals were stored in powder form in 25-pound sacks. Typically, a month's supply, roughly 8 to 12 sacks of 25 pounds each would be stored. Wastewater was discharged into the sanitary sewer (USACE, 1996).

A removed 10,000-gallon storage tank was associated with this laundry facility. This tank was 16 feet bgs in a concrete vault. No records of any spills at this facility exist, and the 2006 VSI did not reveal signs of potential contamination.

Currently, no known ASTs are located on the Property. One active, double-walled, portable, 360-gallon oil tank used by the AMSA 82 Motor Pool was located in the motor pool yard east of Building 400 and was returned to Phillips Corporation in the first quarter of 2002 (ENSR, 2002). In the past, ASTs that contained heating oil were located throughout the housing area, but the last of these tanks was removed in 1985.

Figure 4.3 redacted.

TABLE 4-1  
 UST Summary  
*Environmental Condition of Property Report, Vancouver Barracks, Vancouver, Washington*

Tank ID	Year Installed (est.)	Tank Capacity (gal)	Construction Material	Product Stored	Release Detection Method	Location	Equipment Served by Tank	Any Release From Tank? (Y/N)	Follow-up Action	Removal Date	Closure Rec'd? (Y/N/NA)
VB-1	1982	550	Fiberglass	Waste oil	Visual field inspection, soil samples	Northeast side Building 400	Floor drain in POL storage room formerly drained to an oil/water separator	N	Tank removed	12/14/93	Y
VB-2	1964	30	Steel	Waste oil	Visual field inspection, soil samples	Southwest side Building 400	Trench drain in front of vehicle bay drains to an oil/water separator	N	Tank removed	12/13/93	NA
VB-3	1982	550	Fiberglass	Waste oil	Visual field inspection, soil samples, Infrared spectrometer	Southeast side Building 402	Floor drain in Building 402 drains to an oil/water separator	N	Tank removed	12/13/93	Y
VB-4	1964	30	Steel	Waste oil	Visual field inspection, soil samples	North side Building 402	Floor drain in POL storage room formerly drained to an oil/water separator	N	Tank removed	12/14/93	NA
VB-5	Unknown	550	Fiberglass	Waste oil	Visual field inspection, soil samples	Northeast side Building 405	Floor drain in Building 405 formerly drained to an oil/water separator	N	Tank removed	12/9/93	Y
VB-6	1964	550	Fiberglass	Waste oil	Visual field inspection, soil samples	North side Building 405	Floor drain in Building 405 formerly drained to an oil/water separator	N	Tank removed	12/8/93	Y
VB-7	1964	30	Steel	Waste oil	Visual field inspection, soil samples	West side Building 405	Floor drain in Building 405 formerly drained to an oil/water separator	N	Tank removed	12/8/93	NA

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Tank ID	Year Installed (est.)	Tank Capacity (gal)	Construction Material	Product Stored	Release Detection Method	Location	Equipment Served by Tank	Any Release From Tank? (Y/N)	Follow-up Action	Removal Date	Closure Rec'd? (Y/N/NA)
VC-1	1964	24,000	Steel	Diesel contaminated water	Visual field inspection, soil samples	Southeast side Building 409	Unknown	N	Tank removed	12/17/93	Y
VC-2	Unknown	200	Steel	Diesel fuel	Visual field inspection, soil samples	Southeast side Building 409	Unknown	N	Tank removed	12/16/93	Y
VC-3	1964	550	Fiberglass	Waste oil	Visual field inspection, soil samples	East side Building 410	Building 410 used oil sump	N	Tank removed	12/8/93	Y
404-1	1982	500	Fiberglass	Waste oil	Visual field inspection, soil samples	South side Building 404	Trench drain in front of vehicle bay	N	Tank removed	1/26/98	Y
404-2	1964	50	Steel	Received spills from hazardous materials storage area	Visual field inspection, soil samples, Photo ionization detector	North side Building 404	Floor drain in Building 404	N	Tank removed	1/26/98	Y
V-1-A	unknown	1,000	Steel	Gasoline	Visual field inspection, soil samples.	East side Building 748	Former fueling station	N	Tank removed	3/12/92	Y

TABLE 4-1  
 UST Summary  
*Environmental Condition of Property Report, Vancouver Barracks, Vancouver, Washington*

Tank ID	Year Installed (est.)	Tank Capacity (gal)	Construction Material	Product Stored	Release Detection Method	Location	Equipment Served by Tank	Any Release From Tank? (Y/N)	Follow-up Action	Removal Date	Closure Rec'd? (Y/N/NA)
V-1-C	1964	1,000	Steel	Fuel oil	Visual field inspection, soil samples. Visibly stained soil observed indicating impacted soil south and west of tank.	North side Building 748	Former fueling station	Y	Tank removed along with 100 cubic yards of petroleum impacted soil	3/12/92	Y
V-1-B	1964	6,000	Steel	Diesel	Visual field inspection, soil samples. Stockpile of soil near tank showed total petroleum hydrocarbon (TPH) contamination presumably a result of overfills.	East side Building 748	Former fueling station	N	Tank removed, stockpiled soils removed	3/12/92	Y

Sources: CEcon Corporation, 1994; ENSR, 2002

### 4.4.3 Underground Storage Tanks Removed

#### 4.4.3.1 Former USTs near 400 Series Buildings

A regulated 550-gallon fiberglass waste oil UST (VB-1) was removed from the northeast side of Building 400 on December 14, 1993. To facilitate tank removal, a concrete pad encapsulating the tank had to be broken. Approximately 4 inches of oily water were pumped from the tank, the tank was rinsed, and the rinse water was pumped from the tank. Visual inspection determined that there was no visible staining that could be related to hydrocarbon contamination. The tank was then excavated, removed, inspected, cleaned, crushed, and transported to a disposal facility. Six soil samples were taken in the excavation area and analytical results of the samples showed no total petroleum hydrocarbon (TPH) contamination above detectable limits. No further action was required at this site (CEcon, 1993). In 1994, Washington Department of Ecology's Southwest Regional Office, Vancouver Field Office received documentation for closure of this UST. This documentation included a Site Assessment Checklist and a Permanent Closure Site Assessment Notice.

A non-regulated 30-gallon steel waste oil UST (VB-2) was removed from the southwest side of Building 400 on December 13, 1993. Approximately 8 inches of oily water were pumped from the tank, and the tank was rinsed, cleaned and transported to a scrap metal recycling facility. Six soil samples were taken from the excavation area. Analytical results of the samples showed no evidence of TPH contamination, and no further action was required at this site (CEcon, 1993).

A 550-gallon fiberglass waste oil UST (VB-3), located on the southeast side of Building 402, was removed on December 13, 1993. This tank was used to hold fluids generated in Building 402, which were pumped into the holding tank through a floor drain system in the building. There was no visual or infrared spectrometer evidence of TPH contamination associated with this site. Results of the soil samples taken from the base and sidewalls of the excavation area were reported to be below detection limits, and no further action was required. In 1994, Ecology's Southwest Regional Office, Vancouver Field Office received documentation, including a Permanent Closure Site Assessment Notice and a Site Assessment Checklist, for closure of this UST.

A non-regulated 30-gallon steel waste oil UST (VB-4) was removed from the north side of Building 402 on December 14, 1993. Approximately 4 inches of oily water were pumped from the tank, and the tank was rinsed, excavated, removed, inspected, cleaned and transported to a scrap metal recycling facility. Six soil samples were collected from the excavation area. All six were found to be below detection limits for TPH contamination, and no further action was required at this site (CEcon, 1993).

A non-regulated 30-gallon steel waste oil tank (VB-7) was removed from the west side of Building 405 on December 8, 1993. Overburden material was removed and approximately one inch of oily water was pumped from the tank. The tank was then rinsed, excavated, removed and disposed of at an offsite metal recycling facility. Six soil samples were collected from the excavation site and were analyzed for TPH contamination. All six were found to be below detection limits, and no further action was required at this site (ENSR, 2002).

A regulated 550-gallon fiberglass waste oil UST (VB-5) was removed on December 9, 1993 from the northeast side of Building 405. Overburden material was removed and 8 inches of oily water were pumped from the tank. The tank was then rinsed and the rinse water was pumped out. The tank was excavated, removed, inspected, and disposed of at an offsite facility. Six soil samples were collected from the excavation site. The samples were analyzed and found to be below detection limits for TPH contamination. No further action was required at this site (CEcon, 1993). In 1994, Ecology's Southwest Regional Office, Vancouver Field Office received documentation for closure of this UST including a Site Assessment Checklist and a Permanent Closure Site Assessment Notice.

A regulated 550-gallon fiberglass waste oil UST (VB-6) was removed from the north side of Building 405 on December 8, 1993. Overburden material was removed from the site and approximately 3 inches of oily water were pumped from the tank. The tank was cleaned and rinsed, excavated, removed, inspected and disposed of at an offsite location. Six soil samples were taken from the excavation area and examined for TPH. All of the samples were found to be below detectable limits, and no further action was required at this site (CEcon, 1993). In 1994, Ecology's Southwest Regional Office, Vancouver Field Office received a Site Assessment Checklist and a Permanent Closure Site Assessment Notice documenting closure.

On December 16, 1993, an empty 200-gallon tank (VC-2), previously used to store diesel fuel and located on the southeast side of Building 409, was removed and inspected for structural integrity. The tank had no obvious holes, dents, or loose fittings and field screening presented no evidence of TPH contamination. The tank was moved, cleaned onsite, and transported to a scrap metal recycling facility. Six soil samples were collected from four locations in the excavation area. The samples were all analyzed for TPH, and all samples showed results below detection limits. No additional actions were required at this site (CEcon, 1993).

A nonregulated 2,000-gallon steel diesel UST (VC-1) was due to be removed from the southeast side of Building 409 on December 17, 1993. However, during excavation activities, VC-1 was discovered to be a 24,000-gallon steel tank filled with diesel-contaminated water. The contaminated water was pumped out of the tank and disposed of by contractors. The tank was then cleaned, removed, and transported to a scrap metal recycling facility. The excavated materials were field screened, and approximately 4 cubic yards of diesel-contaminated soil were removed from the tank excavation during the cleaning process. The contaminated soil was transported to Woodworth & Company for thermal desorption, treatment and disposal. Seven soil samples collected from the excavation site were analyzed for TPH, and all were found to be below detection limits. No further action was required at this site (CEcon, 1993).

On December 8, 1993, a regulated 550-gallon fiberglass waste oil UST (VC-3) was removed from the east side of Building 410. Removal procedures consisted of pumping 2 inches of oily water from the tank, rinsing the tank and pumping out the rinse water. The tank was then excavated, removed, inspected, and transported to a disposal facility. Six soil samples were collected from four locations in the excavation area. All samples were found to be below detection limits for TPH, and no additional action was required (CEcon, 1993).

Two USTs were removed from Building 404 on January 26, 1998, Tanks 404-1 and 404-2. Tank 404-1 was a 17-year-old fiberglass tank with a 500-gallon storage capacity that had been used to store waste oil. This UST was located on the south side of Building 404. Approximately 200 gallons of waste oil were pumped from the tank prior to excavation. During the removal process, excavated soil fell into the tank and was subsequently removed and placed into 55-gallon drums (ENSR, 2002).

The second tank (404-2) was a 17-year-old, 50-gallon-capacity steel tank designated to receive spills from the hazardous materials storage area. This tank was located on the north side of Building 404, and it appeared that the tank had never been used. No complications were associated with tank removal, and photoionization detector sampling and visual observations indicated that no soil had been contaminated.

A total of 14 soil samples were collected and analyzed from both sites (404-1 and 404-2), and all samples were tested for TPH and metals. Soil associated with the 500-gallon tank was further tested for eight RCRA metals using the toxicity characteristic leaching procedure (TCLP) method. Soil associated with the 50-gallon tank was also tested for PCBs, VOCs, and SVOCs. No contamination was detected at either site.

#### 4.4.3.2 Former USTs near Building 748

The Washington National Guard historically had a single fuel pump on the east side of Building 748 until the late 1970s, when the fuel pump was demolished. In the vicinity of Building 748 was an additional service station, located next to the former location of Building 723, which has also been demolished. Three USTs near Building 748 (V-1-A, V-1-B, and V-1-C) were removed in 1992. Upon removal, the tanks were cut apart, cleaned, and disposed of as scrap metal.

The two USTs located along the east side of Building 748, V-1-A and V-1-B, were described as a 1,000-gallon gasoline tank and a 6,000-gallon diesel tank, respectively. Neither of these tanks had visual evidence of leaks during removal. Samples were collected from both tanks and from a stockpile of soil near tank V-1-B. The samples were analyzed using the Washington State Total Petroleum Hydrocarbon Identification Analytical Method. Diesel concentrations in the stockpile of soil by V-1-B exceeded state limits. Analytical results of testing conducted on the stockpile showed diesel levels as high as 360 mg/kg in one sample. This contamination was limited to the stockpile, as all other samples were found to be below 50 mg/kg (ENSR, 2002).

The UST located on the north side of Building 748 (V-1-C) was a 1,000-gallon fuel oil tank with visibly stained surface soils. The tank reportedly had been overfilled in the past. Additionally, a small hole was discovered in the bottom of V-1-C, and sampling showed soil with petroleum hydrocarbons located to the south and west of the tank. Samples collected in the vicinity of V-1-C showed diesel concentrations of 930 mg/kg in one sample and heavy petroleum oil concentrations at 1,400 mg/kg in two samples. The remedial action consisted of the removal of approximately 100 cubic yards of petroleum-containing soil in the vicinity of the tank excavation site, including the stockpiled soil near V-1-B. The affected soil was transported to Camp Murray for treatment and land farming. The excavations were filled with imported fill and topsoil (ENSR, 2002).

#### 4.4.4 Additional Investigations

The UST removal report associated with the CEcon Corporation December 1993 removal activities indicated 4.5 tons of petroleum-contaminated soil was transported offsite, although it was not clear from which UST excavation the soil originated.

As part of an environmental site inspection at Vancouver Barracks conducted by Woodward-Clyde in 1997, an additional soil investigation was made along the drain lines leading from Building 402 to former UST VB-3. The results of this investigation included detection of the following five VOCs: acetone, methyl ethyl ketone, methyl isobutyl ketone, toluene, and para xylenes. Concentrations of these compounds did not exceed Ecology Model Toxics Control Act Method A cleanup levels for soil. No further remediation was required for the site (Woodward-Clyde 1998).

#### 4.4.5 Petroleum Product Spills

During the summer of 1999, a 60-gallon fuel release occurred at Building 402 on the pavement. The spill reportedly did not reach the soil or the storm drain. Cleanup consisted of cleaning the spill site with Ecology cleaning pads and placing the cleanup materials inside Building 402 to await offsite disposal (ENSR, 2002).

On April 2, 1999, fuel from a Mobile Army Surgery Hospital generator located south of Building 748 spilled onto the ground. Less than 5 gallons of fuel were reported to have spilled and the spilled fuel was fully recovered. The fuel soaked soil was placed into a drum. The spill was reported to the National Spill Response center and assigned Spill report No. 9092-1 (ENSR, 2002).

On February 15, 1995, a fuel spill occurred in the motor pool adjacent to Building 402. The fuel spill resulted when the plugs were removed from a Washington Army National Guard howitzer. A sheen was visible in the storm drain, and the spill was reported to the National Spill Response Center. The Spill Report states that the spill was secured and the spill site was contained and recovered. The spill was assigned Spill Report No. 280001 (ENSR, 2002).

A spill of approximately 0.5 quart of motor oil reportedly reached the installation stormwater system in 1994. Consequently, Vancouver Barracks was added to the federal Hazardous Waste Compliance docket on April 11, 1995. Under CERCLA requirements, Vancouver Barracks conducted a PA in 1996, which concluded that no further action was necessary (Woodward-Clyde, 1996). EPA concurred with the no further action recommendation in the PA (ENSR, 2002).

### 4.5 Polychlorinated Biphenyls

All of the transformers and light fixtures on the installation are owned by Vancouver Barracks. On December 1 and 2, 2004, 24 buildings of the Property were inspected for PCB-containing equipment. During this inspection, a total of 224 ballasts were discovered to either contain or be likely to contain PCB. These ballasts are located in the following buildings: 408, 422, 721, 725, 746, 748, 752, 786, and 987 (Engineering and Environmental Management, Inc. [e<sup>2</sup>M], 2005).

The East Barracks have 22 pole-mounted transformers (e<sup>2</sup>M, 2005). The last oil-filled transformers that contained PCBs were replaced in 1985, and according to Property representatives none of the transformers remaining on the installation contain PCBs. The transformers that were removed were disposed of by DRMO at Fort Lewis (ENSR, 2002)

In summary, no PCB-containing transformers exist at Vancouver Barracks, and 224 ballasts contain or are likely to contain PCBs (e<sup>2</sup>M, 2005).

## 4.6 Asbestos-Containing Materials

An Asbestos Site Inspection was conducted as a part of the EBS. The EBS reported that the majority of the 400, 700, and 900 Series buildings were observed to have potential asbestos-containing materials (ACMs). Without additional analysis, these materials cannot be confirmed to contain asbestos. Four buildings were identified during the site investigation with conditions that potentially pose a threat to human health due to ACM. The buildings include:

- Building 704 – Damaged floor tile throughout the building and damaged heat shield in the restroom (ENSR, 2002)
- Building 721 – Floor tile on stairway from basement to first floor was in disrepair (ENSR, 2002).
- Building 987 – Fireproofing in boiler room has been abated; however, some still remains. Pipe insulation has been disturbed in some places (ENSR, 2002).
- Building 989 – Damaged plaster on the basement ceiling (ENSR, 2002).

Additional follow-up is required to determine whether these areas are being inspected in accordance with the 1999 Asbestos Maintenance and Repair Manual (ENSR, 2002).

## 4.7 Lead and Lead-Based Paint

The presence of lead-based paint (LBP) in a building is also potential concern for disposal of demolition debris due to landfill restrictions. The use of LBP was generally discontinued in 1978. The routine application of LBP in the past, and the associated peeling or degradation of paint over time have created the potential for localized lead contamination in soil in areas around the buildings that were constructed prior to or during 1978.

As part of the EBS, an inspection at Vancouver Barracks observed buildings with peeling paint, both on the interior and exterior. This was confirmed during the 2006 VSI. In general, LBP on the buildings and on the ground likely poses an ingestion hazard to humans and ecological receptors. Paint chips were observed during the VSI to have accumulated on the ground surface, creating a potential source of lead in soil.

As described in Section 4.2.4.2, four buildings (721, 987, 989, and 993) previously housed firing ranges. The attics of Buildings 987, 989, and 993 and the basement of Building 721 are contaminated with lead dust. These four buildings were surface cleaned in the summer of 1998. It was determined at that time that a final clearance sample would not be required for Building 721 because the remediation was considered thorough. An investigation conducted

in 2006 concluded further abatement is necessary in the attic and administrative areas of Buildings 993, 989, and 987. The 2006 investigation did not include the basement of Building 721 (Shaw Environmental, 2006)

Table 4-2 provides a summary of the buildings with potential lead contamination.

TABLE 4-2  
Potential Lead Contamination  
*Environmental Condition of Property Report, Vancouver Barracks, Vancouver, Washington*

Building No.	Year Built	Interior	Exterior
400	1983	potential for LBP	potential for LBP
401	1990	potential for LBP	potential for LBP
402	1983	potential for LBP	potential for LBP
404	1983	potential for LBP	potential for LBP
405	1983	potential for LBP	potential for LBP
406	1935	potential for LBP	potential for LBP
408	1936	potential for LBP	potential for LBP
409	1990	potential for LBP	potential for LBP
410	1935	potential for LBP	potential for LBP; exterior paint is observed to be in poor (peeling) condition
422	1935	potential for LBP	potential for LBP; exterior paint is observed to be in poor (peeling) condition
704	1935	potential for LBP	potential for LBP; exterior paint is observed to be in poor (peeling) condition
710	1978	potential for LBP	potential for LBP
721	1905	potential for LBP; possibly in basement	potential for LBP
722	1914	potential for LBP	potential for LBP
725	1914	potential for LBP	potential for LBP
728	1941	potential for LBP	potential for LBP; exterior paint is observed to be in poor (peeling) condition
733	1919	potential for LBP	potential for LBP
746	1940	potential for LBP	potential for LBP
748	1918	potential for LBP; paint observed peeling from garage ceiling	potential for LBP
749	1919	potential for LBP	potential for LBP
750	1919	potential for LBP	potential for LBP
752	1905	potential for LBP	potential for LBP

TABLE 4-2  
 Potential Lead Contamination  
*Environmental Condition of Property Report, Vancouver Barracks, Vancouver, Washington*

Building No.	Year Built	Interior	Exterior
753	1917	potential for LBP	potential for LBP
754	1909	potential for LBP	potential for LBP
786	1905	potential for LBP	potential for LBP
787	1985	potential for LBP	potential for LBP
987	1906	potential for LBP; paint observed peeling in eastern hallway near offices. Lead dust found in the attic (mean concentration of 2,253 $\mu\text{g}/\text{ft}^2$ ) <sup>a</sup> and administrative areas (levels ranged from less than 10 $\mu\text{g}/\text{ft}^2$ to 11 $\mu\text{g}/\text{ft}^2$ ) <sup>b</sup>	potential for LBP
989	1904	potential for LBP; paint observed peeling in eastern shower stall. Lead dust was found in attic (mean concentration of 3,207 $\mu\text{g}/\text{ft}^2$ ) <sup>a</sup> and administrative areas (levels ranged from less than 10 $\mu\text{g}/\text{ft}^2$ to 280 $\mu\text{g}/\text{ft}^2$ ) <sup>b</sup>	potential for LBP
991	1906	potential for LBP	potential for LBP
993	1906	lead dust was found in the attic (mean concentration of 5,795 $\mu\text{g}/\text{ft}^2$ ) <sup>a</sup> and administrative areas (levels ranged from less than 10 $\mu\text{g}/\text{ft}^2$ to 350 $\mu\text{g}/\text{ft}^2$ ) <sup>b</sup>	potential for LBP

<sup>a</sup> Lead wipe samples collected in August 2002

<sup>b</sup> Lead wipe sampling analysis results of the July 2004 Investigation

Sources: 2006 VSI; ENSR, 2002; and Shaw Environmental, 2006

The routine application of LBP in the past, and the associated peeling or degradation of paint over time have created the potential for localized lead contamination in soil in areas around the buildings that were constructed prior to or during 1978. Buildings 406, 408, 410, 422, 704, 710, 721, 722, 725, 728, 733, 746, 748, 749, 750, 752, 753, 754, 786, 987, 989, 991, and 993 were built prior to 1978, and soils surrounding these building have the potential to be affected by lead-based paint.

## 4.8 Radioactive Materials

According to the Radiation Safety Manager for the 70<sup>th</sup> RRC, only low-level commodities were stored at the Property (Chris Boes, 2006b). Instruments known as Improved Chemical Agent Monitors, used to measure chemical agents, were stored in Building 400 in a locked cage 2 to 3 weeks per year. These instruments are known to contain a very small amount of Nickel-63, and a radioactive warning sign was posted on the cage. These instruments were not used at the Property but were stored in transit to another destination. Storage of this equipment ceased in 2004, and the storage duration is unknown (Rick Adams, 2006).

## 4.9 Historical Landfills/Dumps

There are no current or known historical landfills located on the Property. From the time the federal government located facilities at this location, solid waste could have been disposed onsite at any location, although no records of such disposal are known to be available. Additional information on the possibility and location of historical landfills or dumps might be available once the aerial photographic analysis is completed.

## 4.10 Radon

Radon gas levels are site specific and are influenced by atmospheric, soil, and building conditions, including pressure differentials between the soil and the building. Clark County is located in Radon Zone 1, which has a predicted average indoor radon screening level greater than 4 picocuries per liter (pCi/L) (EPA, 1999). EPA has established a guidance threshold of 4 pCi/L of air, above which could exist adverse health risks to humans if exposure is continued over a prolonged time, generally 70 years (EPA, 2001). The U.S. Army has adopted the same radon guidelines as those established by the EPA (Environmental and Natural Resources Division, 1991). Radon is a non-CERCLA safety concern and is discussed in the conclusion of this report as a non-CERCLA disclosure item.

The only records available on radon at the Property were on surveys performed in 1991 and 1996. The 1991 survey revealed that Building 721 had radon levels of 9.3 pCi/L. It was determined that vertical radon exhaust vents going up through the middle of the main room would not be a feasible means of radon mitigation for this building. Instead, the entry end of the structure was determined to be better suited for the radon exhausts. The EBS reported that radon testing conducted by Cavalier Corporation in 1996 showed that the radon level was less than 0.3 pCi/L as a result of radon mitigation measures.

In 1991, three additional buildings at Vancouver Barracks were found to have radon readings above 4 pCi/L. These buildings are summarized in Table 4-3. Radon mitigation has not yet occurred at these buildings.

TABLE 4-3  
Summary of Radon Results  
*Environmental Condition of Property Report, Vancouver Barracks, Vancouver, Washington*

Building Number	Status	Square Feet	Number of Floors	Highest Radon Reading
754	Waiting for mitigation	3,968	1	5.8
991	Waiting for mitigation	13,215	2 + basement	8.1
993	Waiting for mitigation	32,526	2 + basement	6.1

Source: Fort Lewis, 2001

No other records were available.

## 4.11 Pesticides

Pesticide control on Vancouver Barracks is contracted out to Eden Pest Control Company. Available information on the historical storage of pesticides is contained in Appendix F.

Portland Habilitation Company, the grounds maintenance company, is contracted to maintain the grounds at the Property. Application records from the Oregon State University Extension Service indicated that herbicides have been used throughout the installation to control pre-emergent weeds (ENSR, 2002).

## 4.12 Munitions and Explosives of Concern

There is one potential MEC site within the Property. This potential MEC site is located south of East 5<sup>th</sup> Street and involves 8.15 acres. The location of the potential MEC site (sometimes referred to as the Western Portion MR site) is shown in Figure 4-2.

A historic records review (HRR) was completed for this site in 2006 (TechLaw, 2006). According to the HRR, potential munitions concerns have not been identified at the Western Portion MR site due to the lack of information regarding MEC. Based on the proximity of this area to other MR sites, it is possible that the same unexploded ordinance (UXO) could be identified. It is assumed that MEC in the Western Portion would include 60-mm mortar rounds and hand grenades (TechLaw, 2006).

Two UXO removals have occurred in this area. One UXO item was removed from near Building 410 and another item was removed during grading activities in front of Building 422. These UXO removals occurred in the late 1980s and early 1990s. No additional information was located during the HRR regarding these UXO items (TechLaw, 2006).

## 4.13 Other Identified Concerns

Building 406 is structurally unsound (Baerncopf, 2006).

## 4.14 Identification of Uncontaminated Property

This section describes portions of the Property that are considered “uncontaminated.” The identification of uncontaminated property was based on the records review, VSI, and interviews. Based on this available information, no release or disposal of hazardous substances or petroleum products or their derivatives has occurred, including no migration of these substances from adjacent areas.

- **Building 401** – Based on available information, no hazardous materials have been stored, released, or disposed of in this building. This building has a concrete floor with sump used as secondary containment (the sump has no discharge).
- **Building 704** – Based on available information, no hazardous materials have been stored, released, or disposed of in this building.

- **Building 722** – No drains or hazardous materials were found in the building during the 2006 VSI.
- **Building 725** – No drains or hazardous materials were found in the building during the 2006 VSI.
- **Building 746** – No hazardous materials were stored in the building, except small quantities of household cleaners. The restroom has a floor drain.
- **Building 787** – No drains or hazardous materials were found in the building during the 2006 VSI.
- **East of Building 754** is an undeveloped area. This area includes an overgrown building foundation and a sewer outlet. During the 2006 VSI no signs of potential contamination were observed
- **Open areas of Vancouver Barracks** include parking lots, roadways, and landscaped areas not associated with buildings. During the 2006 VSI, no signs of potential contamination were observed in these areas.

## 4.15 Description of Remaining Property

This section of the ECP Report identifies geographically contiguous and geospatially located areas where the results of environmental investigation show that a release or disposal of petroleum products or hazardous substance has occurred. There are no remaining properties at the Property.

## 4.16 Applicable Regulatory Compliance Issues

The U.S. Army currently tracks issues concerning compliance with environmental laws and regulations through the Environmental Quality Report (EQR). The EQR includes an Enforcement Action Summary which is derived from data stored in the AEDB-R. The EQR indicates no enforcement actions were found at the Property.

## 4.17 Adjacent Properties

The Property is surrounded by areas of mixed land use, including military, private industrial, commercial, retail, residential, and undeveloped. The land uses of the area immediately bordering the Property are summarized below:

North and East: The Property is bordered to the north and east by the Fort Vancouver National Historic Site. An athletic field is also located to the north of the Property.

South: The Property is bordered by State Highway 14, Pearson Airpark, and the Fort Vancouver National Historic Site.

West: The area to the west of the Property, formerly West Barracks, is composed mostly of commercial and residential areas of the City.

Sites located adjacent to the Property that were identified in the EDR report are listed below. Environmental conditions at these facilities pose a low potential of a threat to the Property; however, because groundwater was affected, the site is regulated in a cleanup program. Given the nature and extent of environmental contamination at these facilities, further details are provided.

#### 4.17.1 Brazier Forest Industries

The former Brazier Forest Industries site, now owned by the Port of Vancouver, is located at the southeast corner of Port of Vancouver Way and Industrial Way, approximately 1 mile west-northwest and cross-gradient of the Property. Soil and water at this site were contaminated with petroleum hydrocarbons prior to 1992, and remedial activities were conducted between 1992 and 1995. The remedial activities removed most of the contamination (ENSR, 2002).

#### 4.17.2 Frontier Hard Chrome, Inc.

The Frontier Hard Chrome property is located at 113 Y Street, approximately 1 mile east and cross-gradient of the Property. Onsite operations included chrome plating for about 25 years between 1958 and 1982. Between 1970 and 1982, Frontier Hard Chrome discharged chromium-contaminated waste water from electroplating operations into a dry well. In 1982, chromium concentrations greater than twice the state groundwater cleanup standard of 48 micrograms per liter ( $\mu\text{g}/\text{L}$ ) were detected in groundwater samples from an industrial well located approximately 0.5 mile southwest of the Frontier Hard Chrome site. In September 1983, this site was added to the NPL. Site remediation included injection of a reducing agent underground around the most concentrated contamination, forming an underground fence to keep contamination from spreading. As a result, hexavalent chromium passing through this treatment zone is reduced to the less toxic trivalent chromium valence. Site remediation began in 2002 and was completed in 2003 (EPA, 2006).

#### 4.17.3 PRI Northwest, Inc.

PRI Northwest, Inc. Vancouver is located at 1300 West 8<sup>th</sup> Street, less than 1 mile west-northwest down-gradient of the Property. An independent remedial investigation is in progress for petroleum contamination of groundwater and soil at the facility (EDR, 2006).

#### 4.17.4 Emerald Petroleum Services

Emerald Petroleum Services is located at 1300 W 12<sup>th</sup> Street, less than 1 mile west-northwest of the Property. The facility is undergoing independent cleanup for petroleum in soil and halogenated organic compounds in groundwater. Of the three USTs reported, two have been closed and inactivated and one is unregulated due to its small capacity (EDR, 2006).

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# 5. Conclusions

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Based on the findings of this ECP, the environmental condition of the Property has been established. A summary of CERCLA, IRP, and/or cleanup areas of concern are presented in Table 5-1. A summary of environmental conditions at each study section is provided in Table 5-2. Section 5.3 discloses the non-CERCLA environmental hazard and safety issues identified during the records review and/or VSI.

## 5.1 Environmental Conditions Findings

The environmental features and areas located at Vancouver Barracks are classified into Categories 1, 2, 3, and 7. Figure 5-1 provides a map of the ECP categories at Vancouver Barracks.

### 5.1.1 Category 1

The following areas are considered Category 1 properties. These are areas where no release or disposal of hazardous substances or petroleum products has occurred, and areas to which no migration of such substances from adjacent areas has occurred:

- **Buildings 401, 704, 722, and 787** – Based on available information, no hazardous materials have been stored, released or disposed of at these buildings.
- **Buildings 400, 402, 404, 405, 406, 408, 409, 410, 422, 710, 721, 725, 728, 733, 746, 749, 750, 752, 753, 754, 786, 987, 989, 991, and 993** – These areas contained small quantities of hazardous materials. Based on available information, there have been no releases at these buildings.
- **Storage trailers associated with Buildings 400, 402, and 404** – Based on available information, no hazardous materials have been stored, released, or disposed of at these buildings.
- **Former VA Laundry Area** – Based on available information, no hazardous materials have been stored, released, or disposed of at this facility.
- **East Barracks Open Areas** – This area includes parking lots, roadways, and landscaped areas not associated with buildings. Based on available information, no hazardous materials have been stored, released, or disposed of in these areas.
- **Antifreeze and Hydraulic Oil Spill** – A de minimis<sup>1</sup> release of approximately 5 gallons of antifreeze and approximately 25 gallons of hydraulic oil occurred at the intersection of McClellan and McLoughlin Roads in December of 1996.

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<sup>1</sup> Washington State Department of Ecology defines a "de minimis" amount of petroleum as an amount that either (1) immediately evaporates, or (2) has been recovered or contained sufficiently so that it will not pose a threat to human health or the environment (Ecology, 2004).

- **Building 748, Former Maintenance Facility (AEDB-R site VABA-01)** – This is a former IRP site (former maintenance facility adjacent to Building 748). A de minimis release of approximately 2 quarts of a mixture of diesel and oil from a vehicle parked in Building 748 went into the storm drain system that discharges into the Columbia River.
- **Generator Fuel Spill** – A de minimis release of fuel (less than 5 gallons) from a generator was reported south of Building 748 in April 1999.

TABLE 5-1

Summary of CERCLA, IRP or Cleanup Sites

*Environmental Condition of Property Report, Vancouver Barracks, Vancouver, Washington*

Site or Area where Release or Disposal of CERCLA Hazardous Substances or Petroleum Products Occurred	Comments	Was Release or Disposal in Excess of the CERCLA RQ? (40 CFR 302.4)	Reference
Building 400, former wash rack	Soil Investigation completed in 1997, no further action planned, declared RC in December 1998	Unknown	Woodward-Clyde ,1998
Building 402, along drain to UST VB-3 (former dry cleaning solvent use and storage area)	Soil Investigation completed in 1997, no further action planned	Unknown	Woodward-Clyde ,1998
Building 748, former maintenance facility (AEDB-R site VABA-01)	PA completed in 1996, RC as of March 1996	No	USACE, 1996

TABLE 5-2

Summary of ECP Findings

*Environmental Condition of Property Report, Vancouver Barracks, Vancouver, Washington*

Study Section	Building Number	Building Name/Area Name	ECP Category	Hazardous Substances	Petroleum	PCBs	Asbestos	Lead	Radiological	Radon	MEC	Other
1	748	Former Maintenance Facility (VABA-01)	1	V	R	S	S	S		B		
2		Former Wash Rack (VABA-02)	2		V							
1000	400	Building 400 Motor Pool	1		S	A	S	S				
1001	400	Storage Trailer	1		V							
1002	401	Building 401	1	A			N	S				
1003	402	Building 402 Motor Pool	1	V	V	A	S	S		B		
1004	402	Storage Trailer	1		V							
1005	402	Storm Drain	2		S							
1006	404	Building 404 Motor Pool	1		V		S	S		B		

TABLE 5-2  
 Summary of ECP Findings  
*Environmental Condition of Property Report, Vancouver Barracks, Vancouver, Washington*

Study Section	Building Number	Building Name/Area Name	ECP Category	Hazardous Substances	Petroleum	PCBs	Asbestos	Lead	Radiological	Radon	MEC	Other
1007	404	Storage Trailer	1									
1008	405	Building 405	1			A	S	S		B	S	
1009	406	Building 406	1				S	S			S	
1010	408	Building 408	1			S	S	S			S	
1011	408	Former Wash Rack	2		S							
1012	409	Building 409	1				N	S			S	
1013	410	Building 410	1			A	S	S			S	
1014	410	Used Oil Sump	2									
1015	410	Battery Room Floor Drain	7		S							
1016	422	Building 422	1			S	S	S				
1017	704	Building 704	1	A		A	S	S				
1018	710	Building 710	1				S	S				
1019	721	Building 721	1			S	S	V		B		
1020	722	Building 722	1			A	S	S				
1021	725	Building 725	1			S	S	S				
1022	728	Building 728	1			A	S	S		B		
1023	733	Building 733	1			A	S	S				
1024	746	Building 746	1			S	S	S				
1025	749	Building 749	1			A	S	S				
1026	750	Building 750	1			A	S	S				
1027	752	Building 752	1			S	S	S		B		
1028	753	Building 753	1				S	S				
1029	754	Shopette	1			A	S	S		X		
1030	786	Building 786	1			S	S	S		B		
1031	787	Building 787	1			A	N	S				
1032	987	Barracks	1			S	S	V		B		
1033	989	Barracks	1			A	S	V		B		
1034	991	Building 991	1			N	S	S		X		
1035	993	Barracks	1				S	V		X		
1036		UST VB-1 (NE of 400)	2		R							

TABLE 5-2  
 Summary of ECP Findings  
*Environmental Condition of Property Report, Vancouver Barracks, Vancouver, Washington*

Study Section	Building Number	Building Name/Area Name	ECP Category	Hazardous Substances	Petroleum	PCBs	Asbestos	Lead	Radiological	Radon	MEC	Other
1037		UST VB-2 (SW of 400)	2		R							
1038		UST VB-3 Drainage Lines (SE of 402)	2	V	V							
1039		UST VB-4 (N of 402)	2		R							
1040		UST 404-1 (S of 404)	2		R							
1041		UST 404-2 (N of 404)	2		R							
1042		UST VB-5 (NE of 405)	2		R							
1043		UST VB-6 (N of 405)	2		R							
1044		UST VB-7 (W of 405)	2		R							
1045		UST VC-1 (SE of 409)	2		R							
1046		UST VC-2 (SE of 409)	2		R							
1047		UST VC-3 (E of 410)	2		R							
1048		UST V-1-A (E of 748)	2		R							
1049		UST V-1-B (E of 748)	2		R							
1050		UST V-1-C (N of 748)	2		R							
1051		Generator fuel spill	1		R							
1052		Former VA Laundry (S of 748)	1		N							
1053		Antifreeze and hydraulic oil spill	1	R	R	R						
1054		East Barracks Open Areas	1									
1055		South Barracks Open Areas	2		S						S	

PCBs – polychlorinated biphenyls

MEC – munitions and explosives of concern

V – Verified

S – Suspected

N – Not suspected

A – Absent

R – Removed/Remediated

X – Radon measured greater than 4.0 picocuries per liter (pCi/L)

B – Radon measured less than 4.0 pCi/L



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### 5.1.2 Category 2

The following areas are considered Category 2 properties. These are areas where release or disposal of petroleum products only has occurred:

- **Location of former USTs** - VB-1, VB-2, VB-4, 404-1, 404-2, VB-3, VB-5, VB-6, VB-7, VC-1, VC-2, VC-3, and V-1-A.
- **Building 402 Storm Drain** - Two spills affected the storm drains between Buildings 402 and 400.
- **Former UST B-1-A and surrounding area**
- **Former UST V-1-B and surrounding area** - Stockpile of soil near the tank showed total petroleum hydrocarbon (TPH) contamination. The tank was removed; impacted soils were removed.
- **Former UST V-1-C and surrounding area**- Visibly stained soil was observed, signifying a release. The tank and 100 cubic yards of petroleum-impacted soils south and west of the tank were removed.
- **South Barracks Open Areas** - This area includes parking lots, roadways, and landscaped areas not associated with buildings.
- **VABA-02** - This is a former IRP site (former wash rack located northeast of Building 400).
- **Building 408 Former Vehicle Wash Rack** - A concrete area (old vehicle wash facility) with a steel plate covering a rectangular slotted manhole cover inside a sump with a drain that drains south through an abandoned line; the outlet pipe acts as a separator/grit trap (ICI LLC, 2004). During the 2006 VSI, liquid was observed in the sump.
- **Building 410 Used Oil Sump** - A sump filled with used oil was observed inside the garage. The sump appeared to be constructed of metal; the integrity of the sump was not inspected during the 2006 VSI.

### 5.1.3 Category 3

Category 3 properties are areas where release, disposal, or migration of hazardous substances has occurred, but in concentrations that do not require a removal or other remedial response. No Category 3 properties were identified at Vancouver Barracks

### 5.1.4 Category 4

Category 4 properties are areas in which release, disposal, or migration of hazardous substances has occurred, but all removal or other remedial actions necessary to protect human health and the environment have been taken. No Category 4 properties were identified at Vancouver Barracks.

### 5.1.5 Category 5

Category 5 properties are areas in which release, disposal, or migration of hazardous substances has occurred, and removal or other remedial actions are under way, but all required actions have not yet been taken. No Category 5 Properties were identified at Vancouver Barracks.

### 5.1.6 Category 6

Category 6 Properties are areas in which release, disposal, or migration of hazardous substances has occurred, but required remedial actions have not yet been implemented. No Category 6 properties were identified at Vancouver Barracks.

### 5.1.7 Category 7

The following areas are considered Category 7 Properties. These are areas that have not been evaluated or require additional evaluation:

- **Building 410, Battery Room Drains:** A floor drain located in the battery room of Building 410 is suspected to drain directly into the ground. A potential exists for historical releases to have occurred in this battery storage room and drain through the floor drain. However, sampling is not recommended because lead is not mobile in soil. The potential area of contamination is underneath the building and, unless the building is demolished, is not accessible to human or ecological receptors.

## 5.2 Adjacent Properties

The record search indicated that low potential exists for contamination from adjacent properties to affect the Property through groundwater migration.

## 5.3 Disclosure of Non-CERCLA Issues

This section discloses the non-CERCLA environmental hazard and safety issues identified during the records review and/or VSI.

The following non-CERCLA environmental safety concerns exist on the Property. These concerns include asbestos, LBP, radon, PCBs, and ordnances:

- Buildings 704, 721, 987, and 989 were identified during the site investigation as having conditions that potentially pose a threat to human health due to ACM.
- Buildings 754, 991, and 993 have radon readings above 4 pCi/L and are awaiting radon mitigation.
- A total of 224 ballasts that either contain or are likely to contain PCBs are located in the following buildings: 408, 422, 721, 725, 746, 748, 752, 786, and 987 (e<sup>2</sup>M, 2005).
- The Western Portion MMRP site has the potential for MEC to be present. This 8.15-acre area is located south of East 5th Street and currently is included in the MMRP. Hand grenades, small-caliber munitions, and large-caliber munitions have been identified in

the western portion MEC; and it is anticipated that additional MEC could be identified at this site.

- The attics of Buildings 987, 989, and 993 are contaminated with lead dust from former small arms firing ranges.
- The routine application of LBP in the past and the associated peeling or degradation of paint over time have created the potential for localized lead contamination in soil in areas around the buildings that were constructed prior to or during 1978. Buildings 406, 408, 410, 422, 704, 710, 721, 722, 725, 728, 733, 746, 748, 749, 750, 752, 753, 754, 786, 987, 989, 991, and 993 were built prior to 1978; and soils surrounding these building have the potential to be affected by lead-based paint.

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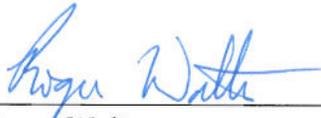
## 6. Certification

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All information/ documentation provided accurately reflects the conditions of the Property. This report meets the DOD requirements for completion of an Environmental Conditions of Property Report.



LTCOL Douglas Willetts  
BRAC Environmental Coordinator  
70<sup>th</sup> RRC Vancouver Barracks



Roger Walton  
Environmental Engineer  
U.S. Army Environmental Center

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**Environmental Condition of Property  
Appendix A - Site Photographs  
Vancouver Barracks Property**

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Photo 1: View looking south at the Vancouver Barracks entrance.



Photo 2: View looking southeast at the location of the former maintenance facility (VABA-01).

**Environmental Condition of Property  
Appendix A - Site Photographs  
Vancouver Barracks Property**

---



Photo 3: View looking north at the location of the former vehicle wash rack (VABA-02).



Photo 4: View looking northwest at Building 400 Motor Pool.

**Environmental Condition of Property  
Appendix A - Site Photographs  
Vancouver Barracks Property**

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Photo 5: View looking at Building 402 POL room and floor drain that has been sealed.



Photo 6: View looking at Building 404 garage interior.

**Environmental Condition of Property  
Appendix A - Site Photographs  
Vancouver Barracks Property**

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Photo 7: Building 408 former wash rack.



Photo 8: Building 410 used oil sump.

**Environmental Condition of Property  
Appendix A - Site Photographs  
Vancouver Barracks Property**

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Photo 9: View looking west along the north side of Building 422 and the Western Portion MMRP.



Photo 10: View looking east at Building 721.

**Environmental Condition of Property  
Appendix A - Site Photographs  
Vancouver Barracks Property**

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Photo 11: View looking at unidentified pipes adjacent to the east side of Building 749.



Photo 12: View looking east at Building 749.

**Environmental Condition of Property  
Appendix A - Site Photographs  
Vancouver Barracks Property**

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Photo 13: Building 993 attic, former firing range.



Photo 14: View looking southeast at Building 993 exterior.

**Environmental Condition of Property  
Appendix A - Site Photographs  
Vancouver Barracks Property**

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Photo 15: View looking east at the former VA laundry location.



Photo 16: View looking at farming equipment stored on adjacent property south of the Building 400 Series.

**Environmental Condition of Property  
Appendix A - Site Photographs  
Vancouver Barracks Property**

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Photo 17: View looking north at adjacent property to the east.



Photo 18: View looking south at adjacent property to the north.

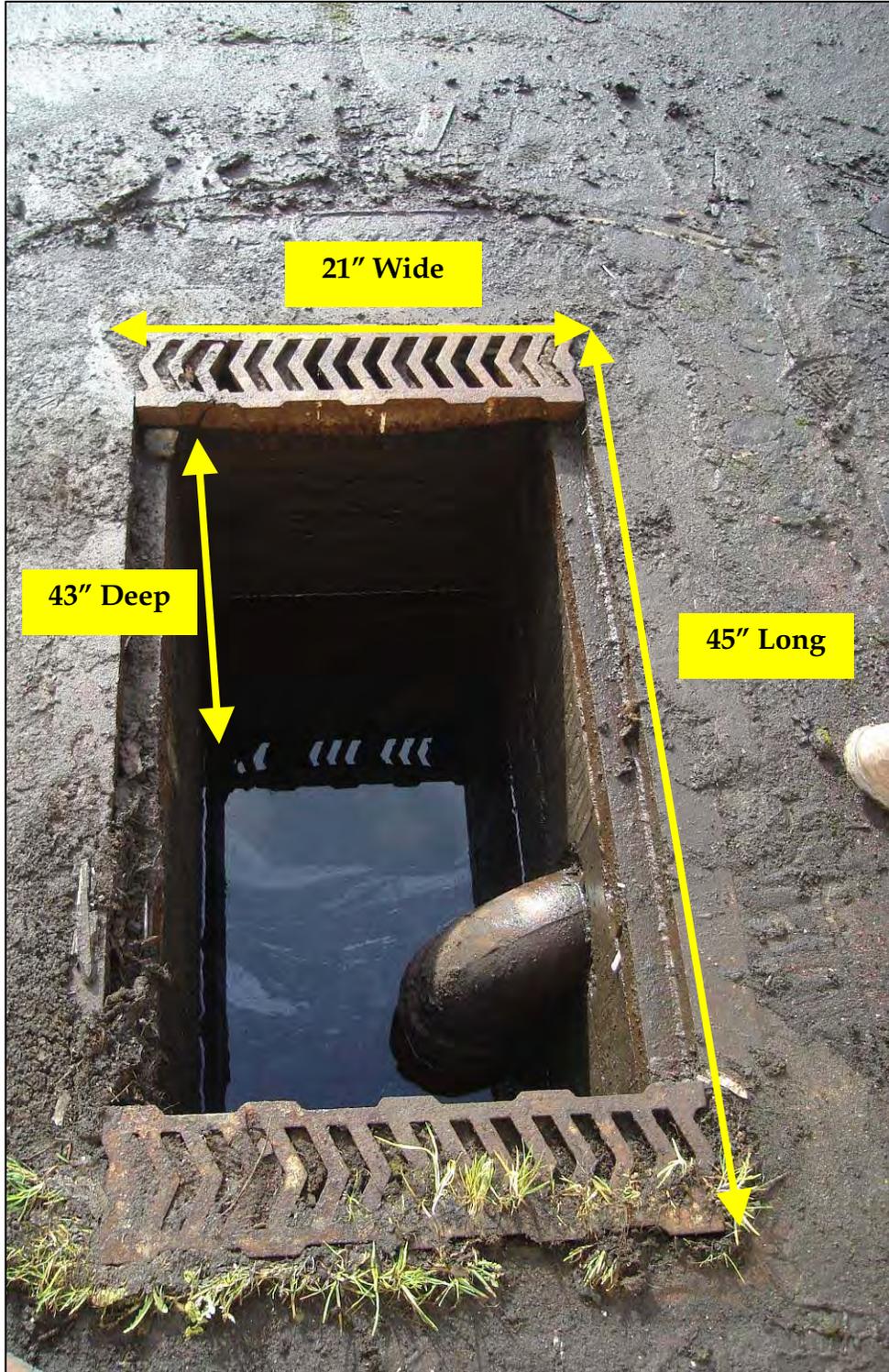


PHOTO A-1  
Bldg 408 Wash Rack Sump

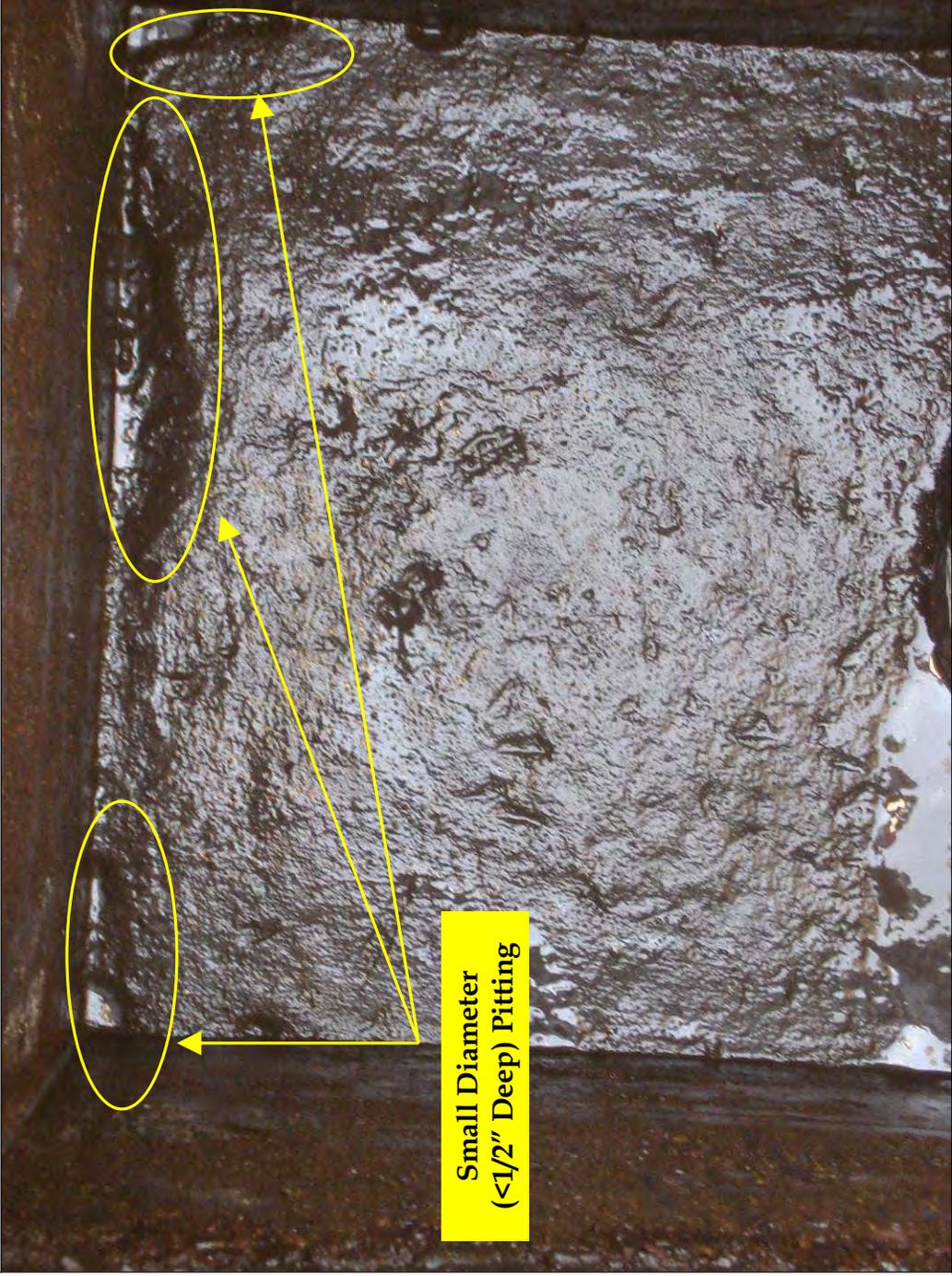


PHOTO A-2  
Bottom of Building 408 Sump (south)



PHOTO A-3  
North and East Wall of Building 408 Sump (northeast corner)



PHOTO A-4  
South Wall of Building 408 Sump



PHOTO A-5  
West Wall of Building 408 Sump



PHOTO A-6  
Building 410 Used Oil Sump



**EDR**® Environmental  
Data Resources Inc

## **The EDR Radius Map with GeoCheck®**

**Vancouver Barracks  
638 Hathaway Road  
Vancouver, WA 98661**

**Inquiry Number: 1692827.2s**

**June 09, 2006**

## **The Standard in Environmental Risk Management Information**

440 Wheelers Farms Road  
Milford, Connecticut 06461

### **Nationwide Customer Service**

Telephone: 1-800-352-0050  
Fax: 1-800-231-6802  
Internet: [www.edrnet.com](http://www.edrnet.com)

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*Thank you for your business.*  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

638 HATHAWAY ROAD  
VANCOUVER, WA 98661

#### COORDINATES

Latitude (North): 45.625000 - 45° 37' 30.0"  
Longitude (West): 122.665700 - 122° 39' 56.5"  
Universal Transverse Mercator: Zone 10  
UTM X (Meters): 526060.7  
UTM Y (Meters): 5052220.5

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 45122-F6 VANCOUVER, WA  
Most Recent Revision: 1990  
  
South Map: 45122-E6 PORTLAND, OR  
Most Recent Revision: 1990

### TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following government records. For more information on this property see page 6 of the attached EDR Radius Map report:

<u>Site</u>	<u>Database(s)</u>	<u>EPA ID</u>
VANCOUVER BARRACKS HATHAWAY RD BLDG 404 VANCOUVER, WA 98661	WA UST	N/A
VANCOUVER SUB-INSTALLATION VANCOUVER BARRACKS, BLDG 638 VANCOUVER, WA 98661	WA UST	N/A

# EXECUTIVE SUMMARY

## DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

### FEDERAL RECORDS

<b>Proposed NPL</b> .....	Proposed National Priority List Sites
<b>Delisted NPL</b> .....	National Priority List Deletions
<b>NPL RECOVERY</b> .....	Federal Superfund Liens
<b>RCRA-TSDF</b> .....	Resource Conservation and Recovery Act Information
<b>ERNS</b> .....	Emergency Response Notification System
<b>HMIRS</b> .....	Hazardous Materials Information Reporting System
<b>DOD</b> .....	Department of Defense Sites
<b>FUDS</b> .....	Formerly Used Defense Sites
<b>US BROWNFIELDS</b> .....	A Listing of Brownfields Sites
<b>CONSENT</b> .....	Superfund (CERCLA) Consent Decrees
<b>UMTRA</b> .....	Uranium Mill Tailings Sites
<b>ODI</b> .....	Open Dump Inventory
<b>TRIS</b> .....	Toxic Chemical Release Inventory System
<b>TSCA</b> .....	Toxic Substances Control Act
<b>FTTS</b> .....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
<b>SSTS</b> .....	Section 7 Tracking Systems
<b>ICIS</b> .....	Integrated Compliance Information System
<b>MINES</b> .....	Mines Master Index File

### STATE AND LOCAL RECORDS

<b>WA HSL</b> .....	Hazardous Sites List
<b>OR SWF/LF</b> .....	Solid Waste Facilities List
<b>WA SWTIRE</b> .....	Solid Waste Tire Facilities
<b>OR LUST</b> .....	Leaking Underground Storage Tank Database
<b>OR UST</b> .....	Underground Storage Tank Database
<b>WA AST</b> .....	Aboveground Storage Tank Locations
<b>OR MANIFEST</b> .....	Manifest Information
<b>WA SPILLS</b> .....	Reported Spills
<b>OR SPILLS</b> .....	Spill Data
<b>OR HAZMAT</b> .....	Hazmat/Incidents
<b>WA INST CONTROL</b> .....	Institutional Control Site List
<b>OR INST CONTROL</b> .....	Institutional Controls Recorded at ESCI Sites
<b>OR VCS</b> .....	Voluntary Cleanup Program Sites
<b>WA DRYCLEANERS</b> .....	Drycleaner List
<b>WA CDL</b> .....	Clandestine Drug Lab Contaminated Site List
<b>OR CDL</b> .....	Uninhabitable Drug Lab Properties
<b>OR AIRS</b> .....	Oregon Title V Facility Listing
<b>WA INACTIVE DRYCLEANERS</b> .....	Inactive Drycleaners

### TRIBAL RECORDS

<b>INDIAN RESERV</b> .....	Indian Reservations
<b>WA INDIAN LUST</b> .....	Leaking Underground Storage Tanks on Indian Land
<b>OR INDIAN LUST</b> .....	Leaking Underground Storage Tanks on Indian Land

## EXECUTIVE SUMMARY

**WA INDIAN UST**..... Underground Storage Tanks on Indian Land  
**OR INDIAN UST**..... Underground Storage Tanks on Indian Land

### EDR PROPRIETARY RECORDS

**EDR Historical Auto Stations**EDR Proprietary Historic Gas Stations  
**EDR Historical Cleaners**..... EDR Proprietary Historic Dry Cleaners

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

### FEDERAL RECORDS

**NPL:** Also known as Superfund, the National Priority List database is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 04/19/2006 has revealed that there are 2 NPL sites within approximately 1.125 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<b><i>FRONTIER HARDCHROME</i></b>	<b><i>113 Y ST</i></b>	<b><i>1/2 - 1 ESE</i></b>	<b><i>0</i></b>	<b><i>10</i></b>
<b><i>VANCOUVER WATER STATION #1 CON</i></b>	<b><i>E. RESERVE AND N.E. FOU</i></b>	<b><i>1 - 2 NE</i></b>	<b><i>62</i></b>	<b><i>92</i></b>

**CORRACTS:** CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 03/15/2006 has revealed that there are 2 CORRACTS sites within approximately 1.125 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<b><i>HILLMAN PROPERTIES</i></b>	<b><i>2000 E COLUMBIA WAY BLD</i></b>	<b><i>1/2 - 1 SE</i></b>	<b><i>56</i></b>	<b><i>78</i></b>
<b><i>HILLMAN PROPERTIES NORTHWEST M</i></b>	<b><i>500 SE MARITIME BLDG 5</i></b>	<b><i>1/2 - 1 SE</i></b>	<b><i>60</i></b>	<b><i>87</i></b>

## EXECUTIVE SUMMARY

**RCRAInfo:** RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act ( RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System(RCRIS). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month Large quantity generators generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRA-LQG list, as provided by EDR, and dated 03/09/2006 has revealed that there is 1 RCRA-LQG site within approximately 0.375 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
FAULKNER USA	512 COLUMBIA ST	1/8 - 1/4 WNW	G28	36

**RCRAInfo:** RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act ( RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System(RCRIS). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month Large quantity generators generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRA-SQG list, as provided by EDR, and dated 03/09/2006 has revealed that there are 20 RCRA-SQG sites within approximately 0.375 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<i>US DOT FEDERAL HIGHWAY ADMIN V</i>	<i>610 E 5TH ST</i>	<i>0 - 1/8</i>	<i>B5</i>	<i>22</i>
<i>PEARSON AIR PARK</i>	<i>1113 E 5TH</i>	<i>0 - 1/8 ESE</i>	<i>C9</i>	<i>24</i>
<i>VANCOUVER CITY AIR MUSEUM</i>	<i>1115 E 5TH ST</i>	<i>0 - 1/8 ESE</i>	<i>C10</i>	<i>25</i>
<i>WA STATE PATROL VANCOUVER</i>	<i>605 E EVERGREEN</i>	<i>0 - 1/8 NNE</i>	<i>11</i>	<i>26</i>
<i>BILL COPPS INC</i>	<i>901 C ST</i>	<i>0 - 1/8 WNW</i>	<i>D13</i>	<i>27</i>
<i>PACIFIC TELECOM CORP OFFICE</i>	<i>805 BROADWAY CORPORATE</i>	<i>1/8 - 1/4 WNW</i>	<i>D17</i>	<i>31</i>
<i>HANNAH MOTOR COMPANY UST 10252</i>	<i>300 WASHINGTON ST</i>	<i>1/8 - 1/4 WSW</i>	<i>F22</i>	<i>34</i>
<i>FROM THE KENNELS</i>	<i>500 WASHINGTON ST</i>	<i>1/8 - 1/4 WNW</i>	<i>23</i>	<i>34</i>
<i>LUCKY LAGER BREWERY</i>	<i>230 W 6TH ST</i>	<i>1/8 - 1/4 WNW</i>	<i>24</i>	<i>35</i>
<i>QUAD INVESTMENTS</i>	<i>3000 LEWIS &amp; CLARK HWY</i>	<i>1/8 - 1/4 ESE</i>	<i>25</i>	<i>35</i>
<i>VANCOUVER POLICE BUILDING</i>	<i>300 E 13TH ST</i>	<i>1/8 - 1/4 NNW</i>	<i>29</i>	<i>37</i>
<i>METRO BUICK OLDS VANCOUVER</i>	<i>904 WASHINGTON ST</i>	<i>1/4 - 1/2 WNW</i>	<i>30</i>	<i>37</i>
<i>CAPITAL TACKEL MFG</i>	<i>404 W 4TH ST</i>	<i>1/4 - 1/2 W</i>	<i>31</i>	<i>39</i>
<i>HANNAH MOTOR CO</i>	<i>411 W 5TH ST</i>	<i>1/4 - 1/2 WNW</i>	<i>32</i>	<i>39</i>
<i>MARSHALL VANCOUVER FORD</i>	<i>1004 WASHINGTON ST</i>	<i>1/4 - 1/2 WNW</i>	<i>33</i>	<i>40</i>
<i>INDUSTRIAL FIBERGLASS SVCS INC</i>	<i>213 E RESERVE</i>	<i>1/4 - 1/2 ESE</i>	<i>I38</i>	<i>46</i>
<i>STORAGE PLACE</i>	<i>311 E RESERVE</i>	<i>1/4 - 1/2 ESE</i>	<i>I39</i>	<i>47</i>
<i>SOUTHWEST DELIVERY CO INC</i>	<i>415 W 6TH ST</i>	<i>1/4 - 1/2 WNW</i>	<i>K43</i>	<i>50</i>
<i>WOLF SUPPLY CO VANCOUVER</i>	<i>301 W 11TH ST</i>	<i>1/4 - 1/2 WNW</i>	<i>45</i>	<i>52</i>
<i>BOISE CASCADE VANCOUVER</i>	<i>907 W 7TH ST</i>	<i>1/4 - 1/2 W</i>	<i>46</i>	<i>53</i>

## EXECUTIVE SUMMARY

**RODS:** Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid the cleanup.

A review of the ROD list, as provided by EDR, and dated 04/13/2006 has revealed that there are 2 ROD sites within approximately 1.125 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<b>FRONTIER HARDCHROME</b>	<b>113 Y ST</b>	<b>1/2 - 1 ESE</b>	<b>0</b>	<b>10</b>
<b>VANCOUVER WATER STATION #1 CON</b>	<b>E. RESERVE AND N.E. FOU</b>	<b>1 - 2 NE</b>	<b>62</b>	<b>92</b>

**MLTS:** The Material Licensing Tracking System is maintained by the Nuclear Regulatory Commission and contains a list for approximately 8,100 sites which possess or use radioactive materials and are subject to NRC licensing requirements.

A review of the MLTS list, as provided by EDR, and dated 04/12/2006 has revealed that there is 1 MLTS site within approximately 0.125 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
TRANSPORTATION, DEPARTMENT OF	610 EAST FIFTH STREET	0 - 1/8	B3	21

**FINDS:** The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 04/27/2006 has revealed that there are 7 FINDS sites within approximately 0.125 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<b>US DOT FEDERAL HIGHWAY ADMIN V</b>	<b>610 E 5TH ST</b>	<b>0 - 1/8</b>	<b>B5</b>	<b>22</b>
TEXACO FRANK BRICKEY AVIATION	1109 E 5TH ST	0 - 1/8 ESE	C8	24
<b>PEARSON AIR PARK</b>	<b>1113 E 5TH</b>	<b>0 - 1/8 ESE</b>	<b>C9</b>	<b>24</b>
<b>VANCOUVER CITY AIR MUSEUM</b>	<b>1115 E 5TH ST</b>	<b>0 - 1/8 ESE</b>	<b>C10</b>	<b>25</b>
<b>WA STATE PATROL VANCOUVER</b>	<b>605 E EVERGREEN</b>	<b>0 - 1/8 NNE</b>	<b>11</b>	<b>26</b>
<b>BILL COPPS INC</b>	<b>901 C ST</b>	<b>0 - 1/8 WNW</b>	<b>D13</b>	<b>27</b>
ACADEMY	400 E EVERGREEN BLVD	0 - 1/8 NW	E15	30

### STATE AND LOCAL RECORDS

**WA CSCSL:** The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Ecology's Confirmed & Suspected Contaminated Sites List.

A review of the WA CSCSL list, as provided by EDR, and dated 03/08/2006 has revealed that there are 5

## EXECUTIVE SUMMARY

WA CSCSL sites within approximately 1.125 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<b>FRONTIER HARDCHROME</b>	<b>113 Y ST</b>	<b>1/2 - 1 ESE</b>	<b>0</b>	<b>10</b>
AUTOMOTIVE SERVICES INC CARWAS	2210 NW MILL PLAIN BLVD	1/2 - 1 E	55	76
<b>PRI NORTHWEST INC VANCOUVER</b>	<b>1300 W 8TH ST</b>	<b>1/2 - 1 WNW</b>	<b>58</b>	<b>80</b>
<b>EMERALD PETROLEUM SERVICES VAN</b>	<b>1300 W 12TH ST</b>	<b>1/2 - 1 WNW</b>	<b>59</b>	<b>82</b>
<b>BRAZIER FOREST INDUSTRIES</b>	<b>1401 INDUSTRIAL WAY</b>	<b>1/2 - 1 WNW</b>	<b>61</b>	<b>90</b>

**OR ECSI:** The Environmental Cleanup Site Information System records information about sites in Oregon that may be of environmental interest. The data come from the Department of Environmental Quality.

A review of the OR SHWS - ECSI list, as provided by EDR, and dated 03/08/2006 has revealed that there is 1 OR SHWS - ECSI site within approximately 1.125 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<b>FRONTIER HARDCHROME</b>	<b>113 Y ST</b>	<b>1/2 - 1 ESE</b>	<b>0</b>	<b>10</b>
<b>COUNTRY CLUB CLEANERS</b>	<b>1190 N JANTZEN DR</b>	<b>1 - 2 SW</b>	<b>63</b>	<b>96</b>

**WA CSCSL NFA:** The data set contains information about sites previously on the Confirmed and Suspected Contaminated Sites list that have received a No Further Action (NFA) determination. Because it is necessary to maintain historical records of sites that have been investigated and cleaned up, sites are not deleted from the database when cleanup activities are completed. Instead a No Further Action code is entered based upon the type of NFA determination the site received.

A review of the WA CSCSL NFA list, as provided by EDR, and dated 02/09/2006 has revealed that there are 2 WA CSCSL NFA sites within approximately 0.625 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
VANCOUVER CITY BREWERY BLOCKS	400 W 8TH ST	1/4 - 1/2 WNW	J41	49
COLUMBIA BUSINESS PARK BLDG 41	3001 SE COLUMBIA WAY BL	1/2 - 1 SE	54	76

**WA SWF/LF:** The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Department of Ecology's Solid Waste Facilities Handbook.

A review of the WA SWF/LF list, as provided by EDR, and dated 10/01/2004 has revealed that there is 1 WA SWF/LF site within approximately 0.625 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
WHATLEY DECANT STATION (VACTOR	1408 FRANKLIN AVE	1/2 - 1 NW	53	75

**WA LUST:** The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Ecology's Leaking Underground Storage Tanks Site List.

A review of the WA LUST list, as provided by EDR, and dated 03/08/2006 has revealed that there are 8 WA LUST sites within approximately 0.625 miles of the target property.

## EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<b>FEDERAL HIGHWAY ADMINISTRATION</b>	<b>610 5TH ST E</b>	<b>0 - 1/8</b>	<b>B4</b>	<b>21</b>
<b>HANNAH MOTOR COMPANY</b>	<b>300 WASHINGTON ST/PO BO</b>	<b>1/8 - 1/4 W</b>	<b>F19</b>	<b>32</b>
<b>METRO BUICK OLDS VANCOUVER</b>	<b>904 WASHINGTON ST</b>	<b>1/4 - 1/2 WNW</b>	<b>30</b>	<b>37</b>
<b>CHUCK'S TIRE &amp; AUTO SERVICE</b>	<b>1416 BROADWAY</b>	<b>1/4 - 1/2 NNW</b>	<b>H40</b>	<b>48</b>
<b>SOUTHWEST DELIVERY CO., INC.</b>	<b>415 WEST 6TH STREET</b>	<b>1/4 - 1/2 WNW</b>	<b>K44</b>	<b>50</b>
<b>KYUNGSHIN CHOI/MATTHIEU'S CAR</b>	<b>1505 BROADWAY</b>	<b>1/4 - 1/2 NNW</b>	<b>L49</b>	<b>68</b>
<b>HOESLY AUTO SERVICE INDIVIDUAL</b>	<b>210 W MCLOUGHLIN BV</b>	<b>1/2 - 1 NNW</b>	<b>51</b>	<b>73</b>
<b>CITY OF VANCOUVER</b>	<b>1912 MAIN</b>	<b>1/2 - 1 NNW</b>	<b>52</b>	<b>75</b>

**WA UST:** The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Ecology's Statewide UST Site/Tank Report.

A review of the WA UST list, as provided by EDR, and dated 04/27/2006 has revealed that there are 23 WA UST sites within approximately 0.375 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<b>FEDERAL HIGHWAY ADMINISTRATION</b>	<b>610 5TH ST E</b>	<b>0 - 1/8</b>	<b>B4</b>	<b>21</b>
PEARSON AIR FIELD	1105 E 5TH STREET	0 - 1/8 ESE	C6	22
TEXACO-FRANK BRICKEY AVIATION	1109 EAST 5TH STREET	0 - 1/8 ESE	C7	24
BILL COPPS INC	901 C ST	0 - 1/8 WNW	D12	26
THE ACADEMY	400 E. EVERGREEN BLVD	0 - 1/8 NW	E14	30
HANNAH MOTOR COMPANY VW	114 EAST SIXTH ST	1/8 - 1/4 WNW	16	31
CLARK PUBLIC UTILITY DISTRICT	1200 FORT VANCOUVER WAY	1/8 - 1/4 NNE	18	31
<b>HANNAH MOTOR COMPANY</b>	<b>300 WASHINGTON ST/PO BO</b>	<b>1/8 - 1/4 W</b>	<b>F19</b>	<b>32</b>
HANNAH MOTOR COMPANY	400 WASHINGTON	1/8 - 1/4 W	F20	33
FT VANCOUVER REGIONAL LIBRARY	1007 E MILL PLAIN BLVD	1/8 - 1/4 NNE	26	36
ADMIRAL DISTRIBUTING	301 WEST 5TH ST	1/8 - 1/4 WNW	G27	36
<b>METRO BUICK OLDS VANCOUVER</b>	<b>904 WASHINGTON ST</b>	<b>1/4 - 1/2 WNW</b>	<b>30</b>	<b>37</b>
<b>CAPITAL TACKEL MFG</b>	<b>404 W 4TH ST</b>	<b>1/4 - 1/2 W</b>	<b>31</b>	<b>39</b>
GENERAL BREWING COMPANY	615 COLUMBIA ST	1/4 - 1/2 WNW	34	40
OLTMANN'S MOBIL SERVICE	1114 WASHINGTON	1/4 - 1/2 WNW	35	42
VANCOUVER CHEVRON	210 E MILL PLAIN BLVD	1/4 - 1/2 NNW	H36	44
NATIONAL PARK SERVICE FORT VAN	612 E RESERVE ST	1/4 - 1/2 ESE	37	45
<b>CHUCK'S TIRE &amp; AUTO SERVICE</b>	<b>1416 BROADWAY</b>	<b>1/4 - 1/2 NNW</b>	<b>H40</b>	<b>48</b>
<b>SOUTHWEST DELIVERY CO., INC.</b>	<b>415 WEST 6TH STREET</b>	<b>1/4 - 1/2 WNW</b>	<b>K44</b>	<b>50</b>
<b>WOLF SUPPLY CO VANCOUVER</b>	<b>301 W 11TH ST</b>	<b>1/4 - 1/2 WNW</b>	<b>45</b>	<b>52</b>
<b>BOISE CASCADE VANCOUVER</b>	<b>907 W 7TH ST</b>	<b>1/4 - 1/2 W</b>	<b>46</b>	<b>53</b>
VANCOUVER AVIATION	101 E RESERVE ST	1/4 - 1/2 ESE	I47	67
<b>KYUNGSHIN CHOI/MATTHIEU'S CAR</b>	<b>1505 BROADWAY</b>	<b>1/4 - 1/2 NNW</b>	<b>L49</b>	<b>68</b>

**WA MANIFEST:** Hazardous waste manifest information.

A review of the WA MANIFEST list, as provided by EDR, and dated 12/31/2004 has revealed that there are 2 WA MANIFEST sites within approximately 0.375 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<b>BILL COPPS INC</b>	<b>901 C ST</b>	<b>0 - 1/8 WNW</b>	<b>D13</b>	<b>27</b>
<b>BOISE CASCADE VANCOUVER</b>	<b>907 W 7TH ST</b>	<b>1/4 - 1/2 W</b>	<b>46</b>	<b>53</b>

## EXECUTIVE SUMMARY

**WA VCP:** Sites that have entered either the Voluntary Cleanup Program or its predecessor Independent Remedial Action Program.

A review of the WA VCP list, as provided by EDR, and dated 03/08/2006 has revealed that there is 1 WA VCP site within approximately 0.625 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<b>VANCOUVER CITY BREWERY BLOCKS</b>	<b>400 W 8TH ST</b>	<b>1/4 - 1/2 WNW</b>	<b>J42</b>	<b>49</b>

**WA ICR:** These are remedial action reports Ecology has received from either the owner or operator of the site. These actions have been conducted without department oversight or approval and are not under an order or decree.

A review of the WA ICR list, as provided by EDR, and dated 12/01/2002 has revealed that there are 7 WA ICR sites within approximately 0.625 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
HANNAH MITSUBISHI	300 WASHINGTON ST.	1/8 - 1/4 WSW	F21	33
<b>METRO BUICK OLDS VANCOUVER</b>	<b>904 WASHINGTON ST</b>	<b>1/4 - 1/2 WNW</b>	<b>30</b>	<b>37</b>
<b>CHUCK'S TIRE &amp; AUTO SERVICE</b>	<b>1416 BROADWAY</b>	<b>1/4 - 1/2 NNW</b>	<b>H40</b>	<b>48</b>
<b>SOUTHWEST DELIVERY CO INC</b>	<b>415 W 6TH ST</b>	<b>1/4 - 1/2 WNW</b>	<b>K43</b>	<b>50</b>
GEM EQUIPMENT	1505 BROADWAY	1/4 - 1/2 NNW	L48	68
<b>CLARK COLLEGE</b>	<b>1800 E MCLOUGHLIN BLVD</b>	<b>1/2 - 1 NE</b>	<b>50</b>	<b>69</b>
<b>HOESLY AUTO SERVICE INDIVIDUAL</b>	<b>210 W MCLOUGHLIN BV</b>	<b>1/2 - 1 NNW</b>	<b>51</b>	<b>73</b>

### EDR PROPRIETARY RECORDS

**EDR Manufactured Gas Plants:** The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

A review of the Manufactured Gas Plants list, as provided by EDR, has revealed that there is 1 Manufactured Gas Plants site within approximately 1.125 miles of the target property.

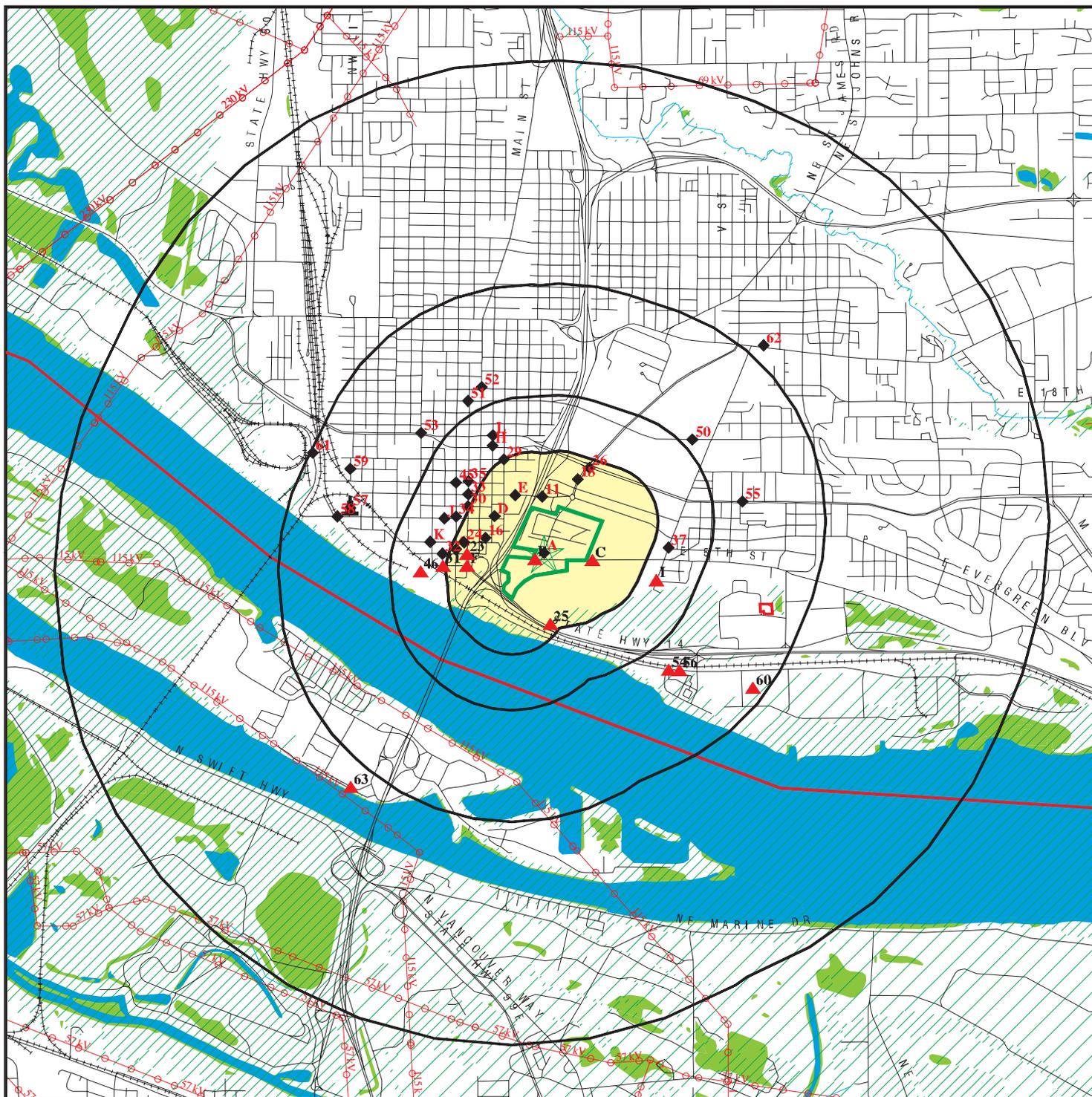
<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
VANCOUVER GAS MANUFACTURING SI	9TH AND LINCOLN STS	1/2 - 1 WNW	57	79

## EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

<u>Site Name</u>	<u>Database(s)</u>
PACIFIC POWER & LIGHT - DEKUM SUBS	OR SHWS - ECSI, FINDS, OR VCS
PACIFIC POWER & LIGHT - MASON SUBS	OR SHWS - ECSI, OR VCS
N MARINE DR EXTENSION - NORTH PORT	OR SHWS - ECSI
PACIFIC COGENERATION INC	RCRA-SQG, WA CSCSL, WA EMI
SPECIAL EVENTS & CONVENTION CENTER	WA CSCSL
FRITO LAY VANCOUVER	WA CSCSL
BPA ALCOA SUBSTATION	WA CSCSL, FINDS
VANCOUVER GAS MANUFACTURING SITE	CERC-NFRAP
CITY OF VANCOUVER	WA SPILLS
CITY OF VANCOUVER PW	WA SPILLS
VANCOUVER WASTE WATER TREATMENT PL	WA SPILLS
VANCOUVER BARRACKS	FINDS, WA LUST
VANCOUVER PLANT-CASCADE PACIFIC LU	WA UST
VANCOUVER MARINE TERMINAL	WA UST
DITTMER MAINTENANCE HEADQUARTERS	WA UST
ROSS COMPLEX	WA UST
VANCOUVER DISTRICT SITE 40001D	WA UST
VANCOUVER WA LINE SEG 643 PRINT NO	WA UST
RITE AID 5291	RCRA-SQG, FINDS, WA MANIFEST
FLOW CHEM INC	RCRA-SQG, WA MANIFEST
VESSEL OCEAN DUCHESS 533611	RCRA-SQG, FINDS
NORTHWEST PIPELINE CORP VANCOUVER	RCRA-SQG, FINDS
USWCOM NORTH VANCOUVER RPTR	RCRA-SQG, FINDS
VANCOUVER ANCHORAGE	ERNS
VANCOUVER BERTH 7	ERNS
SPECIAL EVENTS & CONVENTION CENTER	FINDS, WA VCP
AT&T VANCOUVER HIDDEN WAY	FINDS
WR GRACE & CO CPD VANCOUVER	FINDS
TRIQUEST PRECISION PLASTICS 100	WA EMI
CITY OF VANCOUVER FIRE STATION	WA ICR
CARBORUNDUM	WA ICR
UNOCAL #5615	WA ICR
BEST WESTERN INN, RM #105, 115	WA CDL
SALMON CRK MTL, RM #22, 11901	WA CDL
EARTH RETENTION INC	WA MANIFEST
ESTATE OF MARY E MACKAY	WA MANIFEST

# OVERVIEW MAP - 1692827.2s



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  National Priority List Sites
-  Landfill Sites
-  Dept. Defense Sites

-  Indian Reservations BIA
-  County Boundary
-  Power transmission lines
-  Oil & Gas pipelines
-  100-year flood zone
-  500-year flood zone
-  National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Vancouver Barracks  
 ADDRESS: 638 Hathaway Road  
 Vancouver WA 98661  
 LAT/LONG: 45.6250 / 122.6657

CLIENT: CH2M Hill, Inc.  
 CONTACT: Heather Rectenwald  
 INQUIRY #: 1692827.2s  
 DATE: June 09, 2006

# DETAIL MAP - 1692827.2s



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Landfill Sites
-  Dept. Defense Sites

-  Indian Reservations BIA
-  County Boundary
-  Oil & Gas pipelines
-  100-year flood zone
-  500-year flood zone
-  National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Vancouver Barracks  
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 Vancouver WA 98661  
 LAT/LONG: 45.6250 / 122.6657

CLIENT: CH2M Hill, Inc.  
 CONTACT: Heather Rectenwald  
 INQUIRY #: 1692827.2s  
 DATE: June 09, 2006

## MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b><u>FEDERAL RECORDS</u></b>								
NPL		1.125	0	0	0	1	1	2
Proposed NPL		1.125	0	0	0	0	0	0
Delisted NPL		1.125	0	0	0	0	0	0
NPL RECOVERY		0.125	0	NR	NR	NR	NR	0
CERCLIS		0.625	0	0	0	1	NR	1
CERC-NFRAP		0.625	0	0	0	0	NR	0
CORRACTS		1.125	0	0	0	2	0	2
RCRA TSD		0.625	0	0	0	0	NR	0
RCRA Lg. Quan. Gen.		0.375	0	1	0	NR	NR	1
RCRA Sm. Quan. Gen.		0.375	5	6	9	NR	NR	20
ERNS		0.125	0	NR	NR	NR	NR	0
HMIRS		0.125	0	NR	NR	NR	NR	0
US ENG CONTROLS		0.625	0	0	0	1	NR	1
US INST CONTROL		0.625	0	0	0	1	NR	1
DOD		1.125	0	0	0	0	0	0
FUDS		1.125	0	0	0	0	0	0
US BROWNFIELDS		0.625	0	0	0	0	NR	0
CONSENT		1.125	0	0	0	0	0	0
ROD		1.125	0	0	0	1	1	2
UMTRA		0.625	0	0	0	0	NR	0
ODI		0.625	0	0	0	0	NR	0
TRIS		0.125	0	NR	NR	NR	NR	0
TSCA		0.125	0	NR	NR	NR	NR	0
FTTS		0.125	0	NR	NR	NR	NR	0
SSTS		0.125	0	NR	NR	NR	NR	0
ICIS		0.125	0	NR	NR	NR	NR	0
PADS		0.125	0	NR	NR	NR	NR	0
MLTS		0.125	1	NR	NR	NR	NR	1
MINES		0.375	0	0	0	NR	NR	0
FINDS		0.125	7	NR	NR	NR	NR	7
RAATS		0.125	0	NR	NR	NR	NR	0
<b><u>STATE AND LOCAL RECORDS</u></b>								
WA CSCSL		1.125	0	0	0	5	0	5
OR State Haz. Waste - ECSI		1.125	0	0	0	0	1	1
WA HSL		1.125	0	0	0	0	0	0
WA CSCSL NFA		0.625	0	0	1	1	NR	2
WA State Landfill		0.625	0	0	0	1	NR	1
OR State Landfill		0.625	0	0	0	0	NR	0
WA SWTIRE		0.625	0	0	0	0	NR	0
WA LUST		0.625	1	1	4	2	NR	8
OR LUST		0.625	0	0	0	0	NR	0
WA UST	X	0.375	5	6	12	NR	NR	23
OR UST		0.375	0	0	0	NR	NR	0
WA AST		0.375	0	0	0	NR	NR	0
OR AST		0.375	0	0	0	NR	NR	0
WA MANIFEST		0.375	1	0	1	NR	NR	2

## MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
OR MANIFEST		0.375	0	0	0	NR	NR	0
WA SPILLS		0.125	0	NR	NR	NR	NR	0
OR SPILLS		0.125	0	NR	NR	NR	NR	0
OR HAZMAT		0.125	0	NR	NR	NR	NR	0
WA INST CONTROL		0.625	0	0	0	0	NR	0
OR INST CONTROL		0.625	0	0	0	0	NR	0
WA VCP		0.625	0	0	1	0	NR	1
WA ICR		0.625	0	1	4	2	NR	7
OR VCS		0.625	0	0	0	0	NR	0
WA DRYCLEANERS		0.375	0	0	0	NR	NR	0
OR DRYCLEANERS		0.375	0	0	0	NR	NR	0
WA CDL		0.125	0	NR	NR	NR	NR	0
OR CDL		0.125	0	NR	NR	NR	NR	0
WA Emissions		0.125	0	NR	NR	NR	NR	0
OR AIRS		0.125	0	NR	NR	NR	NR	0
WA INACTIVE DRYCLEANERS		0.375	0	0	0	NR	NR	0
<b><u>TRIBAL RECORDS</u></b>								
INDIAN RESERV		1.125	0	0	0	0	0	0
WA INDIAN LUST		0.625	0	0	0	0	NR	0
OR INDIAN LUST		0.625	0	0	0	0	NR	0
WA INDIAN UST		0.375	0	0	0	NR	NR	0
OR INDIAN UST		0.375	0	0	0	NR	NR	0
<b><u>EDR PROPRIETARY RECORDS</u></b>								
Manufactured Gas Plants		1.125	0	0	0	1	0	1
EDR Historical Auto Stations		0.375	0	0	0	NR	NR	0
EDR Historical Cleaners		0.375	0	0	0	NR	NR	0

**NOTES:**

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**A1**      **VANCOUVER BARRACKS**  
**Target**    **HATHAWAY RD BLDG 404**  
**Property**   **VANCOUVER, WA 98661**

**WA UST**    **U003604971**  
                   **N/A**

**Site 1 of 2 in cluster A**

**Actual:**  
**-999 ft.**

**UST:**

Facility ID:            46955582  
 Site ID:                503277  
 Install Date:         1/1/1964 00:00:00  
 Capacity:             5,000 to 9,999 Gallons  
 Status:                Removed  
 Tank Name:            V-1-B  
 Substance:            Diesel  
 Compartment #:      1  
 Tank ID:               503282  
 Comartment ID:      503283  
 Decimal Latitude:    45.62637  
 Decimal Longitude:   -122.66674  
 Ecology Region:     South Western

Facility ID:            46955582  
 Site ID:                503277  
 Install Date:         1/1/1900 00:00:00  
 Capacity:             111 TO 1,100 Gallons  
 Status:                Removed  
 Tank Name:            V-1-A  
 Substance:            Used Oil/Waste Oil  
 Compartment #:      1  
 Tank ID:               503287  
 Comartment ID:      503288  
 Decimal Latitude:    45.62637  
 Decimal Longitude:   -122.66674  
 Ecology Region:     South Western

Facility ID:            46955582  
 Site ID:                503277  
 Install Date:         1/1/1964 00:00:00  
 Capacity:             111 TO 1,100 Gallons  
 Status:                Removed  
 Tank Name:            V-1-C  
 Substance:            Diesel  
 Compartment #:      1  
 Tank ID:               598224  
 Comartment ID:      592126  
 Decimal Latitude:    45.62637  
 Decimal Longitude:   -122.66674  
 Ecology Region:     South Western

**A2**      **VANCOUVER SUB-INSTALLATION**  
**Target**    **VANCOUVER BARRACKS, BLDG 638**  
**Property**   **VANCOUVER, WA 98661**

**WA UST**    **U003355692**  
                   **N/A**

**Site 2 of 2 in cluster A**

**Actual:**  
**-999 ft.**

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

Database(s)  
EPA ID Number  
EDR ID Number

**VANCOUVER SUB-INSTALLATION (Continued)**

**U003355692**

UST:

Facility ID: 82215111  
Site ID: 8732  
Install Date: 12/31/1964 00:00:00  
Capacity: 111 TO 1,100 Gallons  
Status: Removed  
Tank Name: 404-2  
Substance: Used Oil/Waste Oil  
Compartment #: 1  
Tank ID: 32496  
Comartment ID: 32966  
Decimal Latitude: 45.64350  
Decimal Longitude: -122.63523  
Ecology Region: South Western

Facility ID: 82215111  
Site ID: 8732  
Install Date: 6/1/1982 00:00:00  
Capacity: 111 TO 1,100 Gallons  
Status: Removed  
Tank Name: 404-1  
Substance: Used Oil/Waste Oil  
Compartment #: 1  
Tank ID: 32528  
Comartment ID: 32998  
Decimal Latitude: 45.64350  
Decimal Longitude: -122.63523  
Ecology Region: South Western

Facility ID: 82215111  
Site ID: 8732  
Install Date: 1/1/1982 00:00:00  
Capacity: 111 TO 1,100 Gallons  
Status: Removed  
Tank Name: VB-3  
Substance: Used Oil/Waste Oil  
Compartment #: 1  
Tank ID: 39501  
Comartment ID: 40049  
Decimal Latitude: 45.64350  
Decimal Longitude: -122.63523  
Ecology Region: South Western

Facility ID: 82215111  
Site ID: 8732  
Install Date: 1/1/1982 00:00:00  
Capacity: 111 TO 1,100 Gallons  
Status: Removed  
Tank Name: VB-1  
Substance: Used Oil/Waste Oil  
Compartment #: 1  
Tank ID: 21202  
Comartment ID: 21511  
Decimal Latitude: 45.64350  
Decimal Longitude: -122.63523  
Ecology Region: South Western

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation    Site

MAP FINDINGS

Database(s)    EDR ID Number  
EPA ID Number

VANCOUVER SUB-INSTALLATION (Continued)

U003355692

Facility ID:            82215111  
Site ID:                8732  
Install Date:          1/1/1900 00:00:00  
Capacity:              111 TO 1,100 Gallons  
Status:                 Removed  
Tank Name:            VB-5  
Substance:            Used Oil/Waste Oil  
Compartment #:        1  
Tank ID:                598228  
Comartment ID:        592123  
Decimal Latitude:     45.64350  
Decimal Longitude:   -122.63523  
Ecology Region:      South Western

Facility ID:            82215111  
Site ID:                8732  
Install Date:          1/1/1900 00:00:00  
Capacity:              111 TO 1,100 Gallons  
Status:                 Removed  
Tank Name:            VC-2  
Substance:            Diesel  
Compartment #:        1  
Tank ID:                598230  
Comartment ID:        592125  
Decimal Latitude:     45.64350  
Decimal Longitude:   -122.63523  
Ecology Region:      South Western

Facility ID:            82215111  
Site ID:                8732  
Install Date:          1/1/1964 00:00:00  
Capacity:              20,000 to 29,999 Gallons  
Status:                 Removed  
Tank Name:            VC-1  
Substance:            Diesel  
Compartment #:        1  
Tank ID:                598229  
Comartment ID:        592124  
Decimal Latitude:     45.64350  
Decimal Longitude:   -122.63523  
Ecology Region:      South Western

Facility ID:            82215111  
Site ID:                8732  
Install Date:          12/31/1964 00:00:00  
Capacity:              111 TO 1,100 Gallons  
Status:                 Exempt  
Tank Name:            VB-7  
Substance:            Not reported  
Compartment #:        1  
Tank ID:                7507  
Comartment ID:        7640  
Decimal Latitude:     45.64350  
Decimal Longitude:   -122.63523  
Ecology Region:      South Western

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

Database(s)  
EDR ID Number  
EPA ID Number

VANCOUVER SUB-INSTALLATION (Continued)

U003355692

Facility ID: 82215111  
Site ID: 8732  
Install Date: 12/31/1964 00:00:00  
Capacity: 111 TO 1,100 Gallons  
Status: Removed  
Tank Name: VC-3  
Substance: Used Oil/Waste Oil  
Compartment #: 1  
Tank ID: 27015  
Comartment ID: 27381  
Decimal Latitude: 45.64350  
Decimal Longitude: -122.63523  
Ecology Region: South Western

Facility ID: 82215111  
Site ID: 8732  
Install Date: 12/31/1964 00:00:00  
Capacity: 111 TO 1,100 Gallons  
Status: Exempt  
Tank Name: VB-2  
Substance: Used Oil/Waste Oil  
Compartment #: 1  
Tank ID: 21331  
Comartment ID: 21641  
Decimal Latitude: 45.64350  
Decimal Longitude: -122.63523  
Ecology Region: South Western

Facility ID: 82215111  
Site ID: 8732  
Install Date: 12/31/1964 00:00:00  
Capacity: 111 TO 1,100 Gallons  
Status: Removed  
Tank Name: VB-6  
Substance: Used Oil/Waste Oil  
Compartment #: 1  
Tank ID: 29311  
Comartment ID: 29725  
Decimal Latitude: 45.64350  
Decimal Longitude: -122.63523  
Ecology Region: South Western

Facility ID: 82215111  
Site ID: 8732  
Install Date: 12/31/1964 00:00:00  
Capacity: 111 TO 1,100 Gallons  
Status: Exempt  
Tank Name: VB-4  
Substance: Used Oil/Waste Oil  
Compartment #: 1  
Tank ID: 39440  
Comartment ID: 39988  
Decimal Latitude: 45.64350  
Decimal Longitude: -122.63523  
Ecology Region: South Western

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**NPL**  
**Region**  
**ESE**  
**1/2-1**  
**4195 ft.**

**FRONTIER HARDCHROME**  
**113 Y ST**  
**VANCOUVER, WA 98661**

**CERCLIS** 1000322340  
**RCRA-SQG** WAD053614988  
**WA CSCSL**  
**FINDS**  
**NPL**  
**ROD**  
**US ENG CONTROLS**  
**US INST CONTROL**

**CERCLIS Classification Data:**

Federal Facility: Not a Federal Facility  
 Non NPL Status: Not reported  
 NPL Status: Currently on the Final NPL  
 Contact: SEAN SHELDRAKE Contact Tel: (206) 553-1220  
 Contact Title: Not reported  
 Site Description:

The Frontier Hard Chrome (FHC) Superfund Site is located in the southwestern part of the State of Washington, in the City of Vancouver, Washington. FHC is in an industrial area of the city directly across the Columbia River from the city of Portland, Oregon. The area is generally flat extending south, east, and west. About one quarter mile to the north, a ridge rises steeply to where a large residential area begins. The site is approximately one-half mile north of the Columbia River and covers about one half acre. The area is within a flood plain that has been extensively filled. There is a topographical depression about one and one-half acres in size adjacent to the east end of the site. The depression is generally five to twenty feet below the level of the site and represents a remnant of the old floodplain that has not been filled. The groundwater table is within twenty feet of the ground surface at the FHC site and is affected by the stage height of the river. The groundwater is used as the drinking water supply for the city of Vancouver, which has two well fields within one mile of the site. In approximately 1955, the site was filled with hydraulic dredge material and construction rubble. Since then the site has been primarily occupied by two businesses, both engaged in the chrome plating business. Pioneer Plating operated at the site from 1958 to 1970. The site was then occupied by FHC until 1983. The property has been leased to various other businesses since 1983. Presently, the facility is being used as a metal shop. During the operation of Pioneer and the initial operation of FHC, chromium plating wastes were discharged to the sanitary sewer system. In 1975, the City of Vancouver determined that chromium in the wastewater from FHC was upsetting the operation of its new secondary treatment system. FHC was directed by the city and the Washington State Department of Ecology (Ecology) to cease discharge to the sewer system until an appropriate wastewater treatment system could be installed to remove the chromium at the site. In 1976, Ecology gave the FHC facility a wastewater disposal permit for discharge of chromium-contaminated wastewater to an on-site dry well. The permit also contained a schedule for the installation of an appropriate treatment system for the FHC wastewater stream. Between 1976 and 1981, several extensions of the permit and schedule were granted, as the deadlines were passed without compliance. In 1982, Ecology found FHC in violation of the Washington State Dangerous Waste Act for the illegal disposal of hazardous wastes. Ecology also discovered that an industrial supply well about one quarter mile southwest of FHC was contaminated with chromium at more than twice the federal drinking water standard. FHC's wastewater permit was again modified with a new compliance date. FHC again did not comply with the permit requirements for economic reasons, and in

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s)  
EDR ID Number  
EPA ID Number

**FRONTIER HARDCHROME (Continued)**

**1000322340**

December, 1982, the site was proposed for inclusion on the National Priorities List (NPL). The listing was finalized in September, 1983. In 1983, Ecology ordered FHC to stop discharge of chromium plating wastes to the dry well. FHC was also required to prepare a plan for the investigation of the groundwater. At that time, FHC closed down all operations at the site. The company did not undertake the investigation. In March 1983, EPA and Ecology signed a Cooperative Agreement which gave Ecology the lead for investigation of the FHC site under Superfund. Ecology began the investigation in the fall of 1984. The Remedial Investigation (RI) led to a Feasibility Study (FS) to determine the cost-effective remedial action of the FHC site. The FS was completed in October, 1987. EPA issued separate RODs for the soils/source control operable unit (December 1987) and the groundwater operable unit (July 1988). The December, 1987 ROD called for removal, stabilization and replacement of 7400 cubic yards of soil - or all soils with concentrations greater than 550 g/kg total chromium (this number was based on a site specific leachate test for protection of groundwater). The July 1988 ROD called for extraction of groundwater from the area of greatest contamination (levels of chromium exceeding 50,000 µg/L) via extraction wells, and treatment of extracted groundwater. Evaluation of the soils remedy by EPA after the ROD was issued revealed that the chosen stabilization method was ineffective at preventing the leaching of hexavalent chromium from site soils. Groundwater monitoring conducted after the ROD was issued indicated that the contaminated groundwater plume was decreasing in size as down-gradient industrial supply wells located at FMC (Figure 1) were taken off line. Because new, cost-effective technologies were becoming available that provided the potential for more effective groundwater remediation, EPA reevaluated the need for pump-and-treat as the most appropriate solution for groundwater cleanup. Based on surface soil sample analyses for total chromium conducted during the RI, Ecology completed a removal action in 1994 to reduce the threat of direct exposure and further impacts to groundwater from the most heavily contaminated surface soils. This action consisted of excavation of surface soil with chromium concentrations exceeding 210 mg/kg from the eastern most portion of the site. The area of excavation was subsequently backfilled with clean material and has been developed. Development consisted of construction of a commercial office building and adjacent parking. In December, 2000, in conjunction with a drainage project on the adjacent Grand Avenue, the City of Vancouver extended a tight-lined drain pipe with road drains and catch basins up 1st Street (directly to the south of the FHC site) to the intersection with "Y" Street (directly to the west of the FHC site). The extension was engineered to handle all water flowing south on "Y" Street (which had previously entered the FHC site from 1st Street). The extension was provided in conjunction with an EPA Removal Action to provide drainage of surface water away from the FHC site, preventing further infiltration of surface water through contaminated soils on site. Since the original RODs were issued, EPA has continued to monitor groundwater and soils, and evaluate new, innovative cleanup technologies to address the persistently high concentrations in soils and groundwater at the FHC site. In May, 2000, EPA finalized a Focused Feasibility Study (FS) which identified and evaluated several new and innovative technologies for addressing the problems at the site. One of the promising new in-situ treatment technologies identified in the Focused FS, In-Situ Redox Manipulation, or ISRM, was further evaluated

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

**FRONTIER HARDCHROME (Continued)**

**1000322340**

in a bench scale test in February, 2001. The results of the bench scale test indicated that the technology would be appropriate for use at the FHC site. In June 2001, EPA issued a Proposed Plan for cleanup of both soils and groundwater at the site. The Proposed Plan identified in situ treatment using reducing compounds as EPA's Preferred Alternative. The public comment period for the Proposed Plan ended on July 25, 2001. EPA received one comment letter with two comments. This Proposed Plan was the basis for a ROD Amendment addressing both soil and groundwater issued in August 2001. Frontier Hard Chrome, Inc. (FHC) ceased operations in 1983 and is no longer a viable entity. At its close, FHC had little in the way of assets. The owners of the property, who were also owners of FHC, Inc., did not receive any dividends or final distributions from FHC, Inc. As such, the regulatory and enforcement actions have centered on the owners of the site. Under Superfund, they are responsible parties and are liable for the site cleanup. Past negotiations between the responsible parties, EPA, and Ecology have not been productive. Since 1976, FHC has not complied fully with any agency orders. The site owners have not indicated any willingness or financial capability to undertake needed remedial actions at the site. Settlement negotiations with the owners are ongoing. Operable Unit 1 addresses contaminated soil at the site. A ROD for this OU was issued in December 1987. A ROD Amendment addressing both OU 1 & OU 2 was issued in August 2001. Operable Unit 2 addresses contaminated groundwater at the site. A ROD for this OU was issued in July 1988. A ROD Amendment addressing both OU 1 & OU 2 was issued in August 2001. The Frontier Hard Chrome (FHC) Superfund Site is located in the southwestern part of the State of Washington, in the City of Vancouver, Washington. FHC is in an industrial area of the city directly across the Columbia River from the city of Portland, Oregon. The area is generally flat extending south, east, and west. About one quarter mile to the north, a ridge rises steeply to where a large residential area begins. The site is approximately one-half mile north of the Columbia River and covers about one half acre. The area is within a flood plain that has been extensively filled. There is a topographical depression about one and one-half acres in size adjacent to the east end of the site. The depression is generally five to twenty feet below the level of the site and represents a remnant of the old floodplain that has not been filled. The groundwater table is within twenty feet of the ground surface at the FHC site and is affected by the stage height of the river. The groundwater is used as the drinking water supply for the city of Vancouver, which has two well fields within one mile of the site. In approximately 1955, the site was filled with hydraulic dredge material and construction rubble. Since then the site has been primarily occupied by two businesses, both engaged in the chrome plating business. Pioneer Plating operated at the site from 1958 to 1970. The site was then occupied by FHC until 1983. The property has been leased to various other businesses since 1983. Presently, the facility is being used as a metal shop. During the operation of Pioneer and the initial operation of FHC, chromium plating wastes were discharged to the sanitary sewer system. In 1975, the City of Vancouver determined that chromium in the wastewater from FHC was upsetting the operation of its new secondary treatment system. FHC was directed by the city and the Washington State Department of Ecology (Ecology) to cease discharge to the sewer system until an appropriate wastewater

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s)  
EDR ID Number  
EPA ID Number

**FRONTIER HARDCHROME (Continued)**

**1000322340**

treatment system could be installed to remove the chromium at the site. In 1976, Ecology gave the FHC facility a wastewater disposal permit for discharge of chromium-contaminated wastewater to an on-site dry well. The permit also contained a schedule for the installation of an appropriate treatment system for the FHC wastewater stream. Between 1976 and 1981, several extensions of the permit and schedule were granted, as the deadlines were passed without compliance. In 1982, Ecology found FHC in violation of the Washington State Dangerous Waste Act for the illegal disposal of hazardous wastes. Ecology also discovered that an industrial supply well about one quarter mile southwest of FHC was contaminated with chromium at more than twice the federal drinking water standard. FHC's wastewater permit was again modified with a new compliance date. FHC again did not comply with the permit requirements for economic reasons, and in December, 1982, the site was proposed for inclusion on the National Priorities List (NPL). The listing was finalized in September, 1983. In 1983, Ecology ordered FHC to stop discharge of chromium plating wastes to the dry well. FHC was also required to prepare a plan for the investigation of the groundwater. At that time, FHC closed down all operations at the site. The company did not undertake the investigation. In March 1983, EPA and Ecology signed a Cooperative Agreement which gave Ecology the lead for investigation of the FHC site under Superfund. Ecology began the investigation in the fall of 1984. The Remedial Investigation (RI) led to a Feasibility Study (FS) to determine the cost-effective remedial action of the FHC site. The FS was completed in October, 1987. EPA issued separate RODs for the soils/source control operable unit (December 1987) and the groundwater operable unit (July 1988). The December, 1987 ROD called for removal, stabilization and replacement of 7400 cubic yards of soil - or all soils with concentrations greater than 550 g/kg total chromium (this number was based on a site specific leachate test for protection of groundwater). The July 1988 ROD called for extraction of groundwater from the area of greatest contamination (levels of chromium exceeding 50,000 µg/L) via extraction wells, and treatment of extracted groundwater. Evaluation of the soils remedy by EPA after the ROD was issued revealed that the chosen stabilization method was ineffective at preventing the leaching of hexavalent chromium from site soils. Groundwater monitoring conducted after the ROD was issued indicated that the contaminated groundwater plume was decreasing in size as down-gradient industrial supply wells located at FMC (Figure 1) were taken off line. Because new, cost-effective technologies were becoming available that provided the potential for more effective groundwater remediation, EPA reevaluated the need for pump-and-treat as the most appropriate solution for groundwater cleanup. Based on surface soil sample analyses for total chromium conducted during the RI, Ecology completed a removal action in 1994 to reduce the threat of direct exposure and further impacts to groundwater from the most heavily contaminated surface soils. This action consisted of excavation of surface soil with chromium concentrations exceeding 210 mg/kg from the eastern most portion of the site. The area of excavation was subsequently backfilled with clean material and has been developed. Development consisted of construction of a commercial office building and adjacent parking. In December, 2000, in conjunction with a drainage project on the adjacent Grand Avenue, the City of Vancouver extended a tight-lined drain pipe with road drains and catch basins up 1st Street (directly to the south of the FHC site) to the intersection with "Y" Street (directly to the

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**FRONTIER HARDCHROME (Continued)**

**1000322340**

west of the FHC site). The extension was engineered to handle all water flowing south on "Y" Street (which had previously entered the FHC site from 1st Street). The extension was provided in conjunction with an EPA Removal Action to provide drainage of surface water away from the FHC site, preventing further infiltration of surface water through contaminated soils on site. Since the original RODs were issued, EPA has continued to monitor groundwater and soils, and evaluate new, innovative cleanup technologies to address the persistently high concentrations in soils and groundwater at the FHC site. In May, 2000, EPA finalized a Focused Feasibility Study (FS) which identified and evaluated several new and innovative technologies for addressing the problems at the site. One of the promising new in-situ treatment technologies identified in the Focused FS, In-Situ Redox Manipulation, or ISRM, was further evaluated in a bench scale test in February, 2001. The results of the bench scale test indicated that the technology would be appropriate for use at the FHC site. In June 2001, EPA issued a Proposed Plan for cleanup of both soils and groundwater at the site. The Proposed Plan identified in situ treatment using reducing compounds as EPA's Preferred Alternative. The public comment period for the Proposed Plan ended on July 25, 2001. EPA received one comment letter with two comments. This Proposed Plan was the basis for a ROD Amendment addressing both soil and groundwater issued in August 2001. Frontier Hard Chrome, Inc. (FHC) ceased operations in 1983 and is no longer a viable entity. At its close, FHC had little in the way of assets. The owners of the property, who were also owners of FHC, Inc., did not receive any dividends or final distributions from FHC, Inc. As such, the regulatory and enforcement actions have centered on the owners of the site. Under Superfund, they are responsible parties and are liable for the site cleanup. Past negotiations between the responsible parties, EPA, and Ecology have not been productive. Since 1976, FHC has not complied fully with any agency orders. The site owners have not indicated any willingness or financial capability to undertake needed remedial actions at the site. Settlement negotiations with the owners are ongoing. Operable Unit 1 addresses contaminated soil at the site. A ROD for this OU was issued in December 1987. A ROD Amendment addressing both OU 1 & OU 2 was issued in August 2001. Operable Unit 2 addresses contaminated groundwater at the site. A ROD for this OU was issued in July 1988. A ROD Amendment addressing both OU 1 & OU 2 was issued in August 2001.

**CERCLIS Assessment History:**

Assessment:	DISCOVERY	Completed:	08/01/1975
Assessment:	PRELIMINARY ASSESSMENT	Completed:	08/01/1975
Assessment:	HRS PACKAGE	Completed:	08/10/1982
Assessment:	SITE INSPECTION	Completed:	08/10/1982
Assessment:	PROPOSAL TO NPL	Completed:	12/30/1982
Assessment:	FINAL LISTING ON NPL	Completed:	09/08/1983
Assessment:	COMMUNITY INVOLVEMENT	Completed:	03/15/1984
Assessment:	NPL RP SEARCH	Completed:	08/27/1987
Assessment:	COMBINED RI/FS	Completed:	12/30/1987
Assessment:	RECORD OF DECISION	Completed:	12/30/1987
Assessment:	FEASIBILITY STUDY	Completed:	07/05/1988
Assessment:	RECORD OF DECISION	Completed:	07/05/1988
Assessment:	ADMINISTRATIVE RECORDS	Completed:	06/12/1989
Assessment:	REMOVAL ASSESSMENT	Completed:	09/10/1990
Assessment:	REMOVAL ASSESSMENT	Completed:	07/19/1991

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

**FRONTIER HARDCHROME (Continued)**

EDR ID Number  
EPA ID Number

Database(s)

**1000322340**

Assessment:	STATE SUPPORT AGENCY COOP AGREEMENT	Completed:	08/31/1993
Assessment:	REMOVAL ASSESSMENT	Completed:	11/09/1993
Assessment:	REMOVAL	Completed:	10/20/1994
Assessment:	STATE SUPPORT AGENCY COOP AGREEMENT	Completed:	06/30/1996
Assessment:	REMOVAL	Completed:	12/17/1999
Assessment:	ROD Amendment	Completed:	08/30/2001
Assessment:	ROD Amendment	Completed:	08/30/2001
Assessment:	CONSENT AGREEMENT (ADMINISTRATIVE)	Completed:	09/26/2002
Assessment:	CONSENT AGREEMENT (ADMINISTRATIVE)	Completed:	12/20/2002
Assessment:	REMEDIAL DESIGN	Completed:	01/31/2003
Assessment:	REMEDIAL ACTION	Completed:	12/19/2003
Assessment:	CONSENT AGREEMENT (ADMINISTRATIVE)	Completed:	03/01/2004
Assessment:	CONSENT AGREEMENT (ADMINISTRATIVE)	Completed:	03/01/2004

CERCLIS Site Status:  
Not reported

CERCLIS Alias Name(s):  
FRONTIER HARD CHROME INC  
FRONTIER HARD CHROME, INC.

US Engineering Control Sites:

EPA ID: WAD053614988  
Site ID: 1000744  
EPA Region: 10  
County: CLARK  
Event Code : Not reported  
Actual Date: Not reported

Action ID: 003  
Action Name: ROD Amendment  
Action Completion date: 08/30/2001  
Planned Completion date: 09/30/2001  
Operable Unit: 02  
Contaminated Media: Groundwater  
Contam. Media num.: 10273320.00000  
Engineering Control: Passive Treatment Walls

Action ID: 001  
Action Name: REMEDIAL ACTION  
Action Completion date: 12/19/2003  
Planned Completion date: 12/30/2003  
Operable Unit: 01  
Contaminated Media: Groundwater  
Contam. Media num.: 10271119.00000  
Engineering Control: Pump And Treat

Action ID: 002  
Action Name: RECORD OF DECISION  
Action Completion date: 07/05/1988  
Planned Completion date: / /  
Operable Unit: 02  
Contaminated Media: Groundwater  
Contam. Media num.: 10270009.00000  
Engineering Control: Pump And Treat

US INST CONTROL:

EPA ID : WAD053614988  
Name : FRONTIER HARD CHROME, INC.  
Address : 113 Y ST  
VANCOUVER, WA 98661  
County : CLARK

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

**FRONTIER HARDCHROME (Continued)**

**1000322340**

Region : 10  
Event Code : Not reported  
Actual Dt : 20010830  
EPA ID : WAD053614988  
Name : FRONTIER HARD CHROME, INC.  
Address : 113 Y ST  
VANCOUVER, WA 98661  
County : CLARK  
Region : 10  
Event Code : Not reported  
Actual Dt : 20010830  
EPA ID : WAD053614988  
Name : FRONTIER HARD CHROME, INC.  
Address : 113 Y ST  
VANCOUVER, WA 98661  
County : CLARK  
Region : 10  
Event Code : Not reported  
Actual Dt : 20010830  
EPA ID : WAD053614988  
Name : FRONTIER HARD CHROME, INC.  
Address : 113 Y ST  
VANCOUVER, WA 98661  
County : CLARK  
Region : 10  
Event Code : Not reported  
Actual Dt : 20010830  
NPL:  
EPA ID: WAD053614988  
Region: 10  
Federal: General  
Final Date: 09/08/1983  
EPA ID: WAD053614988  
Region: 10  
Federal: General  
Final Date: 09/08/1983  
Category Details:  
Site ID: Not reported  
NPL Status: Currently on the Final NPL  
Categ. Description: Depth To Aquifer-> 50 And <= 100 Feet  
Categ. Value: 70  
Site ID: Not reported  
NPL Status: Currently on the Final NPL  
Categ. Description: Distance To Nearest Population-> 0 And <= 1/4 Mile  
Categ. Value: 10

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

FRONTIER HARDCHROME (Continued)

EDR ID Number  
EPA ID Number

Database(s)

1000322340

Site Details:

Site Name: FRONTIER HARD CHROME, INC.  
Site Status: Final  
Status Date: 09/08/1983  
Site City: VANCOUVER  
Site State: WA  
Federal Site: Not a Federal Facility  
HRS Score: 57.92  
GW Score: 100.00  
SW Score: 6.55  
Air Score: Not reported  
Soil Score: Not reported  
DC Score: Not reported  
FE Score: Not reported

Site Name: FRONTIER HARD CHROME, INC.  
Site Status: Final  
Status Date: 09/08/1983  
Site City: VANCOUVER  
Site State: WA  
Federal Site: Not a Federal Facility  
HRS Score: 57.93  
GW Score: 100.00  
SW Score: 6.55  
Air Score: Not reported  
Soil Score: Not reported  
DC Score: Not reported  
FE Score: Not reported

Substance Details:

Site ID: Not reported  
NPL Status: Currently on the Final NPL  
Substance ID: A020  
CAS #: Not reported  
Substance: CHROMIUM AND COMPOUNDS  
Pathway: GROUND WATER PATHWAY  
Scoring: 4

Site ID: Not reported  
NPL Status: Currently on the Final NPL  
Substance ID: A020  
CAS #: Not reported  
Substance: CHROMIUM AND COMPOUNDS  
Pathway: SURFACE WATER PATHWAY  
Scoring: 3

Site ID: Not reported  
NPL Status: Currently on the Final NPL  
Substance ID: C320  
CAS #: 18540-29-9  
Substance: CHROMIUM, HEXAVALENT  
Pathway: GROUND WATER PATHWAY  
Scoring: 4

Site ID: Not reported  
NPL Status: Currently on the Final NPL  
Substance ID: C320  
CAS #: 18540-29-9  
Substance: CHROMIUM, HEXAVALENT  
Pathway: SURFACE WATER PATHWAY

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number  
EPA ID Number

**FRONTIER HARDCHROME (Continued)**

**1000322340**

Scoring: 3  
Site ID: Not reported  
NPL Status: Currently on the Final NPL  
Substance ID: Not reported  
CAS #: Not reported  
Substance: Not reported  
Pathway: Not reported  
Scoring: Not reported

Summary Details:

" Conditions at listing (December 1982): The Frontier Hard Chrome, Inc., Site covers 2 acres in Vancouver, Washington. For a number of years in the middle to late 1970s, the company discharged chromium-contaminated waste water from electroplating operations into a "dry well" on-site. There is no impervious layer between the dry well and ground water beneath. Chromium, including the more toxic hexavalent chromium, has been detected in a well supplying industrial and drinking water about 0.3 mile from the site. Drinking water for 10,000 Vancouver residents is drawn from the same aquifer; the nearest city well is about 1 mile from the contaminated well. Status (July 1983): The State has issued an order to Frontier to stop its discharge and to prepare a plan for remedial action. Monitoring wells are necessary to determine the extent of contamination of the aquifer. EPA is preparing a Remedial Action Master Plan outlining the investigations needed to determine the full extent of cleanup required at the site."

Site Status Details:

NPL Status: Final  
Proposed Date: 12/30/1982  
Final Date: 09/08/1983  
Deleted Date: Not reported

ROD:

Full-text of USEPA Record of Decision(s) is available from EDR.

RCRAInfo:

Owner: US EPA  
(206)553-1220  
EPA ID: WAD053614988  
Contact: Not reported  
Classification: Small Quantity Generator  
TSD Activities: Not reported  
Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:  
CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) is the Superfund database that is used to support management in all phases of the Superfund program. The system contains information on all aspects of hazardous waste sites, including an inventory of sites, planned and actual site activities, and financial information.

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**FRONTIER HARDCHROME (Continued)**

**1000322340**

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

WA-DOEFSIS (Washington - Department Of Ecology Facility / Site Identification System) is the Department of Ecology's Facility/Site identification system that provides a means to query and display data maintained by the Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the departments Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

**SHWS:**

Facility ID: 197  
 MTBE Code: Not reported  
 Prog plan code : 2  
 UXO Code : Not reported  
 Lat/Long : 45.64285000000003 / -122.64487  
 Responsible Unit: Headquarters Site Cleanup Section  
 Ecology Site Status relative to the MTCA cleanup process:  
     Remedial Action in progress  
 Independent Site Status - those sites undergoing an independent cleanup:  
     Not reported

WARM Bin Number indicates the outcome of the Washington Ranking Model (WARM):  
 Affected Media Status: C (Confirmed) - The presence of hazardous substances above MTCA cleanup levels has been confirmed by laboratory analysis (or field determination in the case of petroleum contamination)

Affected Media : Ground Water  
 Arsenic Code: Not reported  
 Base/Neutral/Acid Organics: Not reported  
 Halogenated Organic Compounds: Confirmed above MTCA cleanup levels  
 EPA Priority Pollutants - Metals and Cyanide: Confirmed above MTCA cleanup levels  
 Metals - Other non-priority pollutant medals: Not reported  
 Polychlorinated biPhenyls (PCBs): Not reported  
 Pesticides: Not reported  
 Petroleum Products: Not reported  
 Phenolic Compounds: Not reported  
 Non-Halogenated Solvents: Not reported  
 Dioxin: Not reported  
 Polynuclear Aromatic Hydrocarbons (PAH): Not reported  
 Reactive Wastes: Not reported  
 Corrosive Wastes: Not reported  
 Radioactive Wastes: Not reported  
 Asbestos: Not reported  
 Conventional Contaminants, Organic: Not reported  
 Conventional Contaminants, Inorganic: Not reported  
 Lat/Long : 45° 38' 34" / 122° 38' 41"  
 Media Id : 259

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**FRONTIER HARDCHROME (Continued)**

**1000322340**

Media Type Description : Groundwater  
 Media Status Description : Confirmed  
 Tributyl Tin Contaminant Group : Not reported  
 Bioassay/benthic Failures Contam group : Not reported  
 Wood Debris Contaminant Group : Not reported  
 Other Deleterious Substance Group : Not reported

Facility ID: 197  
 MTBE Code: Not reported  
 Prog plan code : 2  
 UXO Code : Not reported  
 Lat/Long : 45.64285000000003 / -122.64487  
 Responsible Unit: Headquarters Site Cleanup Section  
 Ecology Site Status relative to the MTCA cleanup process:  
     Remedial Action in progress  
 Independent Site Status - those sites undergoing an independent cleanup:  
     Not reported

WARM Bin Number indicates the outcome of the Washington Ranking Model (WARM):  
 Affected Media Status: C (Confirmed) - The presence of hazardous substances above MTCA cleanup levels has been confirmed by laboratory analysis (or field determination in the case of petroleum contamination)

Affected Media : Soil  
 Arsenic Code: Not reported  
 Base/Neutral/Acid Organics: Not reported  
 Halogenated Organic Compounds: Not reported  
 EPA Priority Pollutants - Metals and Cyanide: Confirmed above MTCA cleanup levels  
 Metals - Other non-priority pollutant metals: Not reported  
 Polychlorinated biPhenyls (PCBs): Not reported  
 Pesticides: Not reported  
 Petroleum Products: Not reported  
 Phenolic Compounds: Not reported  
 Non-Halogenated Solvents: Not reported  
 Dioxin: Not reported  
 Polynuclear Aromatic Hydrocarbons (PAH): Not reported  
 Reactive Wastes: Not reported  
 Corrosive Wastes: Not reported  
 Radioactive Wastes: Not reported  
 Asbestos: Not reported  
 Conventional Contaminants, Organic: Not reported  
 Conventional Contaminants, Inorganic: Not reported  
 Lat/Long : 45° 38' 34" / 122° 38' 41"  
 Media Id : 260  
 Media Type Description : Soil  
 Media Status Description : Confirmed  
 Tributyl Tin Contaminant Group : Not reported  
 Bioassay/benthic Failures Contam group : Not reported  
 Wood Debris Contaminant Group : Not reported  
 Other Deleterious Substance Group : Not reported

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**B3**      **TRANSPORTATION, DEPARTMENT OF**  
**610 EAST FIFTH STREET**  
**VANCOUVER, WA 98661**

**MLTS**    **1004807443**  
**N/A**

< 1/8  
 1 ft.

**Site 1 of 3 in cluster B**

**Relative:**  
**Higher**

MLTS:

**Actual:**  
**46 ft.**

License Number: 46-21202-01	First License Date: 12/20/1989
License Date: 05/22/1996	Institution Code: 21202
License Expires: 09/30/2004	
Primary Program: Not reported	
License Use: Not reported	
Department: FEDERAL HIGHWAY ADM., WESTERN DIREC	
Building: Not reported	
Status: Not reported	
Contact Name: GORDON W. CLARK	Contact Phone: 209-696-7718
States Allowing Use: Not reported	
Store Material: No	
Redistribution: No	Incineration: No
Burial: No	
Last Inspection: 09/1995	
Inspector Name: SKOV_D.	
Next Inspection: 08/2002	

**B4**      **FEDERAL HIGHWAY ADMINISTRATION**  
**610 5TH ST E**  
**VANCOUVER, WA 98661**

**WA LUST**    **U003353609**  
**WA UST**      **N/A**

< 1/8  
 1 ft.

**Site 2 of 3 in cluster B**

**Relative:**  
**Higher**

LUST:

**Actual:**  
**46 ft.**

Facility ID: 153	
Facility Status: Cleanup Started	
Release ID: 1281	
Release Notification Date: 2/26/1990 00:00:00	
Release Status Date: 2/26/1990 00:00:00	
Alternate Name: Not reported	
Lat/Lon: 45.6249 / -122.67687	
Affected Media: Soil	
FS ID: 68499396	
Site Response Code Unit: SW	
Facility ID: 153	
Facility Status: Reported Cleaned Up	
Release ID: 1281	
Release Notification Date: 2/26/1990 00:00:00	
Release Status Date: 5/2/1990 00:00:00	
Alternate Name: Not reported	
Lat/Lon: 45.6249 / -122.67687	
Affected Media: Soil	
FS ID: 68499396	
Site Response Code Unit: SW	

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

MAP FINDINGS

**FEDERAL HIGHWAY ADMINISTRATION (Continued)**

EDR ID Number  
 EPA ID Number

Database(s)

**U003353609**

UST:

Facility ID: 68499396  
 Site ID: 153  
 Install Date: 12/31/1964 00:00:00  
 Capacity: Not reported  
 Status: Removed  
 Tank Name: 1  
 Substance: Unleaded Gasoline  
 Compartment #: 1  
 Tank ID: 10426  
 Comartment ID: 10595  
 Decimal Latitude: 45.62490  
 Decimal Longitude: -122.67687  
 Ecology Region: South Western

**B5 US DOT FEDERAL HIGHWAY ADMIN VANCOUVER  
 610 E 5TH ST  
 VANCOUVER, WA 98661**

**RCRA-SQG 1000342734  
 FINDS WA4690705948**

< 1/8  
 1 ft.

**Site 3 of 3 in cluster B**

**Relative:  
 Higher**

RCRAInfo:  
 Owner: WA DOT FACILITIES HAZMAT  
 (360)696-7763  
 EPA ID: WA4690705948  
 Contact: Not reported  
 Classification: Small Quantity Generator  
 TSD Activities: Not reported  
 Violation Status: No violations found

**Actual:  
 46 ft.**

**FINDS:**

Other Pertinent Environmental Activity Identified at Site:  
 RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.  
 WA-DOEFSIS (Washington - Department Of Ecology Facility / Site Identification System) is the Department of Ecology's Facility/Site identification system that provides a means to query and display data maintained by the Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the departments Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

**C6 PEARSON AIR FIELD  
 ESE 1105 E 5TH STREET  
 < 1/8 VANCOUVER, WA 98661  
 137 ft.**

**WA UST U003750484  
 N/A**

**Site 1 of 5 in cluster C**

**Relative:  
 Higher**

**Actual:  
 49 ft.**

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

Database(s)  
EPA ID Number  
EDR ID Number

PEARSON AIR FIELD (Continued)

U003750484

UST:

Facility ID: 96794788  
Site ID: 547149  
Install Date: 1/1/1900 00:00:00  
Capacity: Not reported  
Status: Removed  
Tank Name: 4  
Substance: Not reported  
Compartment #: Not reported  
Tank ID: 548224  
Comartment ID: 0  
Decimal Latitude: 45.62478  
Decimal Longitude: -122.66149  
Ecology Region: South Western

Facility ID: 96794788  
Site ID: 547149  
Install Date: 1/1/1900 00:00:00  
Capacity: Not reported  
Status: Removed  
Tank Name: 3  
Substance: Not reported  
Compartment #: Not reported  
Tank ID: 548219  
Comartment ID: 0  
Decimal Latitude: 45.62478  
Decimal Longitude: -122.66149  
Ecology Region: South Western

Facility ID: 96794788  
Site ID: 547149  
Install Date: 1/1/1900 00:00:00  
Capacity: Not reported  
Status: Removed  
Tank Name: 2  
Substance: Not reported  
Compartment #: Not reported  
Tank ID: 548214  
Comartment ID: 0  
Decimal Latitude: 45.62478  
Decimal Longitude: -122.66149  
Ecology Region: South Western

Facility ID: 96794788  
Site ID: 547149  
Install Date: 1/1/1964 00:00:00  
Capacity: Not reported  
Status: Removed  
Tank Name: 1  
Substance: Aviation Fuel  
Compartment #: 1  
Tank ID: 548209  
Comartment ID: 548210  
Decimal Latitude: 45.62478  
Decimal Longitude: -122.66149  
Ecology Region: South Western

MAP FINDINGS

Map ID			
Direction			
Distance			
Distance (ft.)			
Elevation	Site	Database(s)	EDR ID Number EPA ID Number

<b>C7</b>	<b>TEXACO-FRANK BRICKEY AVIATION</b>	<b>WA UST</b>	<b>U003353174</b>
<b>ESE</b>	<b>1109 EAST 5TH STREET</b>		<b>N/A</b>
<b>&lt; 1/8</b>	<b>VANCOUVER, WA 98661</b>		
<b>147 ft.</b>			

**Site 2 of 5 in cluster C**

<b>Relative:</b>	UST:		
<b>Higher</b>	Facility ID:	73432299	
	Site ID:	11117	
<b>Actual:</b>	Install Date:	12/31/1964 00:00:00	
<b>50 ft.</b>	Capacity:	Not reported	
	Status:	Unknown	
	Tank Name:	2	
	Substance:	Leaded Gasoline	
	Compartment #:	1	
	Tank ID:	39766	
	Comartment ID:	40324	
	Decimal Latitude:	45.62435	
	Decimal Longitude:	-122.66108	
	Ecology Region:	South Western	
	Facility ID:	73432299	
	Site ID:	11117	
	Install Date:	12/31/1964 00:00:00	
	Capacity:	Not reported	
	Status:	Unknown	
	Tank Name:	1	
	Substance:	Leaded Gasoline	
	Compartment #:	1	
	Tank ID:	39855	
	Comartment ID:	40413	
	Decimal Latitude:	45.62435	
	Decimal Longitude:	-122.66108	
	Ecology Region:	South Western	

<b>C8</b>	<b>TEXACO FRANK BRICKEY AVIATION</b>	<b>FINDS</b>	<b>1007066051</b>
<b>ESE</b>	<b>1109 E 5TH ST</b>		<b>110015426298</b>
<b>&lt; 1/8</b>	<b>VANCOUVER, WA 98661</b>		
<b>147 ft.</b>			

**Site 3 of 5 in cluster C**

<b>Relative:</b>	FINDS:		
<b>Higher</b>	Other Pertinent Environmental Activity Identified at Site:		
<b>Actual:</b>	WA-DOEFSIS (Washington - Department Of Ecology Facility / Site Identification System) is the		
<b>50 ft.</b>	Department of Ecology's Facility/Site identification system that provides a means to query and		
	display data maintained by the Department of Ecology. This system contains key information for each		
	facility/site that is currently, or has been, of interest to the departments Air Quality, Dam Safety,		
	Hazardous Waste, Toxics Cleanup, and Water Quality Programs.		

<b>C9</b>	<b>PEARSON AIR PARK</b>	<b>RCRA-SQG</b>	<b>1000369614</b>
<b>ESE</b>	<b>1113 E 5TH</b>	<b>FINDS</b>	<b>WAD076427178</b>
<b>&lt; 1/8</b>	<b>VANCOUVER, WA 98661</b>		
<b>157 ft.</b>			

**Site 4 of 5 in cluster C**

**Relative:**  
**Higher**

**Actual:**  
**50 ft.**

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

MAP FINDINGS

**PEARSON AIR PARK (Continued)**

EDR ID Number  
 EPA ID Number

Database(s)

**1000369614**

RCRAInfo:  
 Owner: PEARSON AIR PARK  
 EPA ID: WAD076427178  
 Contact: THOMAS HIGHLAND  
 (206) 696-8191  
 Classification: Small Quantity Generator  
 TSDF Activities: Not reported  
 Violation Status: No violations found

**FINDS:**

Other Pertinent Environmental Activity Identified at Site:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

WA-DOEFSSIS (Washington - Department Of Ecology Facility / Site Identification System) is the Department of Ecology's Facility/Site identification system that provides a means to query and display data maintained by the Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the departments Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

**C10** **VANCOUVER CITY AIR MUSEUM**  
**ESE** **1115 E 5TH ST**  
**< 1/8** **VANCOUVER, WA 98661**  
**163 ft.**

**RCRA-SQG** **1001121513**  
**FINDS** **WAR000009357**

**Relative:**  
**Higher**

**Site 5 of 5 in cluster C**

**Actual:**  
**50 ft.**

RCRAInfo:  
 Owner: VANCOUVER CITY  
 (360) 619-1009  
 EPA ID: WAR000009357  
 Contact: Not reported  
 Classification: Conditionally Exempt Small Quantity Generator  
 TSDF Activities: Not reported  
 Violation Status: No violations found

**FINDS:**

Other Pertinent Environmental Activity Identified at Site:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

WA-DOEFSSIS (Washington - Department Of Ecology Facility / Site Identification System) is the Department of Ecology's Facility/Site identification system that provides a means to query and display data maintained by the Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the departments Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**11**  
**NNE**  
**< 1/8**  
**322 ft.**

**WA STATE PATROL VANCOUVER**  
**605 E EVERGREEN**  
**VANCOUVER, WA 98668**

**RCRA-SQG** **1001490480**  
**FINDS** **WAD982657868**

**Relative:**  
**Higher**

RCRAInfo:

Owner: WA ECY  
 EPA ID: WAD982657868

**Actual:**  
**-999 ft.**

Contact: MIKE OSWEILER  
 (360) 586-0365

Classification: Conditionally Exempt Small Quantity Generator  
 TSDF Activities: Not reported

Violation Status: No violations found

**FINDS:**

Other Pertinent Environmental Activity Identified at Site:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

WA-DOEFSIS (Washington - Department Of Ecology Facility / Site Identification System) is the Department of Ecology's Facility/Site identification system that provides a means to query and display data maintained by the Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the departments Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

**D12**  
**WNW**  
**< 1/8**  
**462 ft.**

**BILL COPPS INC**  
**901 C ST**  
**VANCOUVER, WA 98660**

**WA UST** **U004021094**  
**N/A**

**Site 1 of 3 in cluster D**

**Relative:**  
**Higher**

UST:

Facility ID: 62651667  
 Site ID: 138  
 Install Date: 12/31/1964 00:00:00  
 Capacity: Not reported  
 Status: Removed  
 Tank Name: 1  
 Substance: Unleaded Gasoline  
 Compartment #: 1  
 Tank ID: 38074  
 Comartment ID: 38608  
 Decimal Latitude: 45.62817  
 Decimal Longitude: -122.66924  
 Ecology Region: South Western

**Actual:**  
**-999 ft.**

Facility ID: 62651667  
 Site ID: 138  
 Install Date: 12/31/1964 00:00:00  
 Capacity: 111 TO 1,100 Gallons  
 Status: Removed  
 Tank Name: 2  
 Substance: Used Oil/Waste Oil  
 Compartment #: 1  
 Tank ID: 38044  
 Comartment ID: 38578  
 Decimal Latitude: 45.62817

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

**BILL COPPS INC (Continued)**

EDR ID Number  
EPA ID Number

Database(s)

**U004021094**

Decimal Longitude: -122.66924  
Ecology Region: South Western  
  
Facility ID: 62651667  
Site ID: 138  
Install Date: 12/31/1964 00:00:00  
Capacity: 111 TO 1,100 Gallons  
Status: Removed  
Tank Name: I  
Substance: Not reported  
Compartment #: 1  
Tank ID: 29899  
Comartment ID: 30319  
Decimal Latitude: 45.62817  
Decimal Longitude: -122.66924  
Ecology Region: South Western

**D13  
WNW  
< 1/8  
462 ft.**

**BILL COPPS INC  
901 C ST  
VANCOUVER, WA 98660**

**RCRA-SQG 1000274037  
FINDS WAD027565035  
WA MANIFEST**

**Site 2 of 3 in cluster D**

**Relative:  
Higher**

RCRAInfo:  
Owner: ELENOR COPPS  
(360)693-1481  
EPA ID: WAD027565035  
Contact: CHUCK BRYAN  
360693-1481

**Actual:  
-999 ft.**

Classification: Conditionally Exempt Small Quantity Generator  
TSDF Activities: Not reported

Violation Status: Violations exist

Regulation Violated: -515(6)(a)(i)  
Area of Violation: GENERATOR-GENERAL REQUIREMENTS  
Date Violation Determined: 05/21/2003  
Actual Date Achieved Compliance: 07/07/2003

Enforcement Action: WRITTEN INFORMAL  
Enforcement Action Date: 05/21/2003  
Penalty Type: Not reported

Regulation Violated: -170(1)(a)  
Area of Violation: GENERATOR-GENERAL REQUIREMENTS  
Date Violation Determined: 05/21/2003  
Actual Date Achieved Compliance: 08/22/2003

Enforcement Action: WRITTEN INFORMAL  
Enforcement Action Date: 05/21/2003  
Penalty Type: Not reported

Regulation Violated: -145(3)  
Area of Violation: GENERATOR-GENERAL REQUIREMENTS  
Date Violation Determined: 05/21/2003  
Actual Date Achieved Compliance: 07/07/2003

Enforcement Action: WRITTEN INFORMAL  
Enforcement Action Date: 05/21/2003  
Penalty Type: Not reported

Regulation Violated: WAC 173-303-630(5)(A)

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

MAP FINDINGS

**BILL COPPS INC (Continued)**

EDR ID Number  
 EPA ID Number

Database(s)

**1000274037**

Area of Violation: GENERATOR-GENERAL REQUIREMENTS  
 Date Violation Determined: 07/11/1995  
 Actual Date Achieved Compliance: 07/20/1995

Regulation Violated: WAC 173-303-630(3)  
 Area of Violation: GENERATOR-GENERAL REQUIREMENTS  
 Date Violation Determined: 07/11/1995  
 Actual Date Achieved Compliance: 07/20/1995

Regulation Violated: WAC 173-303-630(7)  
 Area of Violation: GENERATOR-GENERAL REQUIREMENTS  
 Date Violation Determined: 07/11/1995  
 Actual Date Achieved Compliance: 08/10/1995

Regulation Violated: WAC 173-303-210(2)(C)  
 Area of Violation: GENERATOR-GENERAL REQUIREMENTS  
 Date Violation Determined: 07/11/1995  
 Actual Date Achieved Compliance: 07/20/1995

There are 7 violation record(s) reported at this site:

<u>Evaluation</u>	<u>Area of Violation</u>	<u>Date of Compliance</u>
Compliance Evaluation Inspection	GENERATOR-GENERAL REQUIREMENTS	20030707
	GENERATOR-GENERAL REQUIREMENTS	20030822
	GENERATOR-GENERAL REQUIREMENTS	20030707
Other Evaluation	GENERATOR-GENERAL REQUIREMENTS	19950720
	GENERATOR-GENERAL REQUIREMENTS	19950720
	GENERATOR-GENERAL REQUIREMENTS	19950810
	GENERATOR-GENERAL REQUIREMENTS	19950720

**FINDS:**

Other Pertinent Environmental Activity Identified at Site:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

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**WA MANIFEST:**

Facility Site ID Number: 62651667  
 Permit by Rule: False  
 Treatment by Generator: False  
 Mixed radioactive waste: False  
 Importer of hazardous waste: False  
 Immediate recycler: False  
 Treatment/Storage/Disposal/Recycling Facility: False  
 Generator of dangerous fuel waste: False  
 Generator marketing to burner: False  
 "Other marketers (i.e., blender, distributor, etc.)": False  
 Utility boiler burner: False  
 Industry boiler burner: False  
 Industrial Furnace: False  
 Smelter defferal: False  
 Universal waste - batteries - generate: False

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation    Site

MAP FINDINGS

Database(s)    EDR ID Number  
EPA ID Number

**BILL COPPS INC (Continued)**

**1000274037**

Universal waste - thermostats - generate:    False  
Universal waste - mercury - generate:        False  
Universal waste - lamps - generate:           True  
Universal waste - batteries - accumulate:     False  
Universal waste - thermostats - accumulate:   False  
Universal waste - mercury - accumulate:      False  
Universal waste - lamps - accumulate:        False  
Destination Facility for Universal Waste:     False  
Off-specification used oil burner - utility boiler:    False  
Off-specification used oil burner - industrial boiler:   False  
Off-specification used oil burner - industrial furnace:   False  
EPA ID:    WAD027565035  
Facility Address 2:                                Not reported  
TAX REG NBR:                                    600011876  
NAICS CD:                                        441110  
BUSINESS TYPE:                                 New Car Dealership  
MAIL NAME:                                      Bill Copps Inc  
MAIL ADDR LINE1:                                PO BOX 791  
MAIL CITY,ST,ZIP:                               VANCOUVER, WA 98666  
MAIL COUNTRY:                                   UNITED STATES  
LEGAL ORG NAME:                                Not reported  
LEGAL ORG TYPE:                                Private  
LEGAL ADDR LINE1:                               901 C ST  
LEGAL CITY,ST,ZIP:                               VANCOUVER, WA 98660-3218  
LEGAL COUNTRY:                                 UNITED STATES  
LEGAL PHONE NBR:                               (360)693-1481  
LEGAL EFFECTIVE DATE:                         05/06/03  
LAND ORG NAME:                                Not reported  
LAND ORG TYPE:                                 Private  
LAND PERSON NAME:                              Elenor Copps  
LAND ADDR LINE1:                               901 C ST  
LAND CITY,ST,ZIP:                               VANCOUVER, WA 98660-3218  
LAND COUNTRY:                                   UNITED STATES  
LAND PHONE NBR:                                (360)693-1481  
OPERATOR ORG NAME:                             Bill Copps, Inc.  
OPERATOR ORG TYPE:                            Private  
OPERATOR ADDR LINE1:                           901 C ST  
OPERATOR CITY,ST,ZIP:                         VANCOUVER, WA 98660-3218  
OPERATOR COUNTRY:                             UNITED STATES  
OPERATOR PHONE NBR:                         (360)693-1481  
OPERATOR EFFECTIVE DATE:                    05/06/03  
SITE CONTACT NAME:                            Chuck Bryan  
SITE CONTACT ADDR LINE1:                     901 C STREET  
SITE CONTACT ZIP:                              VANCOUVER, WA 98660-3218  
SITE CONTACT COUNTRY:                        UNITED STATES  
SITE CONTACT PHONE NBR:                     360693-1481  
SITE CONTACT EMAIL:                         cbryan@billcopps.com  
FORM CONTACT NAME:                            Mitchell Wang  
FORM CONTACT ADDR LINE1:                    3787 RIVER ROAD NORTH SUITE A  
FORM CONTACT CITY,ST,ZIP:                   KEIZER, OR 97303  
FORM CONTACT COUNTRY:                       UNITED STATES  
FORM CONTACT PHONE NBR:                    503393-0980  
FORM CONTACT EMAIL:                         drwang@ehsassociates.com  
GEN STATUS CD:                                 SQG  
MONTHLY GENERATION:                         True  
BATCH GENERATION:                            False  
ONE TIME GENERATION:                        False

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**BILL COPPS INC (Continued)**

**1000274037**

TRANSPORTS OWN WASTE: False  
 TRANSPORTS OTHRS WASTE: False  
 RECYCLER ONSITE: False  
 TRANSFER FACILITY: False  
 OTHER EXEMPTION: Not reported  
 UW BATTERY GEN: True  
 USED OIL TRANSPORTER: False  
 USED OIL TRANSFER FACILITY: False  
 USED OIL PROCESSOR: False  
 USED OIL REREFINER: False  
 USED OIL FUEL MRKTR DIRECTS SHPMNTS: False  
 USED OIL FUEL MRKTR MEETS SPECS: False

**E14  
 NW  
 < 1/8  
 486 ft.**

**THE ACADEMY  
 400 E. EVERGREEN BLVD  
 VANCOUVER, WA 98660**

**WA UST U003355934  
 N/A**

**Site 1 of 2 in cluster E**

**Relative:  
 Higher**

UST:  
 Facility ID: 28764496  
 Site ID: 97367  
 Install Date: 12/31/1964 00:00:00  
 Capacity: Not reported  
 Status: Removed  
 Tank Name: 1  
 Substance: Heating Fuel  
 Compartment #: 1  
 Tank ID: 39009  
 Comartment ID: 39555  
 Decimal Latitude: 45.62864  
 Decimal Longitude: -122.66939  
 Ecology Region: South Western

**Actual:  
 -999 ft.**

**E15  
 NW  
 < 1/8  
 486 ft.**

**ACADEMY  
 400 E EVERGREEN BLVD  
 VANCOUVER, WA 98660**

**FINDS 1007073153  
 110015497853**

**Site 2 of 2 in cluster E**

**Relative:  
 Higher**

FINDS:  
 Other Pertinent Environmental Activity Identified at Site:  
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**Actual:  
 -999 ft.**

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**16**            **HANNAH MOTOR COMPANY VW**  
**WNW**            **114 EAST SIXTH ST**  
**1/8-1/4**            **VANCOUVER, WA 98660**  
**684 ft.**

**WA UST**    **U003352901**  
**N/A**

**Relative:**            UST:  
**Higher**              Facility ID:            6488736  
                          Site ID:                10253  
**Actual:**              Install Date:           12/31/1964 00:00:00  
**-999 ft.**               Capacity:               Not reported  
                          Status:                 Unknown  
                          Tank Name:            2  
                          Substance:            Used Oil/Waste Oil  
                          Compartment #:      1  
                          Tank ID:               1897  
                          Comartment ID:      1941  
                          Decimal Latitude:    45.62568  
                          Decimal Longitude:   -122.67252  
                          Ecology Region:      South Western

**D17**            **PACIFIC TELECOM CORP OFFICE**  
**WNW**            **805 BROADWAY CORPORATE OFFICE**  
**1/8-1/4**            **VANCOUVER, WA 98660**  
**703 ft.**

**RCRA-SQG**    **1000252096**  
**FINDS**        **WAD067159855**

**Site 3 of 3 in cluster D**

**Relative:**            RCRAInfo:  
**Higher**              Owner:                PACIFIC TELECOM CORP  
**Actual:**              EPA ID:                WAD067159855  
**-999 ft.**               Contact:               TOM STONE  
                                                     (206) 696-7369  
                          Classification:      Small Quantity Generator  
                          TSDF Activities:    Not reported  
                          Violation Status:   No violations found

**FINDS:**  
 Other Pertinent Environmental Activity Identified at Site:  
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**18**            **CLARK PUBLIC UTILITY DISTRICT**  
**NNE**            **1200 FORT VANCOUVER WAY**  
**1/8-1/4**            **VANCOUVER, WA 98663**  
**764 ft.**

**WA UST**    **U003355343**  
**N/A**

**Relative:**            UST:  
**Higher**              Facility ID:            64513172  
                          Site ID:                7400  
**Actual:**              Install Date:           12/31/1964 00:00:00  
**-999 ft.**               Capacity:               Not reported  
                          Status:                 Removed  
                          Tank Name:            #1  
                          Substance:            Leaded Gasoline  
                          Compartment #:      1  
                          Tank ID:               19068  
                          Comartment ID:      19349

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**CLARK PUBLIC UTILITY DISTRICT (Continued)**

**U003355343**

Decimal Latitude: 45.63066  
 Decimal Longitude: -122.66252  
 Ecology Region: South Western

Facility ID: 64513172  
 Site ID: 7400  
 Install Date: 12/31/1964 00:00:00  
 Capacity: 111 TO 1,100 Gallons  
 Status: Removed  
 Tank Name: #3  
 Substance: Used Oil/Waste Oil  
 Compartment #: 1  
 Tank ID: 18929  
 Comartment ID: 19210  
 Decimal Latitude: 45.63066  
 Decimal Longitude: -122.66252  
 Ecology Region: South Western

Facility ID: 64513172  
 Site ID: 7400  
 Install Date: 12/31/1964 00:00:00  
 Capacity: Not reported  
 Status: Removed  
 Tank Name: #2  
 Substance: Unleaded Gasoline  
 Compartment #: 1  
 Tank ID: 19180  
 Comartment ID: 19463  
 Decimal Latitude: 45.63066  
 Decimal Longitude: -122.66252  
 Ecology Region: South Western

**F19  
 West  
 1/8-1/4  
 794 ft.**

**HANNAH MOTOR COMPANY  
 300 WASHINGTON ST/PO BOX 1306  
 VANCOUVER, WA 98666**

**WA LUST U003352900  
 WA UST N/A**

**Site 1 of 4 in cluster F**

**Relative:  
 Higher**

**LUST:**  
 Facility ID: 10252  
 Facility Status: Cleanup Started  
 Release ID: 4737  
 Release Notification Date: 10/21/1993 00:00:00  
 Release Status Date: 10/21/1993 00:00:00  
 Alternate Name: HANNAH MITSUBISHI  
 Lat/Lon: 45.62332 / -122.67312  
 Affected Media: Soil  
 FS ID: 12126843  
 Site Response Code Unit: SW

**Actual:  
 38 ft.**

Facility ID: 10252  
 Facility Status: Reported Cleaned Up  
 Release ID: 4737  
 Release Notification Date: 10/21/1993 00:00:00  
 Release Status Date: 12/31/1994 00:00:00  
 Alternate Name: HANNAH MITSUBISHI  
 Lat/Lon: 45.62332 / -122.67312  
 Affected Media: Soil  
 FS ID: 12126843

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

MAP FINDINGS

**HANNAH MOTOR COMPANY (Continued)**

EDR ID Number  
 EPA ID Number

Database(s)

Site Response Code Unit: SW

UST:

Facility ID: 12126843  
 Site ID: 10252  
 Install Date: 12/31/1964 00:00:00  
 Capacity: 111 TO 1,100 Gallons  
 Status: Removed  
 Tank Name: 1  
 Substance: Used Oil/Waste Oil  
 Compartment #: 1  
 Tank ID: 4089  
 Comartment ID: 4167  
 Decimal Latitude: 45.62332  
 Decimal Longitude: -122.67312  
 Ecology Region: South Western

**U003352900**

**F20  
 West  
 1/8-1/4  
 826 ft.**

**HANNAH MOTOR COMPANY  
 400 WASHINGTON  
 VANCOUVER, WA 98660**

**WA UST U003356067  
 N/A**

**Relative:  
 Higher**

**Site 2 of 4 in cluster F**

**Actual:  
 39 ft.**

UST:

Facility ID: 25385199  
 Site ID: 9879  
 Install Date: 12/31/1964 00:00:00  
 Capacity: Not reported  
 Status: Removed  
 Tank Name: 3  
 Substance: Unleaded Gasoline  
 Compartment #: 1  
 Tank ID: 25078  
 Comartment ID: 25418  
 Decimal Latitude: 45.62399  
 Decimal Longitude: -122.67376  
 Ecology Region: South Western

**F21  
 WSW  
 1/8-1/4  
 887 ft.**

**HANNAH MITSUBISHI  
 300 WASHINGTON ST.  
 VANCOUVER, WA 98660**

**WA ICR S103507726  
 N/A**

**Relative:  
 Higher**

**Site 3 of 4 in cluster F**

**Actual:  
 42 ft.**

WA ICR:

Date Ecology Received Report: 02/01/1994  
 Contaminants Found at Site: Petroleum products  
 Media Contaminated: Soil  
 Cause of Contamination: Tank  
 Region: South Western  
 Type of Report Ecology Received: Final cleanup report  
 Site Register Issue: 93-18  
 County Code: 6.00000  
 Contact: Not reported  
 Report Title: Not reported

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**F22**            **HANNAH MOTOR COMPANY UST 10252**  
**WSW**           **300 WASHINGTON ST**  
**1/8-1/4**        **VANCOUVER, WA 98668**  
**888 ft.**

**RCRA-SQG**    **1001491433**  
**FINDS**        **WA0000991240**

**Site 4 of 4 in cluster F**

**Relative:**  
**Higher**

RCRAInfo:

Owner:            DICK HANNAH  
 (360)256-5000

**Actual:**  
**41 ft.**

EPA ID:            WA0000991240

Contact:          Not reported

Classification:   Small Quantity Generator

TSDF Activities: Not reported

Violation Status: No violations found

**FINDS:**

Other Pertinent Environmental Activity Identified at Site:

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**23**                **FROM THE KENNELS**  
**WNW**            **500 WASHINGTON ST**  
**1/8-1/4**        **VANCOUVER, WA 98660**  
**906 ft.**

**RCRA-SQG**    **1000294497**  
**FINDS**        **WAD055966444**

**Relative:**  
**Higher**

RCRAInfo:

Owner:            FROM THE KENNELS  
 EPA ID:            WAD055966444

**Actual:**  
**42 ft.**

Contact:          Not reported

Classification:   Small Quantity Generator

TSDF Activities: Not reported

Violation Status: No violations found

**FINDS:**

Other Pertinent Environmental Activity Identified at Site:

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MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**24**  
**WNW**  
**1/8-1/4**  
**1088 ft.**

**LUCKY LAGER BREWERY**  
**230 W 6TH ST**  
**VANCOUVER, WA 98660**

**RCRA-SQG** **1000993145**  
**FINDS** **WAR000001784**

**Relative:**  
**Higher**

RCRAInfo:  
 Owner: LUCKY LAGER BREWERY  
 EPA ID: WAR000001784

**Actual:**  
**-999 ft.**

Contact: Not reported  
 Classification: Small Quantity Generator  
 TSDF Activities: Not reported  
 Violation Status: No violations found

**FINDS:**

Other Pertinent Environmental Activity Identified at Site:  
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**25**  
**ESE**  
**1/8-1/4**  
**1090 ft.**

**QUAD INVESTMENTS**  
**3000 LEWIS & CLARK HWY WHOLE**  
**VANCOUVER, WA 98661**

**RCRA-SQG** **1001490943**  
**FINDS** **WAD988516803**

**Relative:**  
**Higher**

RCRAInfo:  
 Owner: QUAD INVESTMENTS  
 EPA ID: WAD988516803

**Actual:**  
**33 ft.**

Contact: Not reported  
 Classification: Conditionally Exempt Small Quantity Generator  
 TSDF Activities: Not reported  
 Violation Status: No violations found

**FINDS:**

Other Pertinent Environmental Activity Identified at Site:  
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MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**FAULKNER USA (Continued)**

**1007265687**

Violation Status: No violations found

**29  
 NNW  
 1/8-1/4  
 1318 ft.**

**VANCOUVER POLICE BUILDING  
 300 E 13TH ST  
 VANCOUVER, WA 98668**

**RCRA-SQG 1001600582  
 FINDS WAH000008177**

**Relative:  
 Higher**

RCRAInfo:  
 Owner: VANCOUVER CITY  
 (360)696-8142  
 EPA ID: WAH000008177  
 Contact: KATHLEEN HEIL  
 (360)619-1009

**Actual:  
 -999 ft.**

Classification: Small Quantity Generator  
 TSD Activities: Not reported

Violation Status: No violations found

**FINDS:**

Other Pertinent Environmental Activity Identified at Site:

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**30  
 WNW  
 1/4-1/2  
 1374 ft.**

**METRO BUICK OLDS VANCOUVER  
 904 WASHINGTON ST  
 VANCOUVER, WA 98660**

**RCRA-SQG 1000365623  
 FINDS WAD980983357  
 WA LUST  
 WA UST  
 WA ICR**

**Relative:  
 Higher**

RCRAInfo:  
 Owner: METRO BUICK OLDS  
 EPA ID: WAD980983357  
 Contact: ALAN WEBB  
 (206) 695-1227

**Actual:  
 -999 ft.**

Classification: Small Quantity Generator  
 TSD Activities: Not reported

Violation Status: No violations found

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation    Site

MAP FINDINGS

Database(s)    EDR ID Number  
EPA ID Number

**METRO BUICK OLDS VANCOUVER (Continued)**

**1000365623**

**FINDS:**

Other Pertinent Environmental Activity Identified at Site:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

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**LUST:**

Facility ID: 4751  
Facility Status: Cleanup Started  
Release ID: 1288  
Release Notification Date: 6/11/1990 00:00:00  
Release Status Date: 6/11/1990 00:00:00  
Alternate Name: Not reported  
Lat/Lon: 45.62772 / -122.67318  
Affected Media: Soil  
FS ID: 95732758  
Site Response Code Unit: SW

Facility ID: 4751  
Facility Status: Reported Cleaned Up  
Release ID: 1288  
Release Notification Date: 6/11/1990 00:00:00  
Release Status Date: 6/21/1990 00:00:00  
Alternate Name: Not reported  
Lat/Lon: 45.62772 / -122.67318  
Affected Media: Soil  
FS ID: 95732758  
Site Response Code Unit: SW

**WA ICR:**

Date Ecology Received Report: 06/21/1990  
Contaminants Found at Site: Petroleum products  
Media Contaminated: Soil  
Cause of Contamination: Tank  
Region: South Western  
Type of Report Ecology Received: I&F  
Site Register Issue: 98-19  
County Code: 6.00000  
Contact: Not reported  
Report Title: Not reported

**UST:**

Facility ID: 95732758  
Site ID: 4751  
Install Date: 12/31/1964 00:00:00  
Capacity: Not reported  
Status: Removed  
Tank Name: 1  
Substance: Used Oil/Waste Oil  
Compartment #: 1  
Tank ID: 40007

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**METRO BUICK OLDS VANCOUVER (Continued)**

**1000365623**

Comartment ID: 40567  
 Decimal Latitude: 45.62772  
 Decimal Longitude: -122.67318  
 Ecology Region: South Western

**31**  
**West**  
**1/4-1/2**  
**1386 ft.**

**CAPITAL TACKEL MFG**  
**404 W 4TH ST**  
**VANCOUVER, WA 98660**

**RCRA-SQG 1001490229**  
**FINDS WAD010753507**  
**WA UST**

**Relative:**  
**Higher**

RCRAInfo:  
 Owner: CAPITAL TACKEL MFG  
 EPA ID: WAD010753507  
 Contact: Not reported  
 Classification: Conditionally Exempt Small Quantity Generator  
 TSDf Activities: Not reported  
 Violation Status: No violations found

**Actual:**  
**38 ft.**

**FINDS:**

Other Pertinent Environmental Activity Identified at Site:  
 RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.  
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**UST:**

Facility ID: 37379634  
 Site ID: 618940  
 Install Date: Not reported  
 Capacity: 1,101 to 2,000 Gallons  
 Status: Removed  
 Tank Name: 1  
 Substance: Unknown  
 Compartment #: 1  
 Tank ID: 618308  
 Comartment ID: 592588  
 Decimal Latitude: 45.62415  
 Decimal Longitude: -122.67486  
 Ecology Region: South Western

**32**  
**WNW**  
**1/4-1/2**  
**1448 ft.**

**HANNAH MOTOR CO**  
**411 W 5TH ST**  
**VANCOUVER, WA 98660**

**RCRA-SQG 1000307035**  
**FINDS WAD981760523**

**Relative:**  
**Higher**

**Actual:**  
**-999 ft.**

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

MAP FINDINGS

**HANNAH MOTOR CO (Continued)**

EDR ID Number  
 EPA ID Number

Database(s)

**1000307035**

RCRAInfo:  
 Owner: HANNAH MOTOR CO  
 EPA ID: WAD981760523  
 Contact: BILL HOUSTON  
 (206) 256-5000  
 Classification: Small Quantity Generator  
 TSD Activities: Not reported  
 Violation Status: No violations found

**FINDS:**

Other Pertinent Environmental Activity Identified at Site:  
 RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

**33**  
**WNW**  
**1/4-1/2**  
**1489 ft.**

**MARSHALL VANCOUVER FORD**  
**1004 WASHINGTON ST**  
**VANCOUVER, WA 98660**

**RCRA-SQG** **1000381416**  
**FINDS** **WAD027564962**

**Relative:**  
**Higher**  
  
**Actual:**  
**-999 ft.**

RCRAInfo:  
 Owner: MARSHALL VANCOUVER FORD  
 EPA ID: WAD027564962  
 Contact: JOHN MANOUGIAN  
 (206) 694-8501  
 Classification: Small Quantity Generator  
 TSD Activities: Not reported  
 Violation Status: No violations found

**FINDS:**

Other Pertinent Environmental Activity Identified at Site:  
 RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

**34**  
**WNW**  
**1/4-1/2**  
**1519 ft.**

**GENERAL BREWING COMPANY**  
**615 COLUMBIA ST**  
**VANCOUVER, WA 98662**

**WA UST** **U003353193**  
**N/A**

**Relative:**  
**Higher**  
  
**Actual:**  
**-999 ft.**

UST:  
 Facility ID: 61596213  
 Site ID: 11204  
 Install Date: 12/10/1990 00:00:00  
 Capacity: 111 TO 1,100 Gallons  
 Status: Removed  
 Tank Name: TANK #5  
 Substance: Diesel  
 Compartment #: 1  
 Tank ID: 20974  
 Comartment ID: 21280

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

**GENERAL BREWING COMPANY (Continued)**

**U003353193**

Decimal Latitude: 45.62579  
Decimal Longitude: -122.67491  
Ecology Region: South Western

Facility ID: 61596213  
Site ID: 11204  
Install Date: 12/10/1990 00:00:00  
Capacity: 10,000 to 19,999 Gallons  
Status: Removed  
Tank Name: TANK #4  
Substance: Unleaded Gasoline  
Compartment #: 1  
Tank ID: 20848  
Comartment ID: 21153  
Decimal Latitude: 45.62579  
Decimal Longitude: -122.67491  
Ecology Region: South Western

Facility ID: 61596213  
Site ID: 11204  
Install Date: 12/31/1964 00:00:00  
Capacity: Not reported  
Status: Removed  
Tank Name: TANK #6  
Substance: Unleaded Gasoline  
Compartment #: 1  
Tank ID: 20717  
Comartment ID: 21022  
Decimal Latitude: 45.62579  
Decimal Longitude: -122.67491  
Ecology Region: South Western

Facility ID: 61596213  
Site ID: 11204  
Install Date: 12/31/1964 00:00:00  
Capacity: Not reported  
Status: Closed in Place  
Tank Name: TANK #2  
Substance: Heating Fuel  
Compartment #: 1  
Tank ID: 20738  
Comartment ID: 21043  
Decimal Latitude: 45.62579  
Decimal Longitude: -122.67491  
Ecology Region: South Western

Facility ID: 61596213  
Site ID: 11204  
Install Date: 12/31/1964 00:00:00  
Capacity: Not reported  
Status: Removed  
Tank Name: TANK #3  
Substance: Unleaded Gasoline  
Compartment #: 1  
Tank ID: 20874  
Comartment ID: 21179  
Decimal Latitude: 45.62579

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**GENERAL BREWING COMPANY (Continued)**

**U003353193**

Decimal Longitude: -122.67491  
 Ecology Region: South Western

Facility ID: 61596213  
 Site ID: 11204  
 Install Date: 12/31/1964 00:00:00  
 Capacity: Not reported  
 Status: Removed  
 Tank Name: TANK #1  
 Substance: Not reported  
 Compartment #: 1  
 Tank ID: 21006  
 Comartment ID: 21312  
 Decimal Latitude: 45.62579  
 Decimal Longitude: -122.67491  
 Ecology Region: South Western

Facility ID: 61596213  
 Site ID: 11204  
 Install Date: 12/31/1964 00:00:00  
 Capacity: Not reported  
 Status: Removed  
 Tank Name: TANK 005  
 Substance: Used Oil/Waste Oil  
 Compartment #: 1  
 Tank ID: 16567  
 Comartment ID: 16811  
 Decimal Latitude: 45.62579  
 Decimal Longitude: -122.67491  
 Ecology Region: South Western

**35  
 WNW  
 1/4-1/2  
 1619 ft.**

**OLTMANN'S MOBIL SERVICE  
 1114 WASHINGTON  
 VANCOUVER, WA 98660**

**WA UST U003355890  
 N/A**

**Relative:  
 Higher**

UST:  
 Facility ID: 61668566  
 Site ID: 9666  
 Install Date: 12/31/1964 00:00:00  
 Capacity: Not reported  
 Status: Removed  
 Tank Name: 6  
 Substance: Unleaded Gasoline  
 Compartment #: 1  
 Tank ID: 3466  
 Comartment ID: 3524  
 Decimal Latitude: 45.62965  
 Decimal Longitude: -122.67376  
 Ecology Region: South Western

**Actual:  
 -999 ft.**

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

**OLTMANN'S MOBIL SERVICE (Continued)**

**U003355890**

Facility ID: 61668566  
Site ID: 9666  
Install Date: 12/31/1964 00:00:00  
Capacity: Not reported  
Status: Removed  
Tank Name: 2  
Substance: Used Oil/Waste Oil  
Compartment #: 1  
Tank ID: 3468  
Comartment ID: 3526  
Decimal Latitude: 45.62965  
Decimal Longitude: -122.67376  
Ecology Region: South Western

Facility ID: 61668566  
Site ID: 9666  
Install Date: 12/31/1964 00:00:00  
Capacity: Not reported  
Status: Removed  
Tank Name: 4  
Substance: Not reported  
Compartment #: 1  
Tank ID: 3489  
Comartment ID: 3548  
Decimal Latitude: 45.62965  
Decimal Longitude: -122.67376  
Ecology Region: South Western

Facility ID: 61668566  
Site ID: 9666  
Install Date: 12/31/1964 00:00:00  
Capacity: Not reported  
Status: Removed  
Tank Name: 1  
Substance: Unleaded Gasoline  
Compartment #: 1  
Tank ID: 3581  
Comartment ID: 3651  
Decimal Latitude: 45.62965  
Decimal Longitude: -122.67376  
Ecology Region: South Western

Facility ID: 61668566  
Site ID: 9666  
Install Date: 12/31/1964 00:00:00  
Capacity: Not reported  
Status: Removed  
Tank Name: 5  
Substance: Not reported  
Compartment #: 1  
Tank ID: 3599  
Comartment ID: 3669  
Decimal Latitude: 45.62965  
Decimal Longitude: -122.67376  
Ecology Region: South Western

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

**OLTMANN'S MOBIL SERVICE (Continued)**

**U003355890**

Facility ID: 61668566  
Site ID: 9666  
Install Date: 12/31/1964 00:00:00  
Capacity: Not reported  
Status: Removed  
Tank Name: 7  
Substance: Leaded Gasoline  
Compartment #: 1  
Tank ID: 3547  
Comartment ID: 3614  
Decimal Latitude: 45.62965  
Decimal Longitude: -122.67376  
Ecology Region: South Western

Facility ID: 61668566  
Site ID: 9666  
Install Date: 12/31/1964 00:00:00  
Capacity: Not reported  
Status: Removed  
Tank Name: 3  
Substance: Not reported  
Compartment #: 1  
Tank ID: 3530  
Comartment ID: 3593  
Decimal Latitude: 45.62965  
Decimal Longitude: -122.67376  
Ecology Region: South Western

**H36  
NNW  
1/4-1/2  
1679 ft.**

**VANCOUVER CHEVRON  
210 E MILL PLAIN BLVD  
VANCOUVER, WA 98663**

**WA UST U003353030  
N/A**

**Site 1 of 2 in cluster H**

**Relative:  
Higher**

UST:  
Facility ID: 36699211  
Site ID: 10562  
Install Date: 6/11/1991 00:00:00  
Capacity: 10,000 to 19,999 Gallons  
Status: Operational  
Tank Name: 1  
Substance: Unleaded Gasoline  
Compartment #: 1  
Tank ID: 7405  
Comartment ID: 7538  
Decimal Latitude: 45.63168  
Decimal Longitude: -122.67144  
Ecology Region: South Western

**Actual:  
-999 ft.**

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

Database(s)  
EDR ID Number  
EPA ID Number

**VANCOUVER CHEVRON (Continued)**

**U003353030**

Facility ID: 36699211  
Site ID: 10562  
Install Date: 6/11/1991 00:00:00  
Capacity: 10,000 to 19,999 Gallons  
Status: Operational  
Tank Name: 2  
Substance: Unleaded Gasoline  
Compartment #: 1  
Tank ID: 7466  
Comartment ID: 7599  
Decimal Latitude: 45.63168  
Decimal Longitude: -122.67144  
Ecology Region: South Western

Facility ID: 36699211  
Site ID: 10562  
Install Date: 6/11/1991 00:00:00  
Capacity: 10,000 to 19,999 Gallons  
Status: Operational  
Tank Name: 3  
Substance: Unleaded Gasoline  
Compartment #: 1  
Tank ID: 7460  
Comartment ID: 7593  
Decimal Latitude: 45.63168  
Decimal Longitude: -122.67144  
Ecology Region: South Western

Facility ID: 36699211  
Site ID: 10562  
Install Date: 6/11/1991 00:00:00  
Capacity: 10,000 to 19,999 Gallons  
Status: Operational  
Tank Name: 4  
Substance: Unleaded Gasoline  
Compartment #: 1  
Tank ID: 7536  
Comartment ID: 7669  
Decimal Latitude: 45.63168  
Decimal Longitude: -122.67144  
Ecology Region: South Western

37  
ESE  
1/4-1/2  
1687 ft.

**NATIONAL PARK SERVICE FORT VANCOUVER N H S  
612 E RESERVE ST  
VANCOUVER, WA 98661**

**WA UST U003354202  
N/A**

**Relative:  
Higher**

UST:  
Facility ID: 72375531  
Site ID: 361931  
Install Date: 1/1/1980 00:00:00  
Capacity: Not reported  
Status: Removed  
Tank Name: 9430-1  
Substance: Unleaded Gasoline  
Compartment #: 1  
Tank ID: 361942  
Comartment ID: 361965

**Actual:  
-999 ft.**

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

MAP FINDINGS

**NATIONAL PARK SERVICE FORT VANCOUVER N H S (Continued)**

EDR ID Number  
 EPA ID Number

Database(s)

**U003354202**

Decimal Latitude: 45.62511  
 Decimal Longitude: -122.65524  
 Ecology Region: South Western

Facility ID: 72375531  
 Site ID: 361931  
 Install Date: 1/1/1980 00:00:00  
 Capacity: Not reported  
 Status: Removed  
 Tank Name: 9430-2  
 Substance: Diesel  
 Compartment #: 1  
 Tank ID: 361943  
 Comartment ID: 361966  
 Decimal Latitude: 45.62511  
 Decimal Longitude: -122.65524  
 Ecology Region: South Western

**I38  
 ESE  
 1/4-1/2  
 1716 ft.**

**INDUSTRIAL FIBERGLASS SVCS INC VANCOUVER  
 213 E RESERVE  
 VANCOUVER, WA 98661**

**RCRA-SQG 1000878459  
 FINDS WA0000062778**

**Site 1 of 3 in cluster I**

**Relative:  
 Higher**

RCRAInfo:  
 Owner: INDUSTRIAL FIBERGLASS SVCS INC  
 EPA ID: WA0000062778  
 Contact: Not reported

**Actual:  
 31 ft.**

Classification: Small Quantity Generator  
 TSDF Activities: Not reported

Violation Status: Violations exist

Regulation Violated:	WAC 173-303-145(3)
Area of Violation:	GENERATOR-GENERAL REQUIREMENTS
Date Violation Determined:	09/22/1994
Actual Date Achieved Compliance:	11/30/1994
Regulation Violated:	WAC 173-303-200(1)(C)
Area of Violation:	GENERATOR-GENERAL REQUIREMENTS
Date Violation Determined:	09/22/1994
Actual Date Achieved Compliance:	04/20/1995
Regulation Violated:	WAC 173-303-200(1)(D)
Area of Violation:	GENERATOR-GENERAL REQUIREMENTS
Date Violation Determined:	09/22/1994
Actual Date Achieved Compliance:	04/20/1995
Regulation Violated:	WAC 173-303-320(1)
Area of Violation:	GENERATOR-GENERAL REQUIREMENTS
Date Violation Determined:	09/22/1994
Actual Date Achieved Compliance:	04/20/1995
Regulation Violated:	WAC 173-303-630(3)
Area of Violation:	GENERATOR-GENERAL REQUIREMENTS
Date Violation Determined:	09/22/1994
Actual Date Achieved Compliance:	04/20/1995
Regulation Violated:	WAC 173-303-630(5)(A)
Area of Violation:	GENERATOR-GENERAL REQUIREMENTS
Date Violation Determined:	09/22/1994

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

MAP FINDINGS

**INDUSTRIAL FIBERGLASS SVCS INC VANCOUVER (Continued)**

EDR ID Number  
 EPA ID Number

Database(s)

**1000878459**

Actual Date Achieved Compliance: 04/20/1995  
 Regulation Violated: WAC 173-303-630(7)  
 Area of Violation: GENERATOR-GENERAL REQUIREMENTS  
 Date Violation Determined: 09/22/1994  
 Actual Date Achieved Compliance: 04/20/1995  
 Regulation Violated: WAC 173-303-180(1)  
 Area of Violation: GENERATOR-GENERAL REQUIREMENTS  
 Date Violation Determined: 09/22/1994  
 Actual Date Achieved Compliance: 04/20/1995  
 Regulation Violated: WAC 173-303-320(2)(D)  
 Area of Violation: GENERATOR-GENERAL REQUIREMENTS  
 Date Violation Determined: 09/22/1994  
 Actual Date Achieved Compliance: 04/20/1995

There are 9 violation record(s) reported at this site:

<u>Evaluation</u>	<u>Area of Violation</u>	<u>Date of Compliance</u>
Other Evaluation	GENERATOR-GENERAL REQUIREMENTS	19941130
	GENERATOR-GENERAL REQUIREMENTS	19950420

**FINDS:**

Other Pertinent Environmental Activity Identified at Site:

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**I39**  
**ESE**  
**1/4-1/2**  
**1720 ft.**  
  
**Relative:**  
**Higher**  
  
**Actual:**  
**35 ft.**

**STORAGE PLACE**  
**311 E RESERVE**  
**VANCOUVER, WA 98661**  
  
**Site 2 of 3 in cluster I**

**RCRA-SQG** **1000838651**  
**FINDS** **WAD988514428**

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

MAP FINDINGS

**STORAGE PLACE (Continued)**

EDR ID Number  
 EPA ID Number

Database(s)

**1000838651**

RCRAInfo:  
 Owner: STORAGE PLACE  
 EPA ID: WAD988514428  
 Contact: TED DURANT  
 (503) 636-4047  
 Classification: Small Quantity Generator  
 TSDF Activities: Not reported  
 Violation Status: No violations found

**FINDS:**

Other Pertinent Environmental Activity Identified at Site:  
 RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

**H40  
 NNW  
 1/4-1/2  
 1733 ft.**

**CHUCK'S TIRE & AUTO SERVICE  
 1416 BROADWAY  
 VANCOUVER, WA 98663**

**WA LUST U003354448  
 WA UST N/A  
 WA ICR**

**Site 2 of 2 in cluster H**

**Relative:  
 Higher**

LUST:  
 Facility ID: 4221  
 Facility Status: Cleanup Started  
 Release ID: 3890  
 Release Notification Date: 9/26/1992 00:00:00  
 Release Status Date: 9/26/1992 00:00:00  
 Alternate Name: GOODYEAR TIRE COMPANY  
 Lat/Lon: 45.63243 / -122.67126  
 Affected Media: Soil  
 FS ID: 62198439  
 Site Response Code Unit: SW

**Actual:  
 -999 ft.**

Facility ID: 4221  
 Facility Status: Reported Cleaned Up  
 Release ID: 3890  
 Release Notification Date: 9/26/1992 00:00:00  
 Release Status Date: 3/8/1993 00:00:00  
 Alternate Name: GOODYEAR TIRE COMPANY  
 Lat/Lon: 45.63243 / -122.67126  
 Affected Media: Soil  
 FS ID: 62198439  
 Site Response Code Unit: SW

**WA ICR:**

Date Ecology Received Report: 10/26/1993  
 Contaminants Found at Site: Petroleum products  
 Media Contaminated: Soil  
 Cause of Contamination: Tank  
 Region: South Western  
 Type of Report Ecology Received: Final cleanup report  
 Site Register Issue: 93-14  
 County Code: 6.00000  
 Contact: Not reported  
 Report Title: Not reported

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

MAP FINDINGS

**CHUCK'S TIRE & AUTO SERVICE (Continued)**

EDR ID Number  
 EPA ID Number

Database(s)

**U003354448**

UST:

Facility ID: 62198439  
 Site ID: 4221  
 Install Date: 12/31/1964 00:00:00  
 Capacity: 111 TO 1,100 Gallons  
 Status: Removed  
 Tank Name: 1  
 Substance: Used Oil/Waste Oil  
 Compartment #: 1  
 Tank ID: 19462  
 Comartment ID: 19747  
 Decimal Latitude: 45.63243  
 Decimal Longitude: -122.67126  
 Ecology Region: South Western

**J41**  
**WNW**  
**1/4-1/2**  
**1749 ft.**

**VANCOUVER CITY BREWERY BLOCKS**  
**400 W 8TH ST**  
**VANCOUVER, WA 98660**

**WA CSCSL NFA S104971467**  
**N/A**

**Site 1 of 2 in cluster J**

**Relative:**  
**Higher**

WA NFA:  
 Facility/Site Id : 85777985  
 Ecology Status : Independent Remedial Action  
 Independent Status Code : Final Independent RA Report received  
 WARM Bin Number : Not reported  
 NFA Code : NFA after Assesment IRAP or VCP  
 NFA Date : 8/25/1999 00:00:00  
 Program Plan Code : 4

**Actual:**  
**-999 ft.**

**J42**  
**WNW**  
**1/4-1/2**  
**1749 ft.**

**VANCOUVER CITY BREWERY BLOCKS**  
**400 W 8TH ST**  
**VANCOUVER, WA 98660**

**FINDS 1007064008**  
**WA VCP 110015405612**

**Site 2 of 2 in cluster J**

**Relative:**  
**Higher**

FINDS:  
 Other Pertinent Environmental Activity Identified at Site:  
 WA-DOEFSIS (Washington - Department Of Ecology Facility / Site Identification System) is the Department of Ecology's Facility/Site identification system that provides a means to query and display data maintained by the Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the departments Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

**Actual:**  
**-999 ft.**

VCP:

Facility ID : 85777985  
 WARM BIN # : Not reported  
 Ecology Status : Independent Remedial Action  
 NFA Code : NFA after assessment, IRAP, or VCP  
 Program Plan Code : 4

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**K43**  
**WNW**  
**1/4-1/2**  
**1815 ft.**

**SOUTHWEST DELIVERY CO INC**  
**415 W 6TH ST**  
**VANCOUVER, WA 98660**

**RCRA-SQG**  
**FINDS**  
**WA ICR**

**1000411117**  
**WAD043002302**

**Site 1 of 2 in cluster K**

**Relative:**  
**Higher**

RCRAInfo:  
 Owner: SOUTHWEST DELIVERY CO INC  
 EPA ID: WAD043002302  
 Contact: JAMES BARNES  
 (206) 694-6571

**Actual:**  
**-999 ft.**

Classification: Small Quantity Generator  
 TSDF Activities: Not reported

Violation Status: No violations found

**FINDS:**

Other Pertinent Environmental Activity Identified at Site:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

WA-DOEFSIS (Washington - Department Of Ecology Facility / Site Identification System) is the Department of Ecology's Facility/Site identification system that provides a means to query and display data maintained by the Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the departments Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

WA ICR:

Date Ecology Received Report: 06/10/1993  
 Contaminants Found at Site: Petroleum products  
 Media Contaminated: Soil  
 Cause of Contamination: Tank  
 Region: South Western  
 Type of Report Ecology Received: Final cleanup report  
 Site Register Issue: 93-01  
 County Code: 6.00000  
 Contact: Not reported  
 Report Title: Not reported

**K44**  
**WNW**  
**1/4-1/2**  
**1815 ft.**

**SOUTHWEST DELIVERY CO., INC.**  
**415 WEST 6TH STREET**  
**VANCOUVER, WA 98660**

**WA LUST** **U003355118**  
**WA UST** **N/A**

**Site 2 of 2 in cluster K**

**Relative:**  
**Higher**

LUST:  
 Facility ID: 6618  
 Facility Status: Cleanup Started  
 Release ID: 4064  
 Release Notification Date: 10/9/1992 00:00:00  
 Release Status Date: 10/9/1992 00:00:00  
 Alternate Name: CHRISTENSEN FAMILY PROPERTIES  
 Lat/Lon: 45.62565 / -122.67545  
 Affected Media: Soil  
 FS ID: 94656347  
 Site Response Code Unit: SW

**Actual:**  
**-999 ft.**

Facility ID: 6618

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

**SOUTHWEST DELIVERY CO., INC. (Continued)**

**U003355118**

Facility Status: Reported Cleaned Up  
Release ID: 4064  
Release Notification Date: 10/9/1992 00:00:00  
Release Status Date: 6/3/1993 00:00:00  
Alternate Name: CHRISTENSEN FAMILY PROPERTIES  
Lat/Lon: 45.62565 / -122.67545  
Affected Media: Soil  
FS ID: 94656347  
Site Response Code Unit: SW

UST:

Facility ID: 94656347  
Site ID: 6618  
Install Date: 12/31/1964 00:00:00  
Capacity: 111 TO 1,100 Gallons  
Status: Removed  
Tank Name: 5  
Substance: Leaded Gasoline  
Compartment #: 1  
Tank ID: 30890  
Comartment ID: 31333  
Decimal Latitude: 45.62565  
Decimal Longitude: -122.67545  
Ecology Region: South Western

Facility ID: 94656347  
Site ID: 6618  
Install Date: 12/31/1964 00:00:00  
Capacity: Not reported  
Status: Removed  
Tank Name: 1  
Substance: Not reported  
Compartment #: 1  
Tank ID: 30857  
Comartment ID: 31300  
Decimal Latitude: 45.62565  
Decimal Longitude: -122.67545  
Ecology Region: South Western

Facility ID: 94656347  
Site ID: 6618  
Install Date: 12/31/1964 00:00:00  
Capacity: Not reported  
Status: Removed  
Tank Name: 3  
Substance: Leaded Gasoline  
Compartment #: 1  
Tank ID: 31013  
Comartment ID: 31460  
Decimal Latitude: 45.62565  
Decimal Longitude: -122.67545  
Ecology Region: South Western

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**SOUTHWEST DELIVERY CO., INC. (Continued)**

**U003355118**

Facility ID: 94656347  
 Site ID: 6618  
 Install Date: 12/31/1964 00:00:00  
 Capacity: 111 TO 1,100 Gallons  
 Status: Removed  
 Tank Name: 4  
 Substance: Used Oil/Waste Oil  
 Compartment #: 1  
 Tank ID: 30642  
 Comartment ID: 31078  
 Decimal Latitude: 45.62565  
 Decimal Longitude: -122.67545  
 Ecology Region: South Western

Facility ID: 94656347  
 Site ID: 6618  
 Install Date: 12/31/1964 00:00:00  
 Capacity: Not reported  
 Status: Removed  
 Tank Name: 2  
 Substance: Not reported  
 Compartment #: 1  
 Tank ID: 30720  
 Comartment ID: 31158  
 Decimal Latitude: 45.62565  
 Decimal Longitude: -122.67545  
 Ecology Region: South Western

**45  
 WNW  
 1/4-1/2  
 1869 ft.**

**WOLF SUPPLY CO VANCOUVER  
 301 W 11TH ST  
 VANCOUVER, WA 98660**

**RCRA-SQG 1000838183  
 FINDS WAD988509063  
 WA UST**

**Relative:  
 Higher**

RCRAInfo:  
 Owner: WOLF SUPPLY CO  
 EPA ID: WAD988509063

**Actual:  
 -999 ft.**

Contact: LES WOLF  
 (206) 695-5600

Classification: Small Quantity Generator  
 TSDF Activities: Not reported

Violation Status: No violations found

**FINDS:**

**Other Pertinent Environmental Activity Identified at Site:**

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

WA-DOEFSIS (Washington - Department Of Ecology Facility / Site Identification System) is the Department of Ecology's Facility/Site identification system that provides a means to query and display data maintained by the Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the departments Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**WOLF SUPPLY CO VANCOUVER (Continued)**

**1000838183**

UST:

Facility ID: 72357236  
 Site ID: 3715  
 Install Date: 12/31/1964 00:00:00  
 Capacity: Not reported  
 Status: Closed in Place  
 Tank Name: 1  
 Substance: Not reported  
 Compartment #: 1  
 Tank ID: 31136  
 Comartment ID: 31583  
 Decimal Latitude: 45.62970  
 Decimal Longitude: -122.67354  
 Ecology Region: South Western

**46**  
**West**  
**1/4-1/2**  
**1910 ft.**

**BOISE CASCADE VANCOUVER**  
**907 W 7TH ST**  
**VANCOUVER, WA 98660**

**PADS 1000378977**  
**RCRA-SQG WAD009427501**  
**FINDS**  
**WA UST**  
**WA MANIFEST**  
**WA EMI**

**Relative:**  
**Higher**

**Actual:**  
**35 ft.**

RCRAInfo:

Owner: BOISE CASCADE CORP  
 (208)384-6161  
 EPA ID: WAD009427501  
 Contact: Not reported  
 Classification: Conditionally Exempt Small Quantity Generator  
 TSDF Activities: Not reported

Violation Status: Violations exist

Regulation Violated: -200(2)(a)(ii)  
 Area of Violation: GENERATOR-ALL REQUIREMENTS (OVERSIGHT)  
 Date Violation Determined: 03/10/1994  
 Actual Date Achieved Compliance: 04/14/1994  
 Enforcement Action: WRITTEN INFORMAL  
 Enforcement Action Date: 03/16/1994  
 Penalty Type: Not reported

Regulation Violated: -140(2)(a)  
 Area of Violation: GENERATOR-MANIFEST REQUIREMENTS  
 Date Violation Determined: 03/10/1994  
 Actual Date Achieved Compliance: 04/14/1994  
 Enforcement Action: WRITTEN INFORMAL  
 Enforcement Action Date: 03/16/1994  
 Penalty Type: Not reported

Regulation Violated: -630(5)(c)  
 Area of Violation: GENERATOR-ALL REQUIREMENTS (OVERSIGHT)  
 Date Violation Determined: 03/10/1994  
 Actual Date Achieved Compliance: 04/16/1994  
 Enforcement Action: WRITTEN INFORMAL  
 Enforcement Action Date: 03/16/1994  
 Penalty Type: Not reported

Regulation Violated: -630(6)  
 Area of Violation: GENERATOR-RECORDKEEPING REQUIREMENTS

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

MAP FINDINGS

**BOISE CASCADE VANCOUVER (Continued)**

EDR ID Number  
 EPA ID Number

**1000378977**

Date Violation Determined: 03/10/1994  
 Actual Date Achieved Compliance: 04/14/1994

Enforcement Action: WRITTEN INFORMAL  
 Enforcement Action Date: 03/16/1994  
 Penalty Type: Not reported

Regulation Violated: -201(2)(C)(II)(A)(C)  
 Area of Violation: GENERATOR-ALL REQUIREMENTS (OVERSIGHT)  
 Date Violation Determined: 09/04/1991  
 Actual Date Achieved Compliance: 09/04/1991

Enforcement Action: WRITTEN INFORMAL  
 Enforcement Action Date: 09/11/1991  
 Penalty Type: Not reported

Regulation Violated: -201(1)(9)  
 Area of Violation: GENERATOR-ALL REQUIREMENTS (OVERSIGHT)  
 Date Violation Determined: 09/04/1991  
 Actual Date Achieved Compliance: 01/10/1992

Enforcement Action: WRITTEN INFORMAL  
 Enforcement Action Date: 09/11/1991  
 Penalty Type: Not reported

There are 6 violation record(s) reported at this site:

<u>Evaluation</u>	<u>Area of Violation</u>	<u>Date of Compliance</u>
Compliance Evaluation Inspection	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)	19940414
	GENERATOR-MANIFEST REQUIREMENTS	19940414
	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)	19940416
	GENERATOR-RECORDKEEPING REQUIREMENTS	19940414
Compliance Evaluation Inspection	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)	19910904
	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)	19920110

**FINDS:**

Other Pertinent Environmental Activity Identified at Site:

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**BOISE CASCADE VANCOUVER (Continued)**

**1000378977**

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

PCS (Permit Compliance System) is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

WA-DOEFSIS (Washington - Department Of Ecology Facility / Site Identification System) is the Department of Ecology's Facility/Site identification system that provides a means to query and display data maintained by the Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the departments Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

**WA AIR EMISSIONS:**

Facility ID:	0013	Local ID:	E
SO2 Chemical:	0	NO2 Chemical:	0
VOC Chemical:	6	CO Chemical:	0
PM10 Chemical:	0	Year Of Info:	98
Mailing Name:	Boise Cascade Corporation PO Box 690 Vancouver, WA 98666		
Year Of Info:	98		
Mail Add Zip 2:	Not reported		
Point Num:	01	Point Desc:	KIDDER PRESSES (2)
Tot Suspended Particulate Tons/Yr:	0		
Ecology Facility ID :	Not reported		
Fed County Code :	Not reported		
Process ID :	Not reported		
Univsl Business ID:	Not reported		
Contact Name :			
Contact Phone :	Not reported	Contact Fax :	Not reported
Contact E-mail :	Not reported		
Plant SIC Code :	Not reported		
Plant Lat/Long :	Not reported		
Point Comments :	Not reported		
Boilers Design Capacity At A Point :	Not reported		
SIC Code For A Point Process:	Not reported		
Plant Lat/Long :	Not reported		
% Of Ops Occuring During Qtr Dec-Feb :	Not reported		
% Of Ops Occuring During Qtr Mar-May :	Not reported		
% Of Ops Occuring During Qtr Jun-Aug :	Not reported		
% Of Ops Occuring During Qtr Sep-Nov :	Not reported		
# Of Hours Facility Operates Each Day :	Not reported		
# Of Days Facility Operates Each Week :	Not reported		
# Of Weeks Facility Operates Each Year :	Not reported		
Exit Temp Of A Stack Or Vent :	Not reported		
% Wtr In Stack / Vent Exhaust :	Not reported		

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**BOISE CASCADE VANCOUVER (Continued)**

**1000378977**

Height Of Stack :	Not reported
Diameter Of Stack :	Not reported
Air Flow From A Vent Or Stack :	Not reported
% Oxygen In Stack / Vent Exhaust :	Not reported
Vertical Dist Exhaust Travels From Stack/vent Outlet :	Not reported
Source Classifcn Code For Each Process In A Facility :	Not reported
EPA Code For Throughput Unit Of Measure :	Not reported
EPA Mat Code For Throughput At Each Process :	Not reported
EPA Code For Mat Throput Fate Desc/input/output/existing :	Not reported
Description Of Material :	Not reported
Annual Qty Of Throughput Mat :	Not reported
Maximum Rate/amount Of Annual Throughput :	Not reported
Percent Of Sulfur In Fuels :	Not reported
Percent Of Ash In Fuels :	Not reported
SCC Process Description :	Not reported
Emission Unit Output Threshold :	Not reported
Facility's Throughput Data Confidential :	Not reported
Tot Suspended Partclt Emisssn Tons/Year :	Not reported
Tot Suspended Partclte Emissions Estmtn Code :	Not reported
Pri Particulate Matter Cntrl Tech Code At Point/Segment :	Not reported
Sec Particulate Matter Cntrl Tech Code At Point/segment :	Not reported
% Control Of Particulate Matter Emissions :	Not reported
Particulate Matter Emission (?10microns) Tons/Year :	Not reported
Partclte Matter Emission (?10microns) Est Code :	Not reported
Pri Prtclte Matter (?10microns) Cntrl Tech Code At Pt/Seg :	Not reported
Sec Prtclte Matter (?10microns) Cntl Tech Code At Pt/Seg :	Not reported
% Cntrl Of Prtclte Matter (? 10microns) Emisns :	Not reported
Prtclte Matter (?2.5microns)emisins In Tons/Yr :	Not reported
Prtclte Matter Emisn (?2.5microns) Est Code :	Not reported
Pri Ptculate Matter (?2.5microns) Ctl Tech Code At Pt/Seg :	Not reported
Sec Prtclte Matter (?2.5microns) Ctl Tech Code At Pt/Seg :	Not reported
% Cntrl Of Particulate Matter (?2.5microns) Emissions :	Not reported
Sulfur Dioxide Emissions Tons/Year :	Not reported
Sulfur Dioxide Emission Estimation Code :	Not reported
Pri Sulfur Dioxide Cntrl Tech Code At Pt/Seg :	Not reported
Secondary Sulfur Dioxide Cntrl Tech Code At Pt/Seg :	Not reported
Percent Control Of Sulfur Dioxide Emissions :	Not reported
Nitrous Oxides Emissions In Tons/Yr :	Not reported
Nitrous Oxides Emission Estimation Code :	Not reported
Pri Nitrous Oxides Cntrl Tech Code At Point/Segment :	Not reported
Sec Nitrous Oxide Control Tech Code At Point Segment :	Not reported
Percent Control Of Nitrous Oxides Emissions :	Not reported
Desc Of Volatile Organic Compound Emitted :	Not reported
Volatile Organic Compound Emissions In Tons/Year :	Not reported
Voltl Organic Compound Emissions Est Code :	Not reported
Pri Voltl Organic Compound Cntrl Tech Code At Pt/seg :	Not reported
Sec Voltle Organic Compound Cntl Tech Code At Pt/Seg :	Not reported
% Cntrl Of Volatile Organic Compound Emissions :	Not reported
Carbon Monoxide Emissions In Tons/Year :	Not reported
Carbon Monoxide Emission Est Code :	Not reported
Pri Carbon Monoxide Cntrl Tech Code At Pt/Seg :	Not reported
Sec Carbon Monoxide Cntrl Tech Code At Pt/Seg :	Not reported
% Cntrl Of Carbon Monoxide Emissions :	Not reported
Lead Emissions In Tons/Year :	Not reported
Lead Emission Estimation Code :	Not reported
PM10 Nonattainment Area :	Not reported
Ozone Nonattainment Area :	Not reported



Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**BOISE CASCADE VANCOUVER (Continued)**

**1000378977**

EPA Code For Throughput Unit Of Measure :	Not reported
EPA Mat Code For Throughput At Each Process :	Not reported
EPA Code For Mat Throput Fate Desc/input/output/existing :	Not reported
Description Of Material :	Not reported
Annual Qty Of Throughput Mat :	Not reported
Maximum Rate/amount Of Annual Throughput :	Not reported
Percent Of Sulfur In Fuels :	Not reported
Percent Of Ash In Fuels :	Not reported
SCC Process Description :	Not reported
Emission Unit Output Threshold :	Not reported
Facility's Throughput Data Confidential :	Not reported
Tot Suspended Partclt Emisssn Tons/Year :	Not reported
Tot Suspended Partclte Emissions Estmtn Code :	Not reported
Pri Particulate Matter Cntrl Tech Code At Point/Segment :	Not reported
Sec Particulate Matter Cntrl Tech Code At Point/segment :	Not reported
% Control Of Particulate Matter Emissions :	Not reported
Particulate Matter Emission (?10microns) Tons/Year :	Not reported
Partclte Matter Emission (?10microns) Est Code :	Not reported
Pri Prtclte Matter (?10microns) Cntrl Tech Code At Pt/Seg :	Not reported
Sec Prtclte Matter (?10microns) Cntl Tech Code At Pt/Seg :	Not reported
% Cntrl Of Prtclte Matter (? 10microns) Emisns :	Not reported
Prtclte Matter (?2.5microns)emisins In Tons/Yr :	Not reported
Prtclte Matter Emisn (?2.5microns) Est Code :	Not reported
Pri Ptculate Matter (?2.5microns) Ctl Tech Code At Pt/Seg :	Not reported
Sec Prtclte Matter (?2.5microns) Ctl Tech Code At Pt/Seg :	Not reported
% Cntrl Of Particulate Matter (?2.5microns) Emissions :	Not reported
Sulfur Dioxide Emissions Tons/Year :	Not reported
Sulfur Dioxide Emission Estimation Code :	Not reported
Pri Sulfur Dioxide Cntrl Tech Code At Pt/Seg :	Not reported
Secondary Sulfur Dioxide Cntrl Tech Code At Pt/Seg :	Not reported
Percent Control Of Sulfur Dioxide Emissions :	Not reported
Nitrous Oxides Emissions In Tons/Yr :	Not reported
Nitrous Oxides Emission Estimation Code :	Not reported
Pri Nitrous Oxides Cntrl Tech Code At Point/Segment :	Not reported
Sec Nitrous Oxide Control Tech Code At Point Segment :	Not reported
Percent Control Of Nitrous Oxides Emissions :	Not reported
Desc Of Volatile Organic Compound Emitted :	Not reported
Volatile Organic Compound Emissions In Tons/Year :	Not reported
Voltl Organic Compound Emissions Est Code :	Not reported
Pri Voltl Organic Compound Cntrl Tech Code At Pt/seg :	Not reported
Sec Voltle Organic Compound Cntl Tech Code At Pt/Seg :	Not reported
% Cntrl Of Volatile Organic Compound Emissions :	Not reported
Carbon Monoxide Emissions In Tons/Year :	Not reported
Carbon Monoxide Emission Est Code :	Not reported
Pri Carbon Monoxide Cntrl Tech Code At Pt/Seg :	Not reported
Sec Carbon Monoxide Cntrl Tech Code At Pt/Seg :	Not reported
% Cntrl Of Carbon Monoxide Emissions :	Not reported
Lead Emissions In Tons/Year :	Not reported
Lead Emission Estimation Code :	Not reported
PM10 Nonattainment Area :	Not reported
Ozone Nonattainment Area :	Not reported
CO Nonattainment Area :	Not reported
UTM East :	Not reported
UTM North :	Not reported
UTM Zone :	Not reported
Plant Lat/Long :	Not reported
Point Lat/Long :	Not reported

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**BOISE CASCADE VANCOUVER (Continued)**

**1000378977**

Facility type :	Not reported
Plant NAICS :	Not reported
Point NAICS :	Not reported
P NH3 Control :	Not reported
Plant Utm East :	Not reported
Plant Utm North :	Not reported
Plant Utm Zone :	Not reported
NH3 TPY :	Not reported
S NH3 Ctrl :	Not reported
NH3 % Ctrl :	Not reported
Stack ACFS :	Not reported
Facility ID: 0013	Local ID: E
SO2 Chemical: 0	NO2 Chemical: 0
VOC Chemical: 0	CO Chemical: 0
PM10 Chemical: 0	Year Of Info: 98
Mailing Name: Boise Cascade Corporation PO Box 690 Vancouver, WA 98666	
Year Of Info: 98	
Mail Add Zip 2: Not reported	
Point Num: 03	Point Desc: CLEAVER BROOKS BOILER
Tot Suspended Particulate Tons/Yr: 0	
Ecology Facility ID :Not reported	Local Air Agency ID:Not reported
Fed County Code Not reported	Source Number : Not reported
Process ID : Not reported	Plant Name : Not reported
Univsl Business ID:Not reported	
Contact Name :	
Contact Phone : Not reported	Contact Fax : Not reported
Contact E-mail : Not reported	
Plant SIC Code : Not reported	
Plant Lat/Long : Not reported	
Point Comments : Not reported	
Boilers Design Capacity At A Point : Not reported	
SIC Code For A Point Process: Not reported	
Plant Lat/Long : Not reported	
% Of Ops Occuring During Qtr Dec-Feb :	Not reported
% Of Ops Occuring During Qtr Mar-May :	Not reported
% Of Ops Occuring During Qtr Jun-Aug :	Not reported
% Of Ops Occuring During Qtr Sep-Nov :	Not reported
# Of Hours Facility Operates Each Day :	Not reported
# Of Days Facility Operates Each Week :	Not reported
# Of Weeks Facility Operates Each Year :	Not reported
Exit Temp Of A Stack Or Vent : Not reported	
% Wtr In Stack / Vent Exhaust : Not reported	
Height Of Stack : Not reported	
Diameter Of Stack : Not reported	
Air Flow From A Vent Or Stack : Not reported	
% Oxygen In Stack / Vent Exhaust : Not reported	
Vertical Dist Exhaust Travels From Stack/vent Outlet :	Not reported
Source Classifcn Code For Each Process In A Facility :	Not reported
EPA Code For Throughput Unit Of Measure :	Not reported
EPA Mat Code For Throughput At Each Process :	Not reported
EPA Code For Mat Thrupt Fate Desc/input/output/existing :	Not reported
Description Of Material :	Not reported
Annual Qty Of Throughput Mat :	Not reported
Maximum Rate/amount Of Annual Throughput :	Not reported

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**BOISE CASCADE VANCOUVER (Continued)**

**1000378977**

Percent Of Sulfur In Fuels :	Not reported
Percent Of Ash In Fuels :	Not reported
SCC Process Description :	Not reported
Emission Unit Output Threshold :	Not reported
Facility's Throughput Data Confidential :	Not reported
Tot Suspended Partclt Emisn Tons/Year :	Not reported
Tot Suspended Partclte Emissions Estrmn Code :	Not reported
Pri Particulate Matter Cntrl Tech Code At Point/Segment :	Not reported
Sec Particulate Matter Cntrl Tech Code At Point/segment :	Not reported
% Control Of Particulate Matter Emissions :	Not reported
Particulate Matter Emission (?10microns) Tons/Year :	Not reported
Partclte Matter Emission (?10microns) Est Code :	Not reported
Pri Prtclte Matter (?10microns) Cntrl Tech Code At Pt/Seg :	Not reported
Sec Prtclte Matter (?10microns) Cntl Tech Code At Pt/Seg :	Not reported
% Cntrl Of Prtclte Matter (? 10microns) Emisns :	Not reported
Prtclte Matter (?2.5microns)emisins In Tons/Yr :	Not reported
Prtclte Matter Emisn (?2.5microns) Est Code :	Not reported
Pri Ptculate Matter (?2.5microns) Ctl Tech Code At Pt/Seg :	Not reported
Sec Prtclte Matter (?2.5microns) Ctl Tech Code At Pt/Seg :	Not reported
% Cntrl Of Particulate Matter (?2.5microns) Emissions :	Not reported
Sulfur Dioxide Emissions Tons/Year :	Not reported
Sulfur Dioxide Emission Estimation Code :	Not reported
Pri Sulfur Dioxide Cntrl Tech Code At Pt/Seg :	Not reported
Secondary Sulfur Dioxide Cntrl Tech Code At Pt/Seg :	Not reported
Percent Control Of Sulfur Dioxide Emissions :	Not reported
Nitrous Oxides Emissions In Tons/Yr :	Not reported
Nitrous Oxides Emission Estimation Code :	Not reported
Pri Nitrous Oxides Cntrl Tech Code At Point/Segment :	Not reported
Sec Nitrous Oxide Control Tech Code At Point Segment :	Not reported
Percent Control Of Nitrous Oxides Emissions :	Not reported
Desc Of Volatile Organic Compound Emitted :	Not reported
Volatile Organic Compound Emissions In Tons/Year :	Not reported
Voltl Organic Compound Emissions Est Code :	Not reported
Pri Voltl Organic Compound Cntl Tech Code At Pt/seg :	Not reported
Sec Voltle Organic Compound Cntl Tech Code At Pt/Seg :	Not reported
% Cntrl Of Volatile Organic Compound Emissions :	Not reported
Carbon Monoxide Emissions In Tons/Year :	Not reported
Carbon Monoxide Emission Est Code :	Not reported
Pri Carbon Monoxide Cntrl Tech Code At Pt/Seg :	Not reported
Sec Carbon Monoxide Cntrl Tech Code At Pt/Seg :	Not reported
% Cntrl Of Carbon Monoxide Emissions :	Not reported
Lead Emissions In Tons/Year :	Not reported
Lead Emission Estimation Code :	Not reported
PM10 Nonattainment Area :	Not reported
Ozone Nonattainment Area :	Not reported
CO Nonattainment Area :	Not reported
UTM East :	Not reported
UTM North :	Not reported
UTM Zone :	Not reported
Plant Lat/Long :	Not reported
Point Lat/Long :	Not reported
Facility type :	Not reported
Plant NAICS :	Not reported
Point NAICS :	Not reported
P NH3 Control :	Not reported
Plant Utm East :	Not reported
Plant Utm North :	Not reported

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**BOISE CASCADE VANCOUVER (Continued)**

**1000378977**

Plant Utm Zone :	Not reported
NH3 TPY :	Not reported
S NH3 Ctrl :	Not reported
NH3 % Ctrl :	Not reported
Stack ACFS :	Not reported
Facility ID: 0013	Local ID: E
SO2 Chemical: 0	NO2 Chemical: 0
VOC Chemical: 0	CO Chemical: 0
PM10 Chemical: 0	Year Of Info: 98
Mailing Name: Boise Cascade Corporation PO Box 690 Vancouver, WA 98666	
Year Of Info: 98	
Mail Add Zip 2: Not reported	
Point Num: 04	Point Desc: SPACE HEATERS (16)
Tot Suspended Particulate Tons/Yr: 0	
Ecology Facility ID :Not reported	Local Air Agency ID:Not reported
Fed County Code Not reported	Source Number : Not reported
Process ID : Not reported	Plant Name : Not reported
Univsl Business ID:Not reported	
Contact Name :	
Contact Phone : Not reported	Contact Fax : Not reported
Contact E-mail : Not reported	
Plant SIC Code : Not reported	
Plant Lat/Long : Not reported	
Point Comments : Not reported	
Boilers Design Capacity At A Point : Not reported	
SIC Code For A Point Process: Not reported	
Plant Lat/Long : Not reported	
% Of Ops Occuring During Qtr Dec-Feb :	Not reported
% Of Ops Occuring During Qtr Mar-May :	Not reported
% Of Ops Occuring During Qtr Jun-Aug :	Not reported
% Of Ops Occuring During Qtr Sep-Nov :	Not reported
# Of Hours Facility Operates Each Day :	Not reported
# Of Days Facility Operates Each Week :	Not reported
# Of Weeks Facility Operates Each Year :	Not reported
Exit Temp Of A Stack Or Vent : Not reported	
% Wtr In Stack / Vent Exhaust : Not reported	
Height Of Stack : Not reported	
Diameter Of Stack : Not reported	
Air Flow From A Vent Or Stack : Not reported	
% Oxygen In Stack / Vent Exhaust : Not reported	
Vertical Dist Exhaust Travels From Stack/vent Outlet :	Not reported
Source Classifcn Code For Each Process In A Facility :	Not reported
EPA Code For Throughput Unit Of Measure :	Not reported
EPA Mat Code For Throughput At Each Process :	Not reported
EPA Code For Mat Thrupt Fate Desc/input/output/existing :	Not reported
Description Of Material :	Not reported
Annual Qty Of Throughput Mat :	Not reported
Maximum Rate/amount Of Annual Throughput :	Not reported
Percent Of Sulfur In Fuels :	Not reported
Percent Of Ash In Fuels :	Not reported
SCC Process Description : Not reported	
Emission Unit Output Threshold : Not reported	
Facility's Throughput Data Confidential :	Not reported
Tot Suspended Partclt Emisssn Tons/Year :	Not reported

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**BOISE CASCADE VANCOUVER (Continued)**

**1000378977**

Tot Suspended Particulate Emissions Estm Code :	Not reported
Pri Particulate Matter Cntrl Tech Code At Point/Segment :	Not reported
Sec Particulate Matter Cntrl Tech Code At Point/segment :	Not reported
% Control Of Particulate Matter Emissions :	Not reported
Particulate Matter Emission (?10microns) Tons/Year :	Not reported
Particulate Matter Emission (?10microns) Est Code :	Not reported
Pri Particulate Matter (?10microns) Cntrl Tech Code At Pt/Seg :	Not reported
Sec Particulate Matter (?10microns) Cntrl Tech Code At Pt/Seg :	Not reported
% Cntrl Of Particulate Matter (? 10microns) Emisns :	Not reported
Particulate Matter (?2.5microns)emissions In Tons/Yr :	Not reported
Particulate Matter Emisn (?2.5microns) Est Code :	Not reported
Pri Particulate Matter (?2.5microns) Cntrl Tech Code At Pt/Seg :	Not reported
Sec Particulate Matter (?2.5microns) Cntrl Tech Code At Pt/Seg :	Not reported
% Cntrl Of Particulate Matter (?2.5microns) Emissions :	Not reported
Sulfur Dioxide Emissions Tons/Year :	Not reported
Sulfur Dioxide Emission Estimation Code :	Not reported
Pri Sulfur Dioxide Cntrl Tech Code At Pt/Seg :	Not reported
Secondary Sulfur Dioxide Cntrl Tech Code At Pt/Seg :	Not reported
Percent Control Of Sulfur Dioxide Emissions :	Not reported
Nitrous Oxides Emissions In Tons/Yr :	Not reported
Nitrous Oxides Emission Estimation Code :	Not reported
Pri Nitrous Oxides Cntrl Tech Code At Point/Segment :	Not reported
Sec Nitrous Oxide Control Tech Code At Point Segment :	Not reported
Percent Control Of Nitrous Oxides Emissions :	Not reported
Desc Of Volatile Organic Compound Emitted :	Not reported
Volatile Organic Compound Emissions In Tons/Year :	Not reported
Volatile Organic Compound Emissions Est Code :	Not reported
Pri Volatile Organic Compound Cntrl Tech Code At Pt/seg :	Not reported
Sec Volatile Organic Compound Cntrl Tech Code At Pt/Seg :	Not reported
% Cntrl Of Volatile Organic Compound Emissions :	Not reported
Carbon Monoxide Emissions In Tons/Year :	Not reported
Carbon Monoxide Emission Est Code :	Not reported
Pri Carbon Monoxide Cntrl Tech Code At Pt/Seg :	Not reported
Sec Carbon Monoxide Cntrl Tech Code At Pt/Seg :	Not reported
% Cntrl Of Carbon Monoxide Emissions :	Not reported
Lead Emissions In Tons/Year :	Not reported
Lead Emission Estimation Code :	Not reported
PM10 Nonattainment Area :	Not reported
Ozone Nonattainment Area :	Not reported
CO Nonattainment Area :	Not reported
UTM East :	Not reported
UTM North :	Not reported
UTM Zone :	Not reported
Plant Lat/Long :	Not reported
Point Lat/Long :	Not reported
Facility type :	Not reported
Plant NAICS :	Not reported
Point NAICS :	Not reported
P NH3 Control :	Not reported
Plant Utm East :	Not reported
Plant Utm North :	Not reported
Plant Utm Zone :	Not reported
NH3 TPY :	Not reported
S NH3 Ctrl :	Not reported
NH3 % Ctrl :	Not reported
Stack ACFS :	Not reported

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

MAP FINDINGS

**BOISE CASCADE VANCOUVER (Continued)**

EDR ID Number  
 EPA ID Number

Database(s)

**1000378977**

Facility ID:	0013	Local ID:	E
SO2 Chemical:	0	NO2 Chemical:	0
VOC Chemical:	0	CO Chemical:	0
PM10 Chemical:	0	Year Of Info:	98
Mailing Name:	Boise Cascade Corporation PO Box 690 Vancouver, WA 98666		
Year Of Info:	98	Point Desc:	FISHER-KRECKE PRESS
Mail Add Zip 2:	Not reported	Local Air Agency ID	Not reported
Point Num:	05	Source Number :	Not reported
Tot Suspended Particulate Tons/Yr:	0	Plant Name :	Not reported
Ecology Facility ID :	Not reported	Contact Fax :	Not reported
Fed County Code	Not reported		
Process ID :	Not reported		
Univsl Business ID	Not reported		
Contact Name :			
Contact Phone :	Not reported		
Contact E-mail :	Not reported		
Plant SIC Code :	Not reported		
Plant Lat/Long :	Not reported		
Point Comments :	Not reported		
Boilers Design Capacity At A Point :	Not reported		
SIC Code For A Point Process:	Not reported		
Plant Lat/Long :	Not reported		
% Of Ops Occuring During Qtr Dec-Feb :		Not reported	
% Of Ops Occuring During Qtr Mar-May :		Not reported	
% Of Ops Occuring During Qtr Jun-Aug :		Not reported	
% Of Ops Occuring During Qtr Sep-Nov :		Not reported	
# Of Hours Facility Operates Each Day :		Not reported	
# Of Days Facility Operates Each Week :		Not reported	
# Of Weeks Facility Operates Each Year :		Not reported	
Exit Temp Of A Stack Or Vent :	Not reported		
% Wtr In Stack / Vent Exhaust :	Not reported		
Height Of Stack :	Not reported		
Diameter Of Stack :	Not reported		
Air Flow From A Vent Or Stack :	Not reported		
% Oxygen In Stack / Vent Exhaust :	Not reported		
Vertical Dist Exhaust Travels From Stack/vent Outlet :		Not reported	
Source Classifcn Code For Each Process In A Facility :		Not reported	
EPA Code For Throughput Unit Of Measure :		Not reported	
EPA Mat Code For Throughput At Each Process :		Not reported	
EPA Code For Mat Thrupt Fate Desc/input/output/existing :		Not reported	
Description Of Material :		Not reported	
Annual Qty Of Throughput Mat :		Not reported	
Maximum Rate/amount Of Annual Throughput :		Not reported	
Percent Of Sulfur In Fuels :		Not reported	
Percent Of Ash In Fuels :		Not reported	
SCC Process Description :	Not reported		
Emission Unit Output Threshold :	Not reported		
Facility's Throughput Data Confidential :		Not reported	
Tot Suspended Partclt Emissn Tons/Year :		Not reported	
Tot Suspended Partclte Emissions Estmn Code :		Not reported	
Pri Particulate Matter Cntrl Tech Code At Point/Segment :		Not reported	
Sec Particulate Matter Cntrl Tech Code At Point/segment :		Not reported	
% Control Of Particulate Matter Emissions :		Not reported	
Particulate Matter Emission (?10microns) Tons/Year :		Not reported	

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**BOISE CASCADE VANCOUVER (Continued)**

**1000378977**

Particulate Matter Emission (?10microns) Est Code :	Not reported
Pri Particulate Matter (?10microns) Cntrl Tech Code At Pt/Seg :	Not reported
Sec Particulate Matter (?10microns) Cntrl Tech Code At Pt/Seg :	Not reported
% Cntrl Of Particulate Matter (? 10microns) Emisns :	Not reported
Particulate Matter (?2.5microns)emissions In Tons/Yr :	Not reported
Particulate Matter Emission (?2.5microns) Est Code :	Not reported
Pri Particulate Matter (?2.5microns) Cntrl Tech Code At Pt/Seg :	Not reported
Sec Particulate Matter (?2.5microns) Cntrl Tech Code At Pt/Seg :	Not reported
% Cntrl Of Particulate Matter (?2.5microns) Emissions :	Not reported
Sulfur Dioxide Emissions Tons/Year :	Not reported
Sulfur Dioxide Emission Estimation Code :	Not reported
Pri Sulfur Dioxide Cntrl Tech Code At Pt/Seg :	Not reported
Secondary Sulfur Dioxide Cntrl Tech Code At Pt/Seg :	Not reported
Percent Control Of Sulfur Dioxide Emissions :	Not reported
Nitrous Oxides Emissions In Tons/Yr :	Not reported
Nitrous Oxides Emission Estimation Code :	Not reported
Pri Nitrous Oxides Cntrl Tech Code At Point/Segment :	Not reported
Sec Nitrous Oxide Control Tech Code At Point Segment :	Not reported
Percent Control Of Nitrous Oxides Emissions :	Not reported
Desc Of Volatile Organic Compound Emitted :	Not reported
Volatile Organic Compound Emissions In Tons/Year :	Not reported
Volatile Organic Compound Emissions Est Code :	Not reported
Pri Volatile Organic Compound Cntrl Tech Code At Pt/seg :	Not reported
Sec Volatile Organic Compound Cntrl Tech Code At Pt/Seg :	Not reported
% Cntrl Of Volatile Organic Compound Emissions :	Not reported
Carbon Monoxide Emissions In Tons/Year :	Not reported
Carbon Monoxide Emission Est Code :	Not reported
Pri Carbon Monoxide Cntrl Tech Code At Pt/Seg :	Not reported
Sec Carbon Monoxide Cntrl Tech Code At Pt/Seg :	Not reported
% Cntrl Of Carbon Monoxide Emissions :	Not reported
Lead Emissions In Tons/Year :	Not reported
Lead Emission Estimation Code :	Not reported
PM10 Nonattainment Area :	Not reported
Ozone Nonattainment Area :	Not reported
CO Nonattainment Area :	Not reported
UTM East :	Not reported
UTM North :	Not reported
UTM Zone :	Not reported
Plant Lat/Long :	Not reported
Point Lat/Long :	Not reported
Facility type :	Not reported
Plant NAICS :	Not reported
Point NAICS :	Not reported
P NH3 Control :	Not reported
Plant Utm East :	Not reported
Plant Utm North :	Not reported
Plant Utm Zone :	Not reported
NH3 TPY :	Not reported
S NH3 Ctrl :	Not reported
NH3 % Ctrl :	Not reported
Stack ACFS :	Not reported

[Click this hyperlink](#) while viewing on your computer to access 9 additional WA AIRS record(s) in the EDR Site Report.

WA MANIFEST:

Facility Site ID Number:	8752343
Permit by Rule:	False

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation    Site

MAP FINDINGS

Database(s)    EDR ID Number  
EPA ID Number

**BOISE CASCADE VANCOUVER (Continued)**

**1000378977**

Treatment by Generator:            False  
Mixed radioactive waste:            False  
Importer of hazardous waste:        False  
Immediate recycler:                False  
Treatment/Storage/Disposal/Recycling Facility:    False  
Generator of dangerous fuel waste:            False  
Generator marketing to burner:            False  
"Other marketers (i.e., blender, distributor, etc.)":    False  
Utility boiler burner:                False  
Industry boiler burner:                False  
Industrial Furnace:                  False  
Smelter defferal:                    False  
Universal waste - batteries - generate:            False  
Universal waste - thermostats - generate:            False  
Universal waste - mercury - generate:            False  
Universal waste - lamps - generate:            False  
Universal waste - batteries - accumulate:            False  
Universal waste - thermostats - accumulate:            False  
Universal waste - mercury - accumulate:            False  
Universal waste - lamps - accumulate:            False  
Destination Facility for Universal Waste:            False  
Off-specification used oil burner - utility boiler:    False  
Off-specification used oil burner - industrial boiler:    False  
Off-specification used oil burner - industrial furnace:    False  
EPA ID:                                WAD009427501  
Facility Address 2:                    Not reported  
TAX REG NBR:                        409009025  
NAICS CD:                             322121  
BUSINESS TYPE:                        Not reported  
MAIL NAME:                            Boise White Paper LLC  
MAIL ADDR LINE1:                      PO Box 690  
MAIL CITY,ST,ZIP:                    VANCOUVER, WA 98666-0690  
MAIL COUNTRY:                        UNITED STATES  
LEGAL ORG NAME:                      Boise Cascade Corp  
LEGAL ORG TYPE:                        Private  
LEGAL ADDR LINE1:                      PO Box 50  
LEGAL CITY,ST,ZIP:                    BOISE, ID 83728-0050  
LEGAL COUNTRY:                        UNITED STATES  
LEGAL PHONE NBR:                      (208)384-6161  
LEGAL EFFECTIVE DATE:                06/18/96  
LAND ORG NAME:                        Boise White Paper LLC  
LAND ORG TYPE:                        Private  
LAND PERSON NAME:                      Not reported  
LAND ADDR LINE1:                      PO Box 50  
LAND CITY,ST,ZIP:                      BOISE, ID 83728-0050  
LAND COUNTRY:                        UNITED STATES  
LAND PHONE NBR:                        (208)384-6161  
OPERATOR ORG NAME:                    Boise White Paper LLC  
OPERATOR ORG TYPE:                    Private  
OPERATOR ADDR LINE1:                    907 W 7TH ST  
OPERATOR CITY,ST,ZIP:                    VANCOUVER, WA 98660-3066  
OPERATOR COUNTRY:                    UNITED STATES  
OPERATOR PHONE NBR:                    (360) 690-7064  
OPERATOR EFFECTIVE DATE:              06/18/96  
SITE CONTACT NAME:                    Joseph Kovich  
SITE CONTACT ADDR LINE1:              1300 Kaster Rd  
SITE CONTACT ZIP:                      ST HELENS, OR 97051

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

**BOISE CASCADE VANCOUVER (Continued)**

**1000378977**

SITE CONTACT COUNTRY: UNITED STATES  
SITE CONTACT PHONE NBR: (503)397-9228  
SITE CONTACT EMAIL: JosephKovich@BoisePaper.com  
FORM CONTACT NAME: Peggy Derrick  
FORM CONTACT ADDR LINE1: PO Box 690  
FORM CONTACT CITY,ST,ZIP: VANCOUVER, WA 98660  
FORM CONTACT COUNTRY: UNITED STATES  
FORM CONTACT PHONE NBR: (360)690-7064  
FORM CONTACT EMAIL: peggyderrick@boisepaper.com  
GEN STATUS CD: XQG  
MONTHLY GENERATION: False  
BATCH GENERATION: False  
ONE TIME GENERATION: False  
TRANSPORTS OWN WASTE: False  
TRANSPORTS OTHRS WASTE: False  
RECYCLER ONSITE: False  
TRANSFER FACILITY: False  
OTHER EXEMPTION: Not reported  
UW BATTERY GEN: False  
USED OIL TRANSPORTER: False  
USED OIL TRANSFER FACILITY: False  
USED OIL PROCESSOR: False  
USED OIL REREFINER: False  
USED OIL FUEL MRKTR DIRECTS SHPMNTS: False  
USED OIL FUEL MRKTR MEETS SPECS: False

**UST:**

Facility ID: 8752343  
Site ID: 9675  
Install Date: 12/31/1964 00:00:00  
Capacity: Not reported  
Status: Removed  
Tank Name: 1  
Substance: Leaded Gasoline  
Compartment #: 1  
Tank ID: 2008  
Comartment ID: 2052  
Decimal Latitude: 45.62278  
Decimal Longitude: -122.67917  
Ecology Region: South Western

Facility ID: 8752343  
Site ID: 9675  
Install Date: 12/31/1964 00:00:00  
Capacity: Not reported  
Status: Removed  
Tank Name: 3  
Substance: Heating Fuel  
Compartment #: 1  
Tank ID: 2074  
Comartment ID: 2118  
Decimal Latitude: 45.62278  
Decimal Longitude: -122.67917  
Ecology Region: South Western

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

Database(s)  
EDR ID Number  
EPA ID Number

**BOISE CASCADE VANCOUVER (Continued)**

**1000378977**

Facility ID: 8752343  
Site ID: 9675  
Install Date: 12/31/1964 00:00:00  
Capacity: Not reported  
Status: Removed  
Tank Name: 2  
Substance: Hazardous Substance  
Compartment #: 1  
Tank ID: 2101  
Comartment ID: 2145  
Decimal Latitude: 45.62278  
Decimal Longitude: -122.67917  
Ecology Region: South Western

**I47  
ESE  
1/4-1/2  
1938 ft.**

**VANCOUVER AVIATION  
101 E RESERVE ST  
VANCOUVER, WA 98661**

**WA UST U003353629  
N/A**

**Site 3 of 3 in cluster I**

**Relative:  
Higher**

UST:  
Facility ID: 43333254  
Site ID: 1618  
Install Date: 1/1/1977 00:00:00  
Capacity: 10,000 to 19,999 Gallons  
Status: Operational  
Tank Name: 1  
Substance: Aviation Fuel  
Compartment #: 1  
Tank ID: 4377  
Comartment ID: 4462  
Decimal Latitude: 45.62308  
Decimal Longitude: -122.65641  
Ecology Region: South Western

**Actual:  
30 ft.**

Facility ID: 43333254  
Site ID: 1618  
Install Date: 1/1/1976 00:00:00  
Capacity: 10,000 to 19,999 Gallons  
Status: Operational  
Tank Name: 2  
Substance: Unleaded Gasoline  
Compartment #: 1  
Tank ID: 4446  
Comartment ID: 4533  
Decimal Latitude: 45.62308  
Decimal Longitude: -122.65641  
Ecology Region: South Western

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**VANCOUVER AVIATION (Continued)**

**U003353629**

Facility ID: 43333254  
 Site ID: 1618  
 Install Date: 1/1/1977 00:00:00  
 Capacity: 10,000 to 19,999 Gallons  
 Status: Operational  
 Tank Name: 3  
 Substance: Unleaded Gasoline  
 Compartment #: 1  
 Tank ID: 4311  
 Comartment ID: 4392  
 Decimal Latitude: 45.62308  
 Decimal Longitude: -122.65641  
 Ecology Region: South Western

**L48  
 NNW  
 1/4-1/2  
 1945 ft.**

**GEM EQUIPMENT  
 1505 BROADWAY  
 VANCOUVER, WA 98663**

**WA ICR S103512230  
 N/A**

**Site 1 of 2 in cluster L**

**Relative:  
 Higher**

WA ICR:  
 Date Ecology Received Report: 09/19/1996  
 Contaminants Found at Site: Petroleum products  
 Media Contaminated: Soil  
 Cause of Contamination: Tank  
 Region: South Western  
 Type of Report Ecology Received: Final cleanup report  
 Site Register Issue: 94-36  
 County Code: 6.00000  
 Contact: Not reported  
 Report Title: Not reported

**Actual:  
 -999 ft.**

**L49  
 NNW  
 1/4-1/2  
 1945 ft.**

**KYUNGSHIN CHOI/MATTHIEU'S CAR CARE  
 1505 BROADWAY  
 VANCOUVER, WA 98663**

**WA LUST U003353309  
 WA UST N/A**

**Site 2 of 2 in cluster L**

**Relative:  
 Higher**

LUST:  
 Facility ID: 11748  
 Facility Status: Awaiting Cleanup  
 Release ID: 3151  
 Release Notification Date: 12/27/1991 00:00:00  
 Release Status Date: 12/27/1991 00:00:00  
 Alternate Name: GEM EQUIPMENT  
 Lat/Lon: 45.63245 / -122.67126  
 Affected Media: Soil  
 FS ID: 75145467  
 Site Response Code Unit: SW  
  
 Facility ID: 11748  
 Facility Status: Cleanup Started  
 Release ID: 3151  
 Release Notification Date: 12/27/1991 00:00:00  
 Release Status Date: 9/15/1996 00:00:00  
 Alternate Name: GEM EQUIPMENT  
 Lat/Lon: 45.63245 / -122.67126

**Actual:  
 -999 ft.**

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

**KYUNGSHIN CHOI/MATTHIEU'S CAR CARE (Continued)**

**U003353309**

Affected Media: Soil  
FS ID: 75145467  
Site Response Code Unit: SW  
  
Facility ID: 11748  
Facility Status: Reported Cleaned Up  
Release ID: 3151  
Release Notification Date: 12/27/1991 00:00:00  
Release Status Date: 9/26/1996 00:00:00  
Alternate Name: GEM EQUIPMENT  
Lat/Lon: 45.63245 / -122.67126  
Affected Media: Soil  
FS ID: 75145467  
Site Response Code Unit: SW

UST:

Facility ID: 75145467  
Site ID: 11748  
Install Date: 12/31/1964 00:00:00  
Capacity: Not reported  
Status: Removed  
Tank Name: 2  
Substance: Leaded Gasoline  
Compartment #: 1  
Tank ID: 14990  
Comartment ID: 15216  
Decimal Latitude: 45.63245  
Decimal Longitude: -122.67126  
Ecology Region: South Western

Facility ID: 75145467  
Site ID: 11748  
Install Date: 12/31/1964 00:00:00  
Capacity: Not reported  
Status: Removed  
Tank Name: 1  
Substance: Unleaded Gasoline  
Compartment #: 1  
Tank ID: 15044  
Comartment ID: 15270  
Decimal Latitude: 45.63245  
Decimal Longitude: -122.67126  
Ecology Region: South Western

50 CLARK COLLEGE  
NE 1800 E MCLOUGHLIN BLVD  
1/2-1 VANCOUVER, WA 98663  
2874 ft.

RCRA-SQG 1000363240  
FINDS WAD134978048  
WA UST  
WA MANIFEST  
WA ICR

Relative:  
Higher

Actual:  
-999 ft.

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

MAP FINDINGS

**CLARK COLLEGE (Continued)**

EDR ID Number  
 EPA ID Number

Database(s)

**1000363240**

RCRAInfo:

Owner: WA STATE  
 (360)992-2251  
 EPA ID: WAD134978048  
 Contact: Not reported  
 Classification: Conditionally Exempt Small Quantity Generator  
 TSDF Activities: Not reported  
 Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:  
 RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.  
 WA-DOEFSIS (Washington - Department Of Ecology Facility / Site Identification System) is the Department of Ecology's Facility/Site identification system that provides a means to query and display data maintained by the Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the departments Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

WA ICR:

Date Ecology Received Report: 07/13/1992  
 Contaminants Found at Site: Petroleum products  
 Media Contaminated: Soil  
 Cause of Contamination: Tank  
 Region: South Western  
 Type of Report Ecology Received: Final cleanup report  
 Site Register Issue: 92-28  
 County Code: 6.00000  
 Contact: Not reported  
 Report Title: Not reported

WA MANIFEST:

Facility Site ID Number: 94652873  
 Permit by Rule: False  
 Treatment by Generator: False  
 Mixed radioactive waste: False  
 Importer of hazardous waste: False  
 Immediate recycler: False  
 Treatment/Storage/Disposal/Recycling Facility: False  
 Generator of dangerous fuel waste: False  
 Generator marketing to burner: False  
 "Other marketers (i.e., blender, distributor, etc.)": False  
 Utility boiler burner: False  
 Industry boiler burner: False  
 Industrial Furnace: False  
 Smelter deferral: False  
 Universal waste - batteries - generate: False  
 Universal waste - thermostats - generate: False  
 Universal waste - mercury - generate: False  
 Universal waste - lamps - generate: False  
 Universal waste - batteries - accumulate: False  
 Universal waste - thermostats - accumulate: False  
 Universal waste - mercury - accumulate: False

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

CLARK COLLEGE (Continued)

1000363240

Universal waste - lamps - accumulate: False  
Destination Facility for Universal Waste: False  
Off-specification used oil burner - utility boiler: False  
Off-specification used oil burner - industrial boiler: False  
Off-specification used oil burner - industrial furnace: False  
EPA ID: WAD134978048  
Facility Address 2: Not reported  
TAX REG NBR: 916001117  
NAICS CD: 61121  
BUSINESS TYPE: Not reported  
MAIL NAME: WA CLC  
MAIL ADDR LINE1: 1800 E McLoughlin Blvd  
MAIL ADDR LINE2: MS 7  
MAIL CITY,ST,ZIP: VANCOUVER, WA 98663-3509  
MAIL COUNTRY: UNITED STATES  
LEGAL ORG NAME: WA State  
LEGAL ORG TYPE: State  
LEGAL ADDR LINE1: 1800 E McLoughlin Blvd  
LEGAL ADDR LINE2: MS 1  
LEGAL CITY,ST,ZIP: VANCOUVER, WA 98663-3509  
LEGAL COUNTRY: UNITED STATES  
LEGAL PHONE NBR: (360)992-2251  
LEGAL EFFECTIVE DATE: 09/05/96  
LAND ORG NAME: WA State  
LAND ORG TYPE: State  
LAND PERSON NAME: Not reported  
LAND ADDR LINE1: 1800 E McLoughlin Blvd  
LAND ADDR LINE2: MS 1  
LAND CITY,ST,ZIP: VANCOUVER, WA 98663-3509  
LAND COUNTRY: UNITED STATES  
LAND PHONE NBR: (360)992-2251  
OPERATOR ORG NAME: Clark College  
OPERATOR ORG TYPE: State  
OPERATOR ADDR LINE1: 1800 E MCLOUGHLIN BLVD  
OPERATOR CITY,ST,ZIP: VANCOUVER, WA 98663-3509  
OPERATOR COUNTRY: UNITED STATES  
OPERATOR PHONE NBR: (360)992-2492  
OPERATOR EFFECTIVE DATE: 09/05/96  
SITE CONTACT NAME: Rebecca Wale  
SITE CONTACT ADDR LINE1: 1800 E McLoughlin Blvd  
SITE CONTACT ADDR LINE2: MS 7  
SITE CONTACT ZIP: VANCOUVER, WA 98663-3509  
SITE CONTACT COUNTRY: UNITED STATES  
SITE CONTACT PHONE NBR: (360)992-2251  
SITE CONTACT EMAIL: Not reported  
FORM CONTACT NAME: Rebecca Wale  
FORM CONTACT ADDR LINE1: 1800 E McLoughlin Blvd  
FORM CONTACT ADDR LINE2: MS 7  
FORM CONTACT CITY,ST,ZIP: VANCOUVER, WA 98663-3509  
FORM CONTACT COUNTRY: UNITED STATES  
FORM CONTACT PHONE NBR: (360)992-2251  
FORM CONTACT EMAIL: rwale@clark.edu  
GEN STATUS CD: SQG  
MONTHLY GENERATION: False  
BATCH GENERATION: False  
ONE TIME GENERATION: False  
TRANSPORTS OWN WASTE: False

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

Database(s)  
EPA ID Number  
EDR ID Number

**CLARK COLLEGE (Continued)**

**1000363240**

TRANSPORTS OTHRS WASTE: False  
RECYCLER ONSITE: False  
TRANSFER FACILITY: False  
OTHER EXEMPTION: Not reported  
UW BATTERY GEN: False  
USED OIL TRANSPORTER: False  
USED OIL TRANSFER FACILITY: False  
USED OIL PROCESSOR: False  
USED OIL REREFINER: False  
USED OIL FUEL MRKTR DIRECTS SHPMNTS: False  
USED OIL FUEL MRKTR MEETS SPECS: False

UST:

Facility ID: 94652873  
Site ID: 97646  
Install Date: 12/31/1964 00:00:00  
Capacity: 111 TO 1,100 Gallons  
Status: Removed  
Tank Name: AA-4  
Substance: Used Oil/Waste Oil  
Compartment #: 1  
Tank ID: 23751  
Comartment ID: 24081  
Decimal Latitude: 45.63281  
Decimal Longitude: -122.65249  
Ecology Region: South Western

Facility ID: 94652873  
Site ID: 97646  
Install Date: 12/31/1964 00:00:00  
Capacity: 111 TO 1,100 Gallons  
Status: Removed  
Tank Name: AA-1  
Substance: Used Oil/Waste Oil  
Compartment #: 1  
Tank ID: 23439  
Comartment ID: 23764  
Decimal Latitude: 45.63281  
Decimal Longitude: -122.65249  
Ecology Region: South Western

Facility ID: 94652873  
Site ID: 97646  
Install Date: 12/31/1964 00:00:00  
Capacity: Not reported  
Status: Exempt  
Tank Name: AA-3  
Substance: Heating Fuel  
Compartment #: 1  
Tank ID: 23552  
Comartment ID: 23880  
Decimal Latitude: 45.63281  
Decimal Longitude: -122.65249  
Ecology Region: South Western

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**CLARK COLLEGE (Continued)**

**1000363240**

Facility ID: 94652873  
 Site ID: 97646  
 Install Date: 12/31/1964 00:00:00  
 Capacity: 111 TO 1,100 Gallons  
 Status: Removed  
 Tank Name: AA-2  
 Substance: Used Oil/Waste Oil  
 Compartment #: 1  
 Tank ID: 23685  
 Comartment ID: 24015  
 Decimal Latitude: 45.63281  
 Decimal Longitude: -122.65249  
 Ecology Region: South Western

Facility ID: 94652873  
 Site ID: 97646  
 Install Date: 12/31/1964 00:00:00  
 Capacity: 111 TO 1,100 Gallons  
 Status: Removed  
 Tank Name: WAREHOUSE  
 Substance: Unleaded Gasoline  
 Compartment #: 1  
 Tank ID: 16812  
 Comartment ID: 17057  
 Decimal Latitude: 45.63281  
 Decimal Longitude: -122.65249  
 Ecology Region: South Western

Facility ID: 94652873  
 Site ID: 97646  
 Install Date: 12/31/1964 00:00:00  
 Capacity: 111 TO 1,100 Gallons  
 Status: Removed  
 Tank Name: DB  
 Substance: Used Oil/Waste Oil  
 Compartment #: 1  
 Tank ID: 44309  
 Comartment ID: 44926  
 Decimal Latitude: 45.63281  
 Decimal Longitude: -122.65249  
 Ecology Region: South Western

**51  
 NNW  
 1/2-1  
 2938 ft.**

**HOESLY AUTO SERVICE INDIVIDUAL  
 210 W MCLOUGHLIN BV  
 VANCOUVER, WA 98660**

**WA LUST U003353058  
 WA UST N/A  
 WA ICR**

**Relative:  
 Higher**

LUST:  
 Facility ID: 10664  
 Facility Status: Awaiting Cleanup  
 Release ID: 565673  
 Release Notification Date: 4/16/2001 00:00:00  
 Release Status Date: 4/16/2001 00:00:00  
 Alternate Name: Not reported  
 Lat/Lon: 45.634869 / -122.673858  
 Affected Media: Soil  
 FS ID: 95266254  
 Site Response Code Unit: SW

**Actual:  
 -999 ft.**

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

HOESLY AUTO SERVICE INDIVIDUAL (Continued)

EDR ID Number  
EPA ID Number

Database(s)

U003353058

Facility ID: 10664  
Facility Status: Cleanup Started  
Release ID: 565673  
Release Notification Date: 4/16/2001 00:00:00  
Release Status Date: 9/21/2001 00:00:00  
Alternate Name: Not reported  
Lat/Lon: 45.634869 / -122.673858  
Affected Media: Soil  
FS ID: 95266254  
Site Response Code Unit: SW

Facility ID: 10664  
Facility Status: Reported Cleaned Up  
Release ID: 565673  
Release Notification Date: 4/16/2001 00:00:00  
Release Status Date: 10/23/2001 00:00:00  
Alternate Name: Not reported  
Lat/Lon: 45.634869 / -122.673858  
Affected Media: Soil  
FS ID: 95266254  
Site Response Code Unit: SW

WA ICR:

Date Ecology Received Report: 06/06/2001  
Contaminants Found at Site: Petroleum products  
Media Contaminated: Soil  
Cause of Contamination: Tank  
Region: South Western  
Type of Report Ecology Received: Interim cleanup report  
Site Register Issue: 98-38  
County Code: 6.00000  
Contact: Not reported  
Report Title: Decommissioning of Used Oil UST

Date Ecology Received Report: 10/23/2001  
Contaminants Found at Site: Petroleum products  
Media Contaminated: Soil  
Cause of Contamination: Tank  
Region: South Western  
Type of Report Ecology Received: Final cleanup report  
Site Register Issue: 98-41  
County Code: 6.00000  
Contact: Not reported  
Report Title: Soil Cleanup Activities

UST:

Facility ID: 95266254  
Site ID: 10664  
Install Date: 12/31/1964 00:00:00  
Capacity: 111 TO 1,100 Gallons  
Status: Removed  
Tank Name: 1  
Substance: Used Oil/Waste Oil  
Compartment #: 1  
Tank ID: 7821  
Comartment ID: 7959  
Decimal Latitude: 45.63487

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

HOESLY AUTO SERVICE INDIVIDUAL (Continued)

EDR ID Number  
EPA ID Number

Database(s)

Decimal Longitude: -122.67386  
Ecology Region: South Western

U003353058

52  
NNW  
1/2-1  
3087 ft.

CITY OF VANCOUVER  
1912 MAIN  
VANCOUVER, WA 98660

WA LUST S101134795  
N/A

Relative:  
Higher

LUST:

Actual:  
-999 ft.

Facility ID: 200422  
Facility Status: Awaiting Cleanup  
Release ID: 5318  
Release Notification Date: 7/27/1994 00:00:00  
Release Status Date: 8/30/1994 00:00:00  
Alternate Name: ABANDON TANK SITE  
Lat/Lon: 45.63626 / -122.67143  
Affected Media: Soil  
FS ID: 52841299  
Site Response Code Unit: SW

Facility ID: 200422  
Facility Status: Cleanup Started  
Release ID: 5318  
Release Notification Date: 7/27/1994 00:00:00  
Release Status Date: 7/27/1994 00:00:00  
Alternate Name: ABANDON TANK SITE  
Lat/Lon: 45.63626 / -122.67143  
Affected Media: Soil  
FS ID: 52841299  
Site Response Code Unit: SW

Facility ID: 200422  
Facility Status: Reported Cleaned Up  
Release ID: 5318  
Release Notification Date: 7/27/1994 00:00:00  
Release Status Date: 8/30/1994 00:00:00  
Alternate Name: ABANDON TANK SITE  
Lat/Lon: 45.63626 / -122.67143  
Affected Media: Soil  
FS ID: 52841299  
Site Response Code Unit: SW

53  
NW  
1/2-1  
3156 ft.

WHATLEY DECANT STATION (VACTOR WASTE PROCESSING)  
1408 FRANKLIN AVE  
VANCOUVER, WA 98666

WA SWF/LF S103350830  
N/A

Relative:  
Higher

LF:

Actual:  
-999 ft.

Facility ID: SCC4  
Contact: Carl Oman  
Name Change: False  
Ownership: Public  
Type: Other, See comment section for determination  
Company: Clark County Public Works  
Contact Title: Not reported  
Facility Phone: (360) 397-2446  
Facility Fax: Not reported  
Class Code: O

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**WHATLEY DECANT STATION (VACTOR WASTE PROCESSING) (Continued)**

**S103350830**

Class: Ancillary - Other  
 Class Type: False  
 Sec/Twn/Rng: Not reported  
 Class Comment: new 7/98 - other classification  
 Region: STATE  
 Status: Mailing Address: PO Box 9810

**54  
 SE  
 1/2-1  
 3244 ft.**

**COLUMBIA BUSINESS PARK BLDG 41 BAY 3  
 3001 SE COLUMBIA WAY BLDG 41 BAY 3  
 VANCOUVER, WA 98661**

**WA CSCSL NFA**

**U003759255  
 N/A**

**Relative:  
 Higher**

WA NFA:

Facility/Site Id : 27945  
 Ecology Status : Independent Remedial Action  
 Independent Status Code : Final Independant RA Report received  
 WARM Bin Number : Not reported  
 NFA Code : NFA after Assesment IRAP or VCP  
 NFA Date : 7/17/1996 00:00:00  
 Program Plan Code : 3

**Actual:  
 26 ft.**

**55  
 East  
 1/2-1  
 3348 ft.**

**AUTOMOTIVE SERVICES INC CARWASH SITE  
 2210 NW MILL PLAIN BLVD  
 VANCOUVER, WA 98660**

**WA CSCSL**

**S105152343  
 N/A**

**Relative:  
 Higher**

SHWS:

Facility ID: 96134765  
 MTBE Code: Not reported  
 Prog plan code : 4  
 UXO Code : Not reported  
 Lat/Long : 45.639443999999997 / -122.693888  
 Responsible Unit: Southwest Region  
 Ecology Site Status relative to the MTCA cleanup process:  
     Independent Remedial Action  
 Independent Site Status - those sites undergoing an independent cleanup:  
     Independent Site Assessment of Interim Remedial Action Report received  
 WARM Bin Number indicates the outcome of the Washington Ranking Model (WARM):  
 Affected Media Status: C (Confirmed) - The presence of hazardous substances above MTCA cleanup levels has  
     been confirmed by laboratory analysis (or field determination in the case of  
     petroleum contamination)  
 Affected Media : Ground Water  
 Arsenic Code: Not reported  
 Base/Neutral/Acid Organics: Not reported  
 Halogenated Organic Compounds: Suspected to be present  
 EPA Priority Pollutants - Metals and Cyanide: Not reported  
 Metals - Other non-priority pollutant medals: Not reported  
 Polychlorinated biPhenyls (PCBs): Not reported  
 Pesticides: Not reported  
 Petroleum Products: Confirmed above MTCA cleanup levels  
 Phenolic Compounds: Not reported  
 Non-Halogenated Solvents: Not reported  
 Dioxin: Not reported  
 Polynuclear Aromatic Hydrocarbons (PAH): Not reported  
 Reactive Wastes: Not reported  
 Corrosive Wastes: Not reported  
 Radioactive Wastes: Not reported  
 Asbestos: Not reported



MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**56**  
**SE**  
**1/2-1**  
**3414 ft.**

**HILLMAN PROPERTIES**  
**2000 E COLUMBIA WAY BLDG 39**  
**VANCOUVER, WA 98661**

**RCRA-SQG**  
**FINDS**  
**RAATS**  
**CORRACTS**  
**CERC-NFRAP**

**1000289869**  
**WAD980979751**

**Relative:**  
**Higher**

CERCLIS-NFRAP Classification Data:

**Actual:**  
**25 ft.**

Federal Facility: Not a Federal Facility  
 Non NPL Code: NFRAP  
 NPL Status: Not on the NPL

CERCLIS-NFRAP Assessment History:  
 Assessment: DISCOVERY  
 Assessment: PRELIMINARY ASSESSMENT  
 Assessment: ARCHIVE SITE

Completed: 09/05/1990  
 Completed: 09/27/1990  
 Completed: 09/27/1990

CERCLIS-NFRAP Alias Name(s):

NORTHWEST COLUMBIA  
 NORTHWEST COLUMBIA

CORRACTS Data:

EPA Id: WAD980979751  
 Region: 10  
 Area Name: ENTIRE FACILITY  
 Actual Date: 08/01/1990  
 Corrective Action: CA070NO - RFA Determination Of Need For An RFI, RFI is Not Necessary  
 2002 NAICS Title: Other Activities Related to Real Estate

EPA Id: WAD980979751  
 Region: 10  
 Area Name: ENTIRE FACILITY  
 Actual Date: 08/21/1991  
 Corrective Action: CA999NF - Corrective Action Process Terminated, No Further Action  
 2002 NAICS Title: Other Activities Related to Real Estate

EPA Id: WAD980979751  
 Region: 10  
 Area Name: ENTIRE FACILITY  
 Actual Date: 08/21/1991  
 Corrective Action: CA075LO - CA Prioritization, Facility or area was assigned a low corrective action priority  
 2002 NAICS Title: Other Activities Related to Real Estate

EPA Id: WAD980979751  
 Region: 10  
 Area Name: ENTIRE FACILITY  
 Actual Date: 12/08/1995  
 Corrective Action: CA225NR - Stabilization Measures Evaluation, This facility is , not amenable to stabilization activity at the, present time for reasons other than (1) it appears to be technically, infeasible or inappropriate (NF) or (2) there is a lack of technical, information (IN). Reasons for this conclusion may be the status of, closure at the facility, the degree of risk, timing considerations, the status of corrective action work at the facility, or other, administrative considerations  
 2002 NAICS Title: Other Activities Related to Real Estate

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

MAP FINDINGS

**HILLMAN PROPERTIES (Continued)**

EDR ID Number  
 EPA ID Number

Database(s)

**1000289869**

RCRAInfo Corrective Action Summary:

- Event: Stabilization Measures Evaluation, This facility is not amenable to stabilization activity at the present time for reasons other than 1) it appears to be technically infeasible or inappropriate (NF) or 2) there is a lack of technical information (IN). Reasons for this conclusion may be the status of closure at the facility, the degree of risk, timing considerations, the status of corrective action work at the facility, or other administrative considerations.
- Event Date: 12/08/1995
- Event: CA Prioritization, Facility or area was assigned a low corrective action priority.
- Event Date: 08/21/1991
- Event: Corrective Action Process Terminated, No Further Action
- Event Date: 08/21/1991
- Event: RFA Determination Of Need For An RFI, RFI is Not Necessary;
- Event Date: 08/01/1990

RCRAInfo:

- Owner: HILLMAN PROPERTIES NW
- EPA ID: WAD980979751
- Contact: CHRISTINE WAMSLEY  
(253) 693-3644
- Classification: Small Quantity Generator
- TSDF Activities: Not reported
- Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

WA-DOEFSIS (Washington - Department Of Ecology Facility / Site Identification System) is the Department of Ecology's Facility/Site identification system that provides a means to query and display data maintained by the Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the departments Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

57  
 WNW  
 1/2-1  
 3876 ft.

**VANCOUVER GAS MANUFACTURING SITE  
 9TH AND LINCOLN STS  
 VANCOUVER, WA 98660**

**Manufactured Gas Plants 1008408712  
 N/A**

**Relative:  
 Higher**

Alternate Name: INDEPENDENT LIGHT AND WATER CO; WASHINGTON OREGON CORPORATION; VANCOUVER GAS CO.

**Actual:  
 -999 ft.**

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**58**  
**WNW**  
**1/2-1**  
**4086 ft.**

**PRI NORTHWEST INC VANCOUVER**  
**1300 W 8TH ST**  
**VANCOUVER, WA 98660**

**RCRA-SQG**  
**WA CSCSL**  
**FINDS**  
**WA VCP**

**1000118518**  
**WAD991281940**

**Relative:**  
**Higher**

RCRAInfo:

Owner: PRI NORTHWEST INC  
 EPA ID: WAD991281940

**Actual:**  
**-999 ft.**

Contact: WILLIAM WILCOX  
 (253) 927-1334

Classification: Small Quantity Generator  
 TSDF Activities: Not reported

Violation Status: No violations found

**FINDS:**

Other Pertinent Environmental Activity Identified at Site:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

WA-DOEFSIS (Washington - Department Of Ecology Facility / Site Identification System) is the Department of Ecology's Facility/Site identification system that provides a means to query and display data maintained by the Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the departments Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

**SHWS:**

Facility ID: 24972725  
 MTBE Code: Not reported  
 Prog plan code : 4  
 UXO Code : Not reported  
 Lat/Long : 45.627420000000001 / -122.68404

Responsible Unit: Southwest Region  
 Ecology Site Status relative to the MTCA cleanup process:  
 Independent Remedial Action

Independent Site Status - those sites undergoing an independent cleanup:  
 Final Independent Remedial Action Report received

WARM Bin Number indicates the outcome of the Washington Ranking Model (WARM):

Affected Media Status: C (Confirmed) - The presence of hazardous substances above MTCA cleanup levels has been confirmed by laboratory analysis (or field determination in the case of petroleum contamination)

Affected Media : Ground Water

Arsenic Code: Not reported

Base/Neutral/Acid Organics: Not reported

Halogenated Organic Compounds: Not reported

EPA Priority Pollutants - Metals and Cyanide: Not reported

Metals - Other non-priority pollutant medals: Not reported

Polychlorinated biPhenyls (PCBs): Not reported

Pesticides: Not reported

Petroleum Products: Confirmed above MTCA cleanup levels

Phenolic Compounds: Not reported

Non-Halogenated Solvents: Not reported

Dioxin: Not reported

Polynuclear Aromatic Hydrocarbons (PAH): Not reported

Reactive Wastes: Not reported

Corrosive Wastes: Not reported

Radioactive Wastes: Not reported

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**PRI NORTHWEST INC VANCOUVER (Continued)**

**1000118518**

Asbestos: Not reported  
 Conventional Contaminants, Organic: Not reported  
 Conventional Contaminants, Inorganic: Not reported  
 Lat/Long : 45° 37' 39.300000000000004" / 122° 41' 7.400000000000004"  
 Media Id : 8670  
 Media Type Description : Groundwater  
 Media Status Description : Confirmed  
 Tributyl Tin Contaminant Group : Not reported  
 Bioassay/benthic Failures Contam group : Not reported  
 Wood Debris Contaminant Group : Not reported  
 Other Deleterious Substance Group : Not reported

Facility ID: 24972725  
 MTBE Code: Not reported  
 Prog plan code : 4  
 UXO Code : Not reported  
 Lat/Long : 45.627420000000001 / -122.68404  
 Responsible Unit: Southwest Region  
 Ecology Site Status relative to the MTCA cleanup process:

Independent Remedial Action  
 Independent Site Status - those sites undergoing an independent cleanup:  
 Final Independent Remedial Action Report received

WARM Bin Number indicates the outcome of the Washington Ranking Model (WARM):  
 Affected Media Status: C (Confirmed) - The presence of hazardous substances above MTCA cleanup levels has been confirmed by laboratory analysis (or field determination in the case of petroleum contamination)

Affected Media : Soil  
 Arsenic Code: Not reported  
 Base/Neutral/Acid Organics: Not reported  
 Halogenated Organic Compounds: Not reported  
 EPA Priority Pollutants - Metals and Cyanide: Not reported  
 Metals - Other non-priority pollutant medals: Not reported  
 Polychlorinated biPhenyls (PCBs): Not reported  
 Pesticides: Not reported  
 Petroleum Products: Confirmed above MTCA cleanup levels  
 Phenolic Compounds: Not reported  
 Non-Halogenated Solvents: Not reported  
 Dioxin: Not reported  
 Polynuclear Aromatic Hydrocarbons (PAH): Below MTCA cleanup levels  
 Reactive Wastes: Not reported  
 Corrosive Wastes: Not reported  
 Radioactive Wastes: Not reported  
 Asbestos: Not reported  
 Conventional Contaminants, Organic: Not reported  
 Conventional Contaminants, Inorganic: Not reported  
 Lat/Long : 45° 37' 39.300000000000004" / 122° 41' 7.400000000000004"  
 Media Id : 8669  
 Media Type Description : Soil  
 Media Status Description : Confirmed  
 Tributyl Tin Contaminant Group : Not reported  
 Bioassay/benthic Failures Contam group : Not reported  
 Wood Debris Contaminant Group : Not reported  
 Other Deleterious Substance Group : Not reported

VCP:  
 Facility ID : 24972725  
 WARM BIN # : Not reported  
 Ecology Status : Independent Remedial Action

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

MAP FINDINGS

**PRI NORTHWEST INC VANCOUVER (Continued)**

EDR ID Number  
 EPA ID Number

**1000118518**

NFA Code : Not reported  
 Program Plan Code : 4  
  
 Facility ID : 24972725  
 WARM BIN # : Not reported  
 Ecology Status : Independent Remedial Action  
 NFA Code : Not reported  
 Program Plan Code : 4

**59**  
**WNW**  
**1/2-1**  
**4259 ft.**

**EMERALD PETROLEUM SERVICES VANCOUVER**  
**1300 W 12TH ST**  
**VANCOUVER, WA 98660**

**RCRA-SQG** **1000388212**  
**WA CSCSL** **WAD068794387**  
**FINDS**  
**WA UST**  
**CERC-NFRAP**  
**WA VCP**  
**WA MANIFEST**

**Relative:**  
**Higher**

**Actual:**  
**-999 ft.**

CERCLIS-NFRAP Classification Data:  
 Federal Facility: Not a Federal Facility  
 Non NPL Code: NFRAP  
 NPL Status: Not on the NPL  
 CERCLIS-NFRAP Assessment History:  
 Assessment: DISCOVERY Completed: 02/11/1981  
 Assessment: PRELIMINARY ASSESSMENT Completed: 11/08/1985  
 Assessment: ARCHIVE SITE Completed: 11/08/1985

RCRAInfo:  
 Owner: EMERALD SERVICES INC  
 206832-3000  
 EPA ID: WAD068794387  
 Contact: Not reported  
 Classification: Small Quantity Generator  
 TSDF Activities: Not reported

Violation Status: Violations exist

Regulation Violated: Not reported  
 Area of Violation: GENERATOR-ALL REQUIREMENTS (OVERSIGHT)  
 Date Violation Determined: 11/28/1984  
 Actual Date Achieved Compliance: 07/04/1994  
  
 Enforcement Action: WRITTEN INFORMAL  
 Enforcement Action Date: 12/19/1984  
 Penalty Type: Not reported  
  
 Regulation Violated: Not reported  
 Area of Violation: GENERATOR-OTHER REQUIREMENTS  
 Date Violation Determined: 02/06/1984  
 Actual Date Achieved Compliance: 07/04/1994

There are 2 violation record(s) reported at this site:

<u>Evaluation</u>	<u>Area of Violation</u>	<u>Date of Compliance</u>
Compliance Evaluation Inspection	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)	19940704
Compliance Evaluation Inspection	GENERATOR-OTHER REQUIREMENTS	19940704

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**EMERALD PETROLEUM SERVICES VANCOUVER (Continued)**

**1000388212**

**FINDS:**

Other Pertinent Environmental Activity Identified at Site:

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

WA-DOEFSIS (Washington - Department Of Ecology Facility / Site Identification System) is the Department of Ecology's Facility/Site identification system that provides a means to query and display data maintained by the Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the departments Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

**SHWS:**

Facility ID:	47231541
MTBE Code:	Not reported
Prog plan code :	4
UXO Code :	Not reported
Lat/Long :	45.63044 / -122.6837
Responsible Unit:	Southwest Region
Ecology Site Status relative to the MTCA cleanup process:	Independent Remedial Action
Independent Site Status - those sites undergoing an independent cleanup:	Independent Site Assessment of Interim Remedial Action Report received
WARM Bin Number indicates the outcome of the Washington Ranking Model (WARM):	
Affected Media Status:	C (Confirmed) - The presence of hazardous substances above MTCA cleanup levels has been confirmed by laboratory analysis (or field determination in the case of petroleum contamination)
Affected Media :	Ground Water
Arsenic Code:	Not reported
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Confirmed above MTCA cleanup levels
EPA Priority Pollutants - Metals and Cyanide:	Not reported
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Pesticides:	Not reported
Petroleum Products:	Not reported
Phenolic Compounds:	Not reported
Non-Halogenated Solvents:	Not reported
Dioxin:	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Lat/Long :	45° 37' 49" / 122° 41' 1"
Media Id :	6685
Media Type Description :	Groundwater
Media Status Description :	Confirmed
Tibutyl Tin Contaminant Group :	Not reported
Bioassay/benthic Failures Contam group :	Not reported
Wood Debris Contaminant Group :	Not reported

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**EMERALD PETROLEUM SERVICES VANCOUVER (Continued)**

**1000388212**

Other Deleterious Substance Group : Not reported

Facility ID: 47231541  
 MTBE Code: Not reported  
 Prog plan code : 4  
 UXO Code : Not reported  
 Lat/Long : 45.63044 / -122.6837  
 Responsible Unit: Southwest Region  
 Ecology Site Status relative to the MTCA cleanup process:  
 Independent Remedial Action  
 Independent Site Status - those sites undergoing an independent cleanup:  
 Independent Site Assessment of Interim Remedial Action Report received  
 WARM Bin Number indicates the outcome of the Washington Ranking Model (WARM):  
 Affected Media Status: C (Confirmed) - The presence of hazardous substances above MTCA cleanup levels has  
 been confirmed by laboratory analysis (or field determination in the case of  
 petroleum contamination)

Affected Media : Soil

Arsenic Code: Not reported

Base/Neutral/Acid Organics: Not reported

Halogenated Organic Compounds: Not reported

EPA Priority Pollutants - Metals and Cyanide: Not reported

Metals - Other non-priority pollutant medals: Not reported

Polychlorinated biPhenyls (PCBs): Not reported

Pesticides: Not reported

Petroleum Products: Confirmed above MTCA cleanup levels

Phenolic Compounds: Not reported

Non-Halogenated Solvents: Not reported

Dioxin: Not reported

Polynuclear Aromatic Hydrocarbons (PAH): Not reported

Reactive Wastes: Not reported

Corrosive Wastes: Not reported

Radioactive Wastes: Not reported

Asbestos: Not reported

Conventional Contaminants, Organic: Not reported

Conventional Contaminants, Inorganic: Not reported

Lat/Long : 45° 37' 49" / 122° 41' 1"

Media Id : 6686

Media Type Description : Soil

Media Status Description : Confirmed

Tibutyl Tin Contaminant Group : Not reported

Bioassay/benthic Failures Contam group : Not reported

Wood Debris Contaminant Group : Not reported

Other Deleterious Substance Group : Not reported

VCP:

Facility ID : 47231541  
 WARM BIN # : Not reported  
 Ecology Status : Independent Remedial Action  
 NFA Code : Not reported  
 Program Plan Code : 4

Facility ID : 47231541  
 WARM BIN # : Not reported  
 Ecology Status : Independent Remedial Action  
 NFA Code : Not reported  
 Program Plan Code : 4

WA MANIFEST:

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation    Site

MAP FINDINGS

Database(s)    EDR ID Number  
 EPA ID Number

**EMERALD PETROLEUM SERVICES VANCOUVER (Continued)**

**1000388212**

Facility Site ID Number:        47231541  
 Permit by Rule:                    False  
 Treatment by Generator:        False  
 Mixed radioactive waste:        False  
 Importer of hazardous waste:   False  
 Immediate recycler:            False  
 Treatment/Storage/Disposal/Recycling Facility:    False  
 Generator of dangerous fuel waste:                  False  
 Generator marketing to burner:                      False  
 "Other marketers (i.e., blender, distributor, etc.)": False  
 Utility boiler burner:            False  
 Industry boiler burner:         False  
 Industrial Furnace:              False  
 Smelter defferal:                False  
 Universal waste - batteries - generate:            False  
 Universal waste - thermostats - generate:        False  
 Universal waste - mercury - generate:            False  
 Universal waste - lamps - generate:              False  
 Universal waste - batteries - accumulate:        False  
 Universal waste - thermostats - accumulate:    False  
 Universal waste - mercury - accumulate:        False  
 Universal waste - lamps - accumulate:           False  
 Destination Facility for Universal Waste:        False  
 Off-specification used oil burner - utility boiler: False  
 Off-specification used oil burner - industrial boiler: False  
 Off-specification used oil burner - industrial furnace: False  
 EPA ID:                            WAD068794387  
 Facility Address 2:                Not reported  
 TAX REG NBR:                    601797417  
 NAICS CD:                        56292  
 BUSINESS TYPE:                Not reported  
 MAIL NAME:                      Emerald Recycling  
 MAIL ADDR LINE1:                PO BOX 1306  
 MAIL CITY,ST,ZIP:               VANCOUVER, WA 98666  
 MAIL COUNTRY:                  UNITED STATES  
 LEGAL ORG NAME:                Emerald Services Inc  
 LEGAL ORG TYPE:                Private  
 LEGAL ADDR LINE1:               9010 E MARGINAL WAY S  
 LEGAL ADDR LINE2:               STE 200  
 LEGAL CITY,ST,ZIP:               SEATTLE, WA 98108  
 LEGAL COUNTRY:                UNITED STATES  
 LEGAL PHONE NBR:               (206)832-3000  
 LEGAL EFFECTIVE DATE:        10/04/99  
 LAND ORG NAME:                Emerald Services Inc  
 LAND ORG TYPE:                Private  
 LAND PERSON NAME:              Not reported  
 LAND ADDR LINE1:               9010 E MARGINAL WAY S  
 LAND ADDR LINE2:               STE 200  
 LAND CITY,ST,ZIP:               SEATTLE, WA 98108  
 LAND COUNTRY:                UNITED STATES  
 LAND PHONE NBR:               (206)832-3000  
 OPERATOR ORG NAME:            EMERALD SERVICES INC  
 OPERATOR ORG TYPE:            Private  
 OPERATOR ADDR LINE1:         9010 E MARGINAL WAY S  
 OPERATOR ADDR LINE2:         STE 200  
 OPERATOR CITY,ST,ZIP:         SEATTLE, WA 98108  
 OPERATOR COUNTRY:            UNITED STATES

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation    Site

MAP FINDINGS

Database(s)    EDR ID Number  
EPA ID Number

**EMERALD PETROLEUM SERVICES VANCOUVER (Continued)**

**1000388212**

OPERATOR PHONE NBR: (206)832-3000  
OPERATOR EFFECTIVE DATE: 08/01/01  
SITE CONTACT NAME: NESS AGUILAR  
SITE CONTACT ADDR LINE1: 9010 E MARGINAL WAY S  
SITE CONTACT ADDR LINE2: STE 200  
SITE CONTACT ZIP: SEATTLE, WA 98108  
SITE CONTACT COUNTRY: UNITED STATES  
SITE CONTACT PHONE NBR: (360) 903-8107  
SITE CONTACT EMAIL: nessa@emeraldnw.com  
FORM CONTACT NAME: MICHELLE LACKMAN  
FORM CONTACT ADDR LINE1: 9010 E MARGINAL WAY S  
FORM CONTACT ADDR LINE2: STE 200  
FORM CONTACT CITY,ST,ZIP: SEATTLE, WA 98108  
FORM CONTACT COUNTRY: UNITED STATES  
FORM CONTACT PHONE NBR: (206)832-3209  
FORM CONTACT EMAIL: michellel@emeraldnw.com  
GEN STATUS CD: MQG  
MONTHLY GENERATION: True  
BATCH GENERATION: False  
ONE TIME GENERATION: False  
TRANSPORTS OWN WASTE: False  
TRANSPORTS OTHRS WASTE: False  
RECYCLER ONSITE: False  
TRANSFER FACILITY: True  
OTHER EXEMPTION: Not reported  
UW BATTERY GEN: False  
USED OIL TRANSPORTER: False  
USED OIL TRANSFER FACILITY: False  
USED OIL PROCESSOR: False  
USED OIL REREFINER: False  
USED OIL FUEL MRKTR DIRECTS SHPMNTS: False  
USED OIL FUEL MRKTR MEETS SPECS: False

UST:

Facility ID: 47231541  
Site ID: 6418  
Install Date: 1/1/1974 00:00:00  
Capacity: 111 TO 1,100 Gallons  
Status: Exempt  
Tank Name: 1-G  
Substance: Heating Fuel  
Compartment #: 1  
Tank ID: 34333  
Comartment ID: 34831  
Decimal Latitude: 45.63044  
Decimal Longitude: -122.68370  
Ecology Region: South Western

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**EMERALD PETROLEUM SERVICES VANCOUVER (Continued)**

**1000388212**

Facility ID: 47231541  
 Site ID: 6418  
 Install Date: 10/1/1984 00:00:00  
 Capacity: 5,000 to 9,999 Gallons  
 Status: Removed  
 Tank Name: 3-L  
 Substance: Diesel  
 Compartment #: 1  
 Tank ID: 35543  
 Comartment ID: 36052  
 Decimal Latitude: 45.63044  
 Decimal Longitude: -122.68370  
 Ecology Region: South Western

Facility ID: 47231541  
 Site ID: 6418  
 Install Date: 12/31/1981 00:00:00  
 Capacity: 111 TO 1,100 Gallons  
 Status: Closed in Place  
 Tank Name: 2-S  
 Substance: Used Oil/Waste Oil  
 Compartment #: 1  
 Tank ID: 35870  
 Comartment ID: 36381  
 Decimal Latitude: 45.63044  
 Decimal Longitude: -122.68370  
 Ecology Region: South Western

**60  
 SE  
 1/2-1  
 4963 ft.**

**HILLMAN PROPERTIES NORTHWEST MARITIME  
 500 SE MARITIME BLDG 5  
 VANCOUVER, WA 98661**

**RCRA-SQG 1000289868  
 FINDS WAD092890342  
 RAATS  
 CORRACTS**

**Relative:  
 Higher**

CORRACTS Data:

**Actual:  
 30 ft.**

EPA Id: WAD092890342  
 Region: 10  
 Area Name: ENTIRE FACILITY  
 Actual Date: 02/10/1992  
 Corrective Action: CA999NF - Corrective Action Process Terminated, No Further Action  
 2002 NAICS Title: Other Activities Related to Real Estate

EPA Id: WAD092890342  
 Region: 10  
 Area Name: ENTIRE FACILITY  
 Actual Date: 08/01/1990  
 Corrective Action: CA070NO - RFA Determination Of Need For An RFI, RFI is Not Necessary  
 2002 NAICS Title: Other Activities Related to Real Estate

EPA Id: WAD092890342  
 Region: 10  
 Area Name: ENTIRE FACILITY  
 Actual Date: 08/01/1990  
 Corrective Action: CA075LO - CA Prioritization, Facility or area was assigned a low corrective action priority  
 2002 NAICS Title: Other Activities Related to Real Estate

EPA Id: WAD092890342

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

**HILLMAN PROPERTIES NORTHWEST MARITIME (Continued)**

EDR ID Number  
EPA ID Number

Database(s)

1000289868

Region: 10  
Area Name: ENTIRE FACILITY  
Actual Date: 12/08/1995  
Corrective Action: CA225NR - Stabilization Measures Evaluation, This facility is , not amenable to stabilization activity at the, present time for reasons other than (1) it appears to be technically, infeasible or inappropriate (NF) or (2) there is a lack of technical, information (IN). Reasons for this conclusion may be the status of, closure at the facility, the degree of risk, timing considerations, the status of corrective action work at the facility, or other, administrative considerations  
2002 NAICS Title: Other Activities Related to Real Estate

RCRAInfo Corrective Action Summary:

Event: Stabilization Measures Evaluation, This facility is not amenable to stabilization activity at the present time for reasons other than 1) it appears to be technically infeasible or inappropriate (NF) or 2) there is a lack of technical information (IN). Reasons for this conclusion may be the status of closure at the facility, the degree of risk, timing considerations, the status of corrective action work at the facility, or other administrative considerations.  
Event Date: 12/08/1995  
Event: Corrective Action Process Terminated, No Further Action  
Event Date: 02/10/1992  
Event: RFA Determination Of Need For An RFI, RFI is Not Necessary;  
Event Date: 08/01/1990  
Event: CA Prioritization, Facility or area was assigned a low corrective action priority.  
Event Date: 08/01/1990

RCRAInfo:

Owner: HILLMAN PROPERTIES NW  
EPA ID: WAD092890342  
Contact: Not reported  
Classification: Conditionally Exempt Small Quantity Generator  
TSDF Activities: Not reported

Violation Status: Violations exist

Regulation Violated: Not reported  
Area of Violation: TSD-CLOSURE/POST-CLOSURE REQUIREMENTS  
Date Violation Determined: 09/22/1987  
Actual Date Achieved Compliance: 04/02/1989  
Enforcement Action: FINAL 3008(A) COMPLIANCE ORDER  
Enforcement Action Date: 09/02/1988  
Penalty Type: Proposed Monetary Penalty  
Enforcement Action: INITIAL 3008(A) COMPLIANCE ORDER  
Enforcement Action Date: 06/30/1988  
Penalty Type: Proposed Monetary Penalty  
Regulation Violated: Not reported  
Area of Violation: TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS  
Date Violation Determined: 09/22/1987  
Actual Date Achieved Compliance: 11/02/1988  
Enforcement Action: FINAL 3008(A) COMPLIANCE ORDER  
Enforcement Action Date: 09/02/1988

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation    Site

MAP FINDINGS

Database(s)    EDR ID Number  
 EPA ID Number

**HILLMAN PROPERTIES NORTHWEST MARITIME (Continued)**

**1000289868**

Penalty Type:	Proposed Monetary Penalty
Enforcement Action:	INITIAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date:	06/30/1988
Penalty Type:	Proposed Monetary Penalty
Regulation Violated:	Not reported
Area of Violation:	TSD-OTHER REQUIREMENTS (OVERSIGHT)
Date Violation Determined:	09/22/1987
Actual Date Achieved Compliance:	10/02/1988
Enforcement Action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date:	09/02/1988
Penalty Type:	Proposed Monetary Penalty
Enforcement Action:	INITIAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date:	06/30/1988
Penalty Type:	Proposed Monetary Penalty
Regulation Violated:	Not reported
Area of Violation:	TSD-OTHER REQUIREMENTS (OVERSIGHT)
Date Violation Determined:	02/04/1985
Actual Date Achieved Compliance:	07/04/1994
Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	03/19/1985
Penalty Type:	Not reported

There are 4 violation record(s) reported at this site:

<u>Evaluation</u>	<u>Area of Violation</u>	<u>Date of Compliance</u>
Compliance Evaluation Inspection	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS	19890402
	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS	19881102
	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19881002
Compliance Evaluation Inspection	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS	19890402
	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS	19881102
	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19881002
Compliance Evaluation Inspection	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19940704

**FINDS:**

Other Pertinent Environmental Activity Identified at Site:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

WA-DOEFSIS (Washington - Department Of Ecology Facility / Site Identification System) is the Department of Ecology's Facility/Site identification system that provides a means to query and display data maintained by the Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the departments Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.



Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**BRAZIER FOREST INDUSTRIES (Continued)**

**1000443358**

Asbestos: Not reported  
 Conventional Contaminants, Organic: Not reported  
 Conventional Contaminants, Inorganic: Not reported  
 Lat/Long : 45° 37' 52.530000000000001" / 122° 41' 13.880000000000001"  
 Media Id : 7593  
 Media Type Description : Soil  
 Media Status Description : Confirmed  
 Tributyl Tin Contaminant Group : Not reported  
 Bioassay/benthic Failures Contam group : Not reported  
 Wood Debris Contaminant Group : Not reported  
 Other Deleterious Substance Group : Not reported

Facility ID: 33837982  
 MTBE Code: Not reported  
 Prog plan code : 4  
 UXO Code : Not reported  
 Lat/Long : 45.631256999999998 / -122.687188000000001

Responsible Unit: Southwest Region  
 Ecology Site Status relative to the MTCA cleanup process:  
 Independent Remedial Action  
 Independent Site Status - those sites undergoing an independent cleanup:  
 Independent Site Assessment of Interim Remedial Action Report received

WARM Bin Number indicates the outcome of the Washington Ranking Model (WARM):  
 Affected Media Status: C (Confirmed) - The presence of hazardous substances above MTCA cleanup levels has been confirmed by laboratory analysis (or field determination in the case of petroleum contamination)

Affected Media : Ground Water  
 Arsenic Code: Not reported  
 Base/Neutral/Acid Organics: Not reported  
 Halogenated Organic Compounds: Not reported  
 EPA Priority Pollutants - Metals and Cyanide: Not reported  
 Metals - Other non-priority pollutant medals: Not reported  
 Polychlorinated biPhenyls (PCBs): Not reported  
 Pesticides: Not reported  
 Petroleum Products: Confirmed above MTCA cleanup levels  
 Phenolic Compounds: Not reported  
 Non-Halogenated Solvents: Not reported  
 Dioxin: Not reported  
 Polynuclear Aromatic Hydrocarbons (PAH): Not reported  
 Reactive Wastes: Not reported  
 Corrosive Wastes: Not reported  
 Radioactive Wastes: Not reported  
 Asbestos: Not reported  
 Conventional Contaminants, Organic: Not reported  
 Conventional Contaminants, Inorganic: Not reported  
 Lat/Long : 45° 37' 52.530000000000001" / 122° 41' 13.880000000000001"  
 Media Id : 7592  
 Media Type Description : Groundwater  
 Media Status Description : Confirmed  
 Tributyl Tin Contaminant Group : Not reported  
 Bioassay/benthic Failures Contam group : Not reported  
 Wood Debris Contaminant Group : Not reported  
 Other Deleterious Substance Group : Not reported

VCP:  
 Facility ID : 33837982  
 WARM BIN # : Not reported  
 Ecology Status : Independent Remedial Action

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**BRAZIER FOREST INDUSTRIES (Continued)**

**1000443358**

NFA Code : Not reported  
 Program Plan Code : 4  
  
 Facility ID : 33837982  
 WARM BIN # : Not reported  
 Ecology Status : Independent Remedial Action  
 NFA Code : Not reported  
 Program Plan Code : 4

**62  
 NE  
 > 1  
 5642 ft.**

**VANCOUVER WATER STATION #1 CONTAMINATION  
 E. RESERVE AND N.E. FOURTH PLAIN BLVD.  
 VANCOUVER, WA 98663**

**CERCLIS 1000710207  
 FINDS WAD988519708  
 NPL  
 ROD  
 US ENG CONTROLS**

**Relative:  
 Higher**

**CERCLIS Classification Data:**

**Actual:  
 -999 ft.**

Federal Facility: Not a Federal Facility  
 Non NPL Status: Not reported  
 NPL Status: Currently on the Final NPL  
 Site Description: Vancouver Water Station #1 (WS1) lies within Waterworks Park near the center of the city of Vancouver, Washington. The site is adjacent to a commercial district and residential areas. WS1 has ten groundwater production wells and a holding reservoir used to provide storage capacity to accommodate daily fluctuations in water demand. WS1 supplies drinking water to approximately 150,000 residents, or about one-half of the drinking water for Vancouver. The aquifer from which WS1 draws is known as the Troutdale Formation. The upper portion of the aquifer is approximately 200 feet below ground surface, and supplies water to several municipal wellfields and an unknown number of private wells. All known private wells are used for irrigation or filling of swimming pools. When the Federal Safe Drinking Water Act (SDWA) was amended to require suppliers of public drinking water to monitor for volatile organic compounds (VOCs), the City of Vancouver began monitoring water from WS1 and its other wellfields. Results of this monitoring indicated a persistent presence of tetrachloroethene (PCE) in the water at WS1. In the fall of 1992, the Environmental Protection Agency (EPA) conducted a hydrological assessment of the Vancouver area, and installed five groundwater monitoring wells in the vicinity of WS1. Following well development, groundwater samples were collected from all five of the monitoring wells, but PCE was detected in only one well (MW1-3). From 1991 through 1992, monitoring of the 10 production wells showed a trend of continuing, and possibly increasing, concentration of PCE in the groundwater at WS1. To ensure that city drinking water was protected, in May 1993 the City of Vancouver installed five air stripping towers at WS1 to remove PCE from the drinking water produced by the wells. These towers are still operational. Although the air stripping system was effectively removing PCE from water that the City was distributing for drinking water, Vancouver WS1 was proposed for the National Priorities List (NPL) in June 1993 because of the presence of PCE in the groundwater. In 1993, EPA conducted a study to evaluate the WS1 site for potential removal actions to mitigate threats to public health. The study found no immediate threats to public health, however concentrations of PCE in groundwater continued to exceed the Maximum Contaminant Level (MCL), so in June of 1994 the site was listed on the NPL. As required under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), a preliminary health assessment was conducted by the State under cooperative agreement with the U.S. Department of Health

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**VANCOUVER WATER STATION #1 CONTAMINATION (Continued)**

**1000710207**

and Human Services' Agency for Toxic Substances and Disease Registry.  
 The preliminary health assessment concluded that there was no apparent health hazard from exposure to PCE in drinking water supplied by WS1, although the State did recommend further investigation of PCE contamination in groundwater near WS1. At about that time, funding constraints led to a decision by EPA to postpone further investigations of WS1, saving EPA's limited funding for sites with greater risk. In November 1997 EPA initiated a remedial investigation/feasibility study (RI/FS) and risk assessment for WS1. PCE was detected in only two wells, but neither sample exceeded the MCL. In July 1998, EPA released the final RI/FS report for WS1.

**CERCLIS Assessment History:**

Assessment:	DISCOVERY	Completed:	05/17/1988
Assessment:	HRS PACKAGE	Completed:	05/06/1993
Assessment:	PROPOSAL TO NPL	Completed:	06/23/1993
Assessment:	REMOVAL ASSESSMENT	Completed:	12/12/1993
Assessment:	FINAL LISTING ON NPL	Completed:	05/31/1994
Assessment:	COMBINED RI/FS	Completed:	09/11/1998
Assessment:	RECORD OF DECISION	Completed:	09/11/1998
Assessment:	FIVE YEAR REVIEW	Completed:	09/11/2003

**CERCLIS Site Status:**

Not reported

**CERCLIS Alias Name(s):**

VANCOUVER WATER STATION #1 CONTAMINATION  
 VANCOUVER WATER STATION #1 CONTAMINATION

**US Engineering Control Sites:**

EPA ID:	WAD988519708
Site ID:	1001733
EPA Region:	10
County:	CLARK
Event Code :	Not reported
Actual Date:	Not reported
Action ID:	001
Action Name:	RECORD OF DECISION
Action Completion date:	09/11/1998
Planned Completion date:	09/30/1998
Operable Unit:	01
Contaminated Media:	Groundwater
Contam. Media num.:	10271524.00000
Engineering Control:	Pump And Treat
Action ID:	001
Action Name:	RECORD OF DECISION
Action Completion date:	09/11/1998
Planned Completion date:	09/30/1998
Operable Unit:	01
Contaminated Media:	Groundwater
Contam. Media num.:	10271528.00000
Engineering Control:	Pump And Treat
Action ID:	001
Action Name:	RECORD OF DECISION
Action Completion date:	09/11/1998
Planned Completion date:	09/30/1998
Operable Unit:	01
Contaminated Media:	Groundwater
Contam. Media num.:	10271529.00000

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

**VANCOUVER WATER STATION #1 CONTAMINATION (Continued)**

**1000710207**

Engineering Control: Pump And Treat

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 09/11/1998  
Planned Completion date: 09/30/1998  
Operable Unit: 01  
Contaminated Media: Groundwater  
Contam. Media num.: 10271530.00000  
Engineering Control: Pump And Treat

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 09/11/1998  
Planned Completion date: 09/30/1998  
Operable Unit: 01  
Contaminated Media: Groundwater  
Contam. Media num.: 10271531.00000  
Engineering Control: Pump And Treat

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 09/11/1998  
Planned Completion date: 09/30/1998  
Operable Unit: 01  
Contaminated Media: Groundwater  
Contam. Media num.: 10271532.00000  
Engineering Control: Pump And Treat

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 09/11/1998  
Planned Completion date: 09/30/1998  
Operable Unit: 01  
Contaminated Media: Groundwater  
Contam. Media num.: 10271533.00000  
Engineering Control: Pump And Treat

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 09/11/1998  
Planned Completion date: 09/30/1998  
Operable Unit: 01  
Contaminated Media: Groundwater  
Contam. Media num.: 10271534.00000  
Engineering Control: Pump And Treat

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 09/11/1998  
Planned Completion date: 09/30/1998  
Operable Unit: 01  
Contaminated Media: Groundwater  
Contam. Media num.: 10271535.00000  
Engineering Control: Pump And Treat

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 09/11/1998  
Planned Completion date: 09/30/1998  
Operable Unit: 01

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**VANCOUVER WATER STATION #1 CONTAMINATION (Continued)**

**1000710207**

Contaminated Media: Groundwater  
 Contam. Media num.: 10271536.00000  
 Engineering Control: Pump And Treat  
 Action ID: 001  
 Action Name: RECORD OF DECISION  
 Action Completion date: 09/11/1998  
 Planned Completion date: 09/30/1998  
 Operable Unit: 01  
 Contaminated Media: Groundwater  
 Contam. Media num.: 10271538.00000  
 Engineering Control: Pump And Treat

**NPL:**

EPA ID: WAD988519708  
 Region: 10  
 Federal: General  
 Final Date: 05/31/1994  
 EPA ID: WAD988519708  
 Region: 10  
 Federal: General  
 Final Date: 05/31/1994

**Site Details:**

Site Name: VANCOUVER WATER STATION #1 CONTAMINATION  
 Site Status: Final  
 Status Date: 05/31/1994  
 Site City: VANCOUVER  
 Site State: WA  
 Federal Site: Not a Federal Facility  
 HRS Score: 50.00  
 GW Score: 100.00  
 SW Score: 0.00  
 Air Score: Not reported  
 Soil Score: Not reported  
 DC Score: Not reported  
 FE Score: Not reported

**Substance Details:**

Site ID: Not reported  
 NPL Status: Currently on the Final NPL  
 Substance ID: U210  
 CAS #: 127-18-4  
 Substance: TETRACHLOROETHENE  
 Pathway: GROUND WATER PATHWAY  
 Scoring: 4  
 Site ID: Not reported  
 NPL Status: Currently on the Final NPL  
 Substance ID: Not reported  
 CAS #: Not reported  
 Substance: Not reported  
 Pathway: Not reported  
 Scoring: Not reported

**Summary Details:**

" Vancouver Water Station #1 is located at East Reserve and Northeast Fourth Plain Boulevard in Vancouver, Clark County, Washington. Vancouver Water Station #1 is one of several stations that consists of ground water wells that supply drink

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**VANCOUVER WATER STATION #1 CONTAMINATION (Continued)**

**1000710207**

ing water through a blended system to approximately 134,000 people. In October 1992, EPA listed a nearby water station, Vancouver Water Station #4, on the National Priorities List. In response to the Safe Drinking Water Act (SDWA), ground water from the wells at Vancouver Water Station #1 was sampled in 1988. Since 1988, increasing levels of tetrachloroethene (PCE) have been detected in each of the wells comprising Vancouver Water Station #1. While levels of PCE have exceeded the EPA maximum contaminant level established under SDWA, the City of Vancouver has used blended water from the Vancouver Water Station #1 wells by selectively pumping lower concentration wells. An extensive soil gas and ground water study conducted by the City of Vancouver was unsuccessful in identifying the source of contamination in Vancouver Water Station #1 wells. In addition, a subsequent soil gas and ground water study conducted by EPA was also unsuccessful in identifying the source of ground water contamination. Although a definitive source has not been identified, several drycleaning facilities, gas stations, and other facilities in the area are suspected contributors of ground water contamination. EPA is currently considering various alternatives for further evaluation of potential sources and performing remediation of the existing ground water contamination. [The description of the site (release) is based on information available at the time the site was scored. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]"

Site Status Details:

NPL Status: Final  
 Proposed Date: 06/23/1993  
 Final Date: 05/31/1994  
 Deleted Date: Not reported

ROD:

Full-text of USEPA Record of Decision(s) is available from EDR.

FINDS:

Other Pertinent Environmental Activity Identified at Site:

CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) is the Superfund database that is used to support management in all phases of the Superfund program. The system contains information on all aspects of hazardous waste sites, including an inventory of sites, planned and actual site activities, and financial information.

63  
 SW  
 > 1  
 5857 ft.

**COUNTRY CLUB CLEANERS**  
 1190 N JANTZEN DR  
 PORTLAND, OR 97217

**OR SHWS - ECSI** S104329423  
**OR AST** N/A  
**OR DRYCLEANERS**

Relative:  
 Higher

ECSI:

State ID Number: 1865	Brown ID	0
Study Area: False		
Cerclis ID: Not reported	Tax Lots:	Not reported
Size: Not reported	NPL:	False
Orphan: False	Region ID:	2
Lat/Long: 45.6090 / -122.678	Tax Lots:	Not reported
Township Coord.: 2.00	Township Zone:	N
Range Coord.: 1.00	Range Zone:	E
Section Coord.: 34	Qtr Section:	Not reported
Legislative : 34	Further Action:	0

Actual:  
 32 ft.

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

COUNTRY CLUB CLEANERS (Continued)

S104329423

FACA ID : 30709 Score Value: Not reported  
Update Date : 2006-02-28 15:57:06. Created Date: jmd  
Created Time : 1996-05-08 00:00:00  
Updated By : GWISTAR

HAZ RELEASED:

Quant. Released: unknown  
Date: unknown  
Update Date: 1997-10-28 00:00:00  
Update By: Not reported  
Substance ID : 121011  
Code : 127-18-4  
Substance Name : TETRACHLOROETHYLENE  
Substance Abbrev. : Not reported  
Substance Categ ID : 8519  
Substance Sub Categ : Volatiles  
Category Level : Not reported  
Created By : Not reported  
Create Date : 2002-12-17 08:50:34.  
Substance Categ ID : 8551  
Substance Sub Categ : Solvents of interest to Milwaukie Area GW study  
Category Level : Not reported  
Created By : Not reported  
Create Date : 2002-12-17 08:50:34.  
Substance Alias ID : 316912  
Sub Alias Name : ETHENE,TETRACHLORO-  
Substance Alias ID : 316913  
Sub Alias Name : ETHYLENE TETRACHLORIDE  
Substance Alias ID : 316914  
Sub Alias Name : PERCHLOROETHYLENE  
Substance Alias ID : 316915  
Sub Alias Name : PERCLENENE  
Substance Alias ID : 316916  
Sub Alias Name : TETRACHLOROETHENE  
Substance Alias ID : 316917  
Sub Alias Name : TETRACHLOROETHENE,1,1,2,2-  
Substance Alias ID : 316918  
Sub Alias Name : TETRACHLOROETHYLENE,1,1,2,2-  
Rel Comment ID : Not reported  
Release Code : Not reported  
Release Comments : Not reported  
Sampling Result ID : 340048  
Feature Id : Not reported  
Hazard Release Id : 380447  
Medium Code Id : 703  
Substance Id : Not reported  
Unit Code : Not reported  
Observation : False  
Owner Operator : False  
Lab Data : True  
Sample Depth : Not reported  
Start Date : 1998-03-30 00:00:00  
End Date : Not reported  
Minimum Concentration : Not reported  
Max Concentration : Not reported  
Last Update By : kpd  
Last Updated On : 1998-06-15 00:00:00  
Sample Comment : up to 267 ug/kg

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s)  
EDR ID Number  
EPA ID Number

**COUNTRY CLUB CLEANERS (Continued)**

**S104329423**

Sampling Result ID : 342133  
Feature Id : Not reported  
Hazard Release Id : 380447  
Medium Code Id : 698  
Substance Id : Not reported  
Unit Code : Not reported  
Observation : False  
Owner Operator : False  
Lab Data : True  
Sample Depth : Not reported  
Start Date : 1998-04-07 00:00:00  
End Date : Not reported  
Minimum Concentration : Not reported  
Max Concentration : Not reported  
Last Update By : kpd  
Last Updated On : 1998-06-15 00:00:00  
Sample Comment : up to 1,230 ug/L

Alias Name: Country Club Cleaners  
Winmar of Jantzen Beach Inc.  
Investigation Status: 206

**NARR:**

NARR ID: 5735910  
NARR Code : Contamination  
Created By: Not reported  
Create Date: 2002-12-17 08:50:04.  
Updated By: Not reported  
Updated Date: 2002-12-17 08:50:04.  
NARR Comments PROJECT FILE ARCHIVED, BOX #272839185

(12/5/2001 DGA/SRS) Dry-cleaning facilities have operated at the site since the mid-1970s. A preliminary environmental assessment in November 1994 identified four floor drains within the facility, three of which yielded a positive reading on a photo ionization detector. In August 1995, four Geoprobe borings were advanced at the site to see if PCE had been released to the soil or groundwater. PCE was detected in soil gas (up to 75 ppm) and groundwater (up to 780 ug/L) in all four boreholes. It appears that PCE may have been released down the floor drains at the site, leaking into the soil through cracks in the sanitary sewer lines. Tidal fluctuations in the shallow groundwater may have spread the contaminants across the site. Hayden Island Cleaners applied to DEQ's Dry Cleaner Program in January 1997, and was accepted in February 1997.

1) November 1994 Hart Crowser "Preliminary Environmental Site Assessment". 2) September 1995 Hydro Geo Chem "Limited Environmental Investigation". 3) June 1998 Jacobs Engineering "Dry Cleaning XPA Report". 4) March 1999 E&E "Focused Site Investigation Report". 5) June 1999 E&E "Technical Memorandum...Beneficial Use Survey Report".

Perchloroethene (PCE), trichloroethene (TCE), and 1,2-dichloroethene (DCE) unknown; possible past releases of contaminated wastewaters through floor drains and sanitary sewer pipes.

JB Laundry (approx 1975 to 1982); Country Club Cleaners (1982 to January 1996); Hayden Island Cleaners (January 1996 to present).

The City of Portland owns four deep production wells on Hayden Island, two of which are within 600 feet of the site. Since 1988, Bull Run water has been provided for residents and businesses on Hayden and Tomahawk Islands, and the

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s)  
EDR ID Number  
EPA ID Number

COUNTRY CLUB CLEANERS (Continued)

S104329423

wells are currently designated for backup fire suppression only. Three of the four wells are contaminated with low levels of TCE and PCE; however, the contamination is thought to be unrelated to Hayden Island Cleaners. Because of the site's proximity to the Columbia River, surface water was another potential pathway of concern. But the contamination does not appear to have reached either the river or the deeper aquifer.

(12/5/2001 DGA/SRS) DEQ retained Jacobs Engineering to conduct an expanded Preliminary Assessment (XPA) at the site in August 1997. As part of the XPA, three monitoring wells were installed, and soil and groundwater samples collected. PCE was detected in soil samples (up to 267 ug/kg) and groundwater samples (up to 1,230 ug/L) from all three wells. The XPA report was completed in June 1998. DEQ retained Ecology & Environment (E&E) to follow up with a focused Site Investigation in August 1998.

Additional groundwater monitoring wells were installed at the site and on adjacent properties. In addition, a pumping test was conducted at the secondary municipal wells (backup fire suppression wells) to determine if there was any connection between the shallow and deep aquifers. No connection was established. The Site Investigation report was completed in March 1999. In May 1999, DEQ injected Hydrogen Releasing Compound (HRC) into the shallow groundwater to accelerate the natural biodegradation of the PCE. Monitoring over the next couple of years showed that the HRC was successful in stimulating degradation of the PCE. DEQ formally notified the site owners and operators in December 2001 that no further cleanup of the site was necessary.

NARR ID: 5735911  
NARR Code : Data Sources  
Created By: Not reported  
Create Date: 2002-12-17 08:50:04.  
Updated By: GWISTAR  
Updated Date: 2005-09-21 08:53:24.  
NARR ID: 5735912  
NARR Code : Hazardous Substance/Waste Types  
Created By: Not reported  
Create Date: 2002-12-17 08:50:04.  
Updated By: Not reported  
Updated Date: 2002-12-17 08:50:04.  
NARR ID: 5735913  
NARR Code : Manner of Release  
Created By: Not reported  
Create Date: 2002-12-17 08:50:04.  
Updated By: Not reported  
Updated Date: 2002-12-17 08:50:04.  
NARR ID: 5735914  
NARR Code : Site Ownership  
Created By: Not reported  
Create Date: 2002-12-17 08:50:04.  
Updated By: Not reported  
Updated Date: 2002-12-17 08:50:04.  
NARR ID: 5747224  
NARR Code : Project Activity Status  
Created By: GWISTAR  
Create Date: 2005-09-21 08:53:27.

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

COUNTRY CLUB CLEANERS (Continued)

S104329423

Updated By: GWISTAR  
Updated Date: 2005-09-21 08:53:27.  
NARR ID: 5735915  
NARR Code : Pathways Other Hazards  
Created By: Not reported  
Create Date: 2002-12-17 08:50:04.  
Updated By: Not reported  
Updated Date: 2002-12-17 08:50:04.  
NARR ID: 5735916  
NARR Code : Remedial Action  
Created By: Not reported  
Create Date: 2002-12-17 08:50:04.  
Updated By: Not reported  
Updated Date: 2002-12-17 08:50:04.

ECWQ:

Owner Site Num: 133162 FACA Id : 30709  
Site Name: Hayden Island Cleaners  
County Code : 26.00  
Owner Name: Hayden Island Cleaners  
Owner Address: 1190 N Jantzen DR  
Portland, 97217  
Lat/Long 45.6092 / -122.6790  
Owner Code: NFA

PERMIT:

Permit Number: Not reported Permit Type: Not reported  
Permit Agency: Not reported  
Permit Comments: Not reported

ADMIN ACT:

Admin ID: 703185 Action ID: 9443  
Agency ID : Dept Of Environmental Quality Start Date: 2001-12-05 00:00:00  
Further Action: 0 Region ID: Northwestern Region  
Complete Date: 2001-12-05 00:00:00 Substance Code: SRS  
Rank Value: 0 Cleanup Flag: False  
Updated By: GWISTAR Update Date: 2004-08-06 15:22:06.  
Created By: Not reported Create Date: 2002-12-17 08:50:22.  
Employee Id: 1976  
Comments : Not reported

Administrative Action: NO FURTHER STATE ACTION REQUIRED  
Admin Action Category: Not reported  
Admin Flag: True  
Admin Action Code Flag: False  
Admin Action : NO FURTHER STATE ACTION REQUIRED

Admin ID: 709884 Action ID: 9520  
Agency ID : Dept Of Environmental Quality Start Date: 1997-08-19 00:00:00  
Further Action: Not reported Region ID: Headquarters  
Complete Date: 1998-06-04 00:00:00 Substance Code: SRS  
Rank Value: 0 Cleanup Flag: False  
Updated By: kpd Update Date: 1998-11-17 00:00:00  
Created By: Not reported Create Date: 2002-12-17 08:50:22.  
Employee Id: 344  
Comments : Not reported

Administrative Action: EXPANDED PRELIMINARY ASSESSMENT  
Admin Action Category: Not reported  
Admin Flag: True  
Admin Action Code Flag: False







Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation

MAP FINDINGS

**COUNTRY CLUB CLEANERS (Continued)**

EDR ID Number  
 EPA ID Number

Database(s)

**S104329423**

Rank Value:	0	Cleanup Flag:	False
Updated By:	kpd	Update Date:	1997-10-28 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	767		
Comments :	Not reported		
Administrative Action:	Facility proposed for Confirmed Release List		
Admin Action Category:	Not reported		
Admin Flag:	True		
Admin Action Code Flag:	False		
Admin Action :	Facility proposed for Confirmed Release List		

Admin ID:	700990	Action ID:	9417
Agency ID :	Dept Of Environmental Quality	Start Date:	2002-03-29 00:00:00
Further Action:	Not reported	Region ID:	Headquarters
Complete Date:	2002-03-29 00:00:00	Substance Code:	SRS
Rank Value:	0	Cleanup Flag:	False
Updated By:	kvp	Update Date:	2002-04-04 00:00:00
Created By:	Not reported	Create Date:	2002-12-17 08:50:22.
Employee Id:	730		
Comments :	Not reported		
Administrative Action:	Facility delisted from Confirmed Release List		
Admin Action Category:	Not reported		
Admin Flag:	True		
Admin Action Code Flag:	False		
Admin Action :	Facility delisted from Confirmed Release List		

**DISPOSAL:**

Disposal ID:	Not reported	Feature ID:	Not reported
Medium :	Not reported		
Treatment :	Not reported		
Disposal Method:	Not reported		
Start Date:	Not reported	End Date:	Not reported
Disposal Flag:	Not reported	Disposal Qty:	Not reported
Unit Code:	Not reported		
Depth :	Not reported		
Monitor :	Not reported		
Manifest Num :	Not reported		
Removed By :	Not reported		
Loc Comments:	Not reported		
Disposal Sub ID:	Not reported		
Substance ID:	Not reported		
Created By:	Not reported		
Create Date:	Not reported		

**FEATURE:**

Feature Id :	Not reported
Site Id :	Not reported
Feature Code :	Not reported
Relative Position :	Not reported
Hazard Rel Id :	Not reported
Region Code :	Not reported
Lat Long Method :	Not reported
Lat Long Source :	Not reported
County Code :	Not reported
Refrence Id :	Not reported
Twnshp Coord :	Not reported
Township Zone :	Not reported
Range Coord :	Not reported

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation    Site

MAP FINDINGS

Database(s)    EDR ID Number  
EPA ID Number

**COUNTRY CLUB CLEANERS (Continued)**

**S104329423**

Range Zone :                    Not reported  
Section Coord :                Not reported  
Qtr Section Coord :            Not reported  
Address :                        Not reported  
                                      Not reported  
Zip Plus :                        Not reported  
Lat/Long :                        Not reported  
Lat/Lon Decimal :                Not reported  
Feature Size :                    Not reported  
Est Accuracy :                    Not reported  
Created On Date :                Not reported  
Created By Prgm :                Not reported  
Last Updated By :                Not reported  
Last Updated On :                Not reported  
Comment :                        Not reported

**WELL:**

Well ID:                            Not reported  
Water Resource Code:            Not reported  
Effective Date:                    Not reported  
Aquifer Code:                    Not reported  
Ground Station Key:              Not reported

**OPERATIONS:**

Operation Id :    133162  
Operation Status :Active  
Common Name : Hayden Island Cleaners  
Yrs of Operation : ~1975 to present  
Comments :        ~1975 to present  
Updated By :      kpd  
Updated Date :    1997-10-28 00:00:00

Process Code ID: Not reported  
Years Of Process:Not reported  
Created By:        Not reported  
Created Date:     Not reported

Operations SIC Id:196327  
SIC Code:            7216  
Created By:        Not reported  
Created Date:     2002-12-17 08:50:34.

**DRYCLN:**

Dry Cleaner ID:    6  
Phone ID:            503 283-0442  
Current Status:    Dry Cleaner  
Last Update:        2002-02-07 00:00:00

Dry Cleaner ID:    539  
Phone ID:            Not reported  
Current Status:    Closed  
Last Update:        2002-08-26 00:00:00

**AST:**

Employer File Number: 004395  
Hazardous Substance: PERCHLOROETHYLENE  
Reporting Quantities: 50-199  
Quantity Units:        GALLONS  
Physical State:        LIQUID  
Storage 1:              ABOVEGROUND TANK

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

MAP FINDINGS

**COUNTRY CLUB CLEANERS (Continued)**

EDR ID Number  
EPA ID Number

Database(s)

Storage 2: TANK INSIDE BUILDING

**S104329423**

## ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
PORTLAND	1006867196	PACIFIC POWER & LIGHT - DEKUM SUBS	SW CORNER OF NE DEKUM ST & NE	97217	OR SHWS - ECSI, FINDS, OR VCS
PORTLAND	S106497133	PACIFIC POWER & LIGHT - MASON SUBS	NE CORNER OF N MASON ST / N	97217	OR SHWS - ECSI, OR VCS
PORTLAND	S106236422	N MARINE DR EXTENSION - NORTH PORT	N MARINE DR	97217	OR SHWS - ECSI
VANCOUVER	1001490307	PACIFIC COGENERATION INC	W 11TH ST	98660	RCRA-SQG, WA CSCSL, WA EMI
VANCOUVER	S107154452	CITY OF VANCOUVER	1921 SE 125TH CIRCLE - OFF EVE		WA SPILLS
VANCOUVER	U004021064	VANCOUVER PLANT-CASCADE PACIFIC LU	1701 WEST 18TH STREET	98660	WA UST
VANCOUVER	1001600493	RITE AID 5291	13511 SE 3RD LOOP	98661	RCRA-SQG, FINDS, WA MANIFEST
VANCOUVER	1006931803	FLOW CHEM INC	1800A W 4TH PLAIN BLVD	98660	RCRA-SQG, WA MANIFEST
VANCOUVER	S107672196	EARTH RETENTION INC	2305 E 5TH ST	98661	WA MANIFEST
VANCOUVER	U003355357	CITY OF VANCOUVER FIRE STATION	7110 NE 63RD ST.	98661	WA ICR
VANCOUVER	U004040752	VANCOUVER MARINE TERMINAL	1300 WEST 8TH STREET	98660	WA UST
VANCOUVER	S106782436		BEST WESTERN INN, RM #105, 115		WA CDL
VANCOUVER	S107672189	ESTATE OF MARY E MACKAY	1700 BROADWAY ST	98663	WA MANIFEST
VANCOUVER	1007063705	SPECIAL EVENTS & CONVENTION CENTER	BTW 4TH & 6TH & COLUMBIA & W E	98660	FINDS, WA VCP
VANCOUVER	S105576119	SPECIAL EVENTS & CONVENTION CENTER	BTW 4TH / 6TH & COLUMBIA & W	98660	WA CSCSL
VANCOUVER	S107485983	CITY OF VANCOUVER PW	2ND / COLUMBIA BLVD (UNDER I-5		WA SPILLS
VANCOUVER	S107565943	FRITO LAY VANCOUVER	4808 NW FRUIT VALLEY RD	98660	WA CSCSL
VANCOUVER	1007070116	VANCOUVER BARRACKS	HATHAWAY RD BLDG 404	98661	FINDS, WA LUST
VANCOUVER	1007692649	AT&T VANCOUVER HIDDEN WAY	3815 SE HIDDEN WAY	98661	FINDS
VANCOUVER	U004020969	DITTMER MAINTENANCE HEADQUARTERS	5411 NE HWY 99 BLDG # Z-695	98663	WA UST
VANCOUVER	U004040667	ROSS COMPLEX	5411 NE HWY 99	98663	WA UST
VANCOUVER	S103531788	TRIQUEST PRECISION PLASTICS 100	3000 LEWIS / CLARK HIGHWAY	98661	WA EMI
VANCOUVER	1003880522	VANCOUVER GAS MANUFACTURING SITE	9TH & LINCOLN STREETS	98660	CERC-NFRAP
VANCOUVER	S103505829	CARBORUNDUM	LOWER RIVER ROAD, PORT OF VANC	98660	WA ICR
VANCOUVER	1007080951	BPA ALCOA SUBSTATION	LOWER RIVER RD	98660	WA CSCSL, FINDS
VANCOUVER	U003025371	VANCOUVER DISTRICT SITE 40001D	4200 MAIN ST	98663	WA UST
VANCOUVER	U003355840	VANCOUVER WA LINE SEG 643 PRINT NO	MILE POST 10.6 2ND SUB DIV POR	98663	WA UST
VANCOUVER	S105454491	UNOCAL #5615	E. MILL PLAIN BLVD / NE ANDE	98661	WA ICR
VANCOUVER	S105686264	VANCOUVER WASTE WATER TREATMENT PL	2373 WEST MILLPLAIN		WA SPILLS
VANCOUVER	1001233941	VESSEL OCEAN DUCHESS 533611	PORT OF VANCOUVER	98660	RCRA-SQG, FINDS
VANCOUVER	1000473879	NORTHWEST PIPELINE CORP VANCOUVER	T2N R1E S18	98661	RCRA-SQG, FINDS
VANCOUVER	1001491340	USWCOM NORTH VANCOUVER RPTR	T3N R1E S16 NW1/4 NE1/4 NE1/4	98660	RCRA-SQG, FINDS
VANCOUVER	1007073304	WR GRACE & CO CPD VANCOUVER	RYE TEAM TRACK		FINDS
VANCOUVER	S106782437		SALMON CRK MTL, RM #22, 11901	98661	WA CDL
VANCOUVER	99629004	VANCOUVER ANCHORAGE	VANCOUVER ANCHORAGE		ERNS
VANCOUVER	92296686	VANCOUVER BERTH 7	VANCOUVER BERTH 7		ERNS

## EPA Waste Codes Addendum

Code	Description
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D018	BENZENE
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D039	TETRACHLOROETHYLENE
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# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## **FEDERAL RECORDS**

### **NPL: National Priority List**

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/19/2006	Source: EPA
Date Data Arrived at EDR: 05/05/2006	Telephone: N/A
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 05/05/2006
Number of Days to Update: 17	Next Scheduled EDR Contact: 07/31/2006
	Data Release Frequency: Quarterly

### **NPL Site Boundaries**

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-814-5418

EPA Region 8  
Telephone: 303-312-6774

EPA Region 4  
Telephone 404-562-8033

### **Proposed NPL: Proposed National Priority List Sites**

Date of Government Version: 04/19/2006	Source: EPA
Date Data Arrived at EDR: 05/05/2006	Telephone: N/A
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 05/05/2006
Number of Days to Update: 17	Next Scheduled EDR Contact: 07/31/2006
	Data Release Frequency: Quarterly

### **DELISTED NPL: National Priority List Deletions**

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/19/2006	Source: EPA
Date Data Arrived at EDR: 05/05/2006	Telephone: N/A
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 05/05/2006
Number of Days to Update: 17	Next Scheduled EDR Contact: 07/31/2006
	Data Release Frequency: Quarterly

### **NPL RECOVERY: Federal Superfund Liens**

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 05/23/2006
Number of Days to Update: 56	Next Scheduled EDR Contact: 08/21/2006
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **CERCLIS:** Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/01/2006	Source: EPA
Date Data Arrived at EDR: 03/21/2006	Telephone: 703-413-0223
Date Made Active in Reports: 04/13/2006	Last EDR Contact: 03/21/2006
Number of Days to Update: 23	Next Scheduled EDR Contact: 06/19/2006
	Data Release Frequency: Quarterly

## **CERCLIS-NFRAP:** CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 02/01/2006	Source: EPA
Date Data Arrived at EDR: 03/21/2006	Telephone: 703-413-0223
Date Made Active in Reports: 04/13/2006	Last EDR Contact: 03/21/2006
Number of Days to Update: 23	Next Scheduled EDR Contact: 06/19/2006
	Data Release Frequency: Quarterly

## **CORRACTS:** Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/15/2006	Source: EPA
Date Data Arrived at EDR: 03/17/2006	Telephone: 800-424-9346
Date Made Active in Reports: 04/13/2006	Last EDR Contact: 05/21/2006
Number of Days to Update: 27	Next Scheduled EDR Contact: 09/04/2006
	Data Release Frequency: Quarterly

## **RCRA:** Resource Conservation and Recovery Act Information

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/09/2006	Source: EPA
Date Data Arrived at EDR: 04/27/2006	Telephone: 800-424-9346
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 04/27/2006
Number of Days to Update: 33	Next Scheduled EDR Contact: 06/26/2006
	Data Release Frequency: Quarterly

## **ERNS:** Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2005	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 01/12/2006	Telephone: 202-260-2342
Date Made Active in Reports: 02/21/2006	Last EDR Contact: 04/26/2006
Number of Days to Update: 40	Next Scheduled EDR Contact: 07/24/2006
	Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **HMIRS:** Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2005	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 04/14/2006	Telephone: 202-366-4555
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 04/14/2006
Number of Days to Update: 46	Next Scheduled EDR Contact: 07/17/2006
	Data Release Frequency: Annually

## **US ENG CONTROLS:** Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 03/21/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2006	Telephone: 703-603-8905
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 03/03/2006
Number of Days to Update: 56	Next Scheduled EDR Contact: 07/03/2006
	Data Release Frequency: Varies

## **US INST CONTROL:** Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 03/21/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2006	Telephone: 703-603-8905
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 03/03/2006
Number of Days to Update: 56	Next Scheduled EDR Contact: 07/03/2006
	Data Release Frequency: Varies

## **DOD:** Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2004	Source: USGS
Date Data Arrived at EDR: 02/08/2005	Telephone: 703-692-8801
Date Made Active in Reports: 08/04/2005	Last EDR Contact: 05/12/2006
Number of Days to Update: 177	Next Scheduled EDR Contact: 08/07/2006
	Data Release Frequency: Semi-Annually

## **FUDS:** Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/05/2005	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 01/19/2006	Telephone: 202-528-4285
Date Made Active in Reports: 02/21/2006	Last EDR Contact: 04/03/2006
Number of Days to Update: 33	Next Scheduled EDR Contact: 07/03/2006
	Data Release Frequency: Varies

## **US BROWNFIELDS:** A Listing of Brownfields Sites

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 04/26/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/27/2006	Telephone: 202-566-2777
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 03/13/2006
Number of Days to Update: 33	Next Scheduled EDR Contact: 06/12/2006
	Data Release Frequency: Semi-Annually

## **CONSENT:** Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/14/2004	Source: Department of Justice, Consent Decree Library
Date Data Arrived at EDR: 02/15/2005	Telephone: Varies
Date Made Active in Reports: 04/25/2005	Last EDR Contact: 03/13/2006
Number of Days to Update: 69	Next Scheduled EDR Contact: 07/24/2006
	Data Release Frequency: Varies

## **ROD:** Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/13/2006	Source: EPA
Date Data Arrived at EDR: 04/28/2006	Telephone: 703-416-0223
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 04/05/2006
Number of Days to Update: 32	Next Scheduled EDR Contact: 07/03/2006
	Data Release Frequency: Annually

## **UMTRA:** Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 11/04/2005	Source: Department of Energy
Date Data Arrived at EDR: 11/28/2005	Telephone: 505-845-0011
Date Made Active in Reports: 01/30/2006	Last EDR Contact: 03/20/2006
Number of Days to Update: 63	Next Scheduled EDR Contact: 06/19/2006
	Data Release Frequency: Varies

## **ODI:** Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **TRIS:** Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2003	Source: EPA
Date Data Arrived at EDR: 07/13/2005	Telephone: 202-566-0250
Date Made Active in Reports: 08/17/2005	Last EDR Contact: 03/21/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 06/19/2006
	Data Release Frequency: Annually

## **TSCA:** Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2002	Source: EPA
Date Data Arrived at EDR: 04/14/2006	Telephone: 202-260-5521
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 04/12/2006
Number of Days to Update: 46	Next Scheduled EDR Contact: 07/17/2006
	Data Release Frequency: Every 4 Years

## **FTTS:** FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/29/2006	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/26/2006	Telephone: 202-566-1667
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 03/20/2006
Number of Days to Update: 34	Next Scheduled EDR Contact: 06/19/2006
	Data Release Frequency: Quarterly

## **FTTS INSP:** FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Date of Government Version: 03/31/2006	Source: EPA
Date Data Arrived at EDR: 04/26/2006	Telephone: 202-566-1667
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 03/20/2006
Number of Days to Update: 34	Next Scheduled EDR Contact: 06/19/2006
	Data Release Frequency: Quarterly

## **SSTS:** Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2004	Source: EPA
Date Data Arrived at EDR: 05/11/2006	Telephone: 202-564-4203
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 03/06/2006
Number of Days to Update: 11	Next Scheduled EDR Contact: 07/17/2006
	Data Release Frequency: Annually

## **ICIS:** Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 02/13/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/21/2006	Telephone: 202-564-5088
Date Made Active in Reports: 05/11/2006	Last EDR Contact: 04/11/2006
Number of Days to Update: 20	Next Scheduled EDR Contact: 07/17/2006
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **PADS:** PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 12/27/2005	Source: EPA
Date Data Arrived at EDR: 02/08/2006	Telephone: 202-566-0500
Date Made Active in Reports: 02/27/2006	Last EDR Contact: 06/02/2006
Number of Days to Update: 19	Next Scheduled EDR Contact: 08/07/2006
	Data Release Frequency: Annually

## **MLTS:** Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/12/2006	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 04/26/2006	Telephone: 301-415-7169
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 04/03/2006
Number of Days to Update: 34	Next Scheduled EDR Contact: 07/03/2006
	Data Release Frequency: Quarterly

## **MINES:** Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/09/2006	Source: Department of Labor, Mine Safety and Health Administration
Date Data Arrived at EDR: 03/29/2006	Telephone: 303-231-5959
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 03/29/2006
Number of Days to Update: 62	Next Scheduled EDR Contact: 06/26/2006
	Data Release Frequency: Semi-Annually

## **FINDS:** Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/27/2006	Source: EPA
Date Data Arrived at EDR: 05/02/2006	Telephone: N/A
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 04/03/2006
Number of Days to Update: 28	Next Scheduled EDR Contact: 07/03/2006
	Data Release Frequency: Quarterly

## **RAATS:** RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/05/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/04/2006
	Data Release Frequency: No Update Planned

## **BRS:** Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2003  
Date Data Arrived at EDR: 06/17/2005  
Date Made Active in Reports: 08/04/2005  
Number of Days to Update: 48

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 03/17/2006  
Next Scheduled EDR Contact: 06/12/2006  
Data Release Frequency: Biennially

## STATE AND LOCAL RECORDS

### **WA CSCSL:** Confirmed & Suspected Contaminated Sites List

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 03/08/2006  
Date Data Arrived at EDR: 03/08/2006  
Date Made Active in Reports: 04/13/2006  
Number of Days to Update: 36

Source: Department of Ecology  
Telephone: 360-407-7200  
Last EDR Contact: 05/16/2006  
Next Scheduled EDR Contact: 08/14/2006  
Data Release Frequency: Semi-Annually

### **OR SHWS - ECSI:** Environmental Cleanup Site Information System

Sites that are or may be contaminated and may require cleanup.

Date of Government Version: 05/01/2006  
Date Data Arrived at EDR: 05/16/2006  
Date Made Active in Reports: 06/01/2006  
Number of Days to Update: 16

Source: Department of Environmental Quality  
Telephone: 503-229-6629  
Last EDR Contact: 05/16/2006  
Next Scheduled EDR Contact: 08/14/2006  
Data Release Frequency: Quarterly

### **WA HSL:** Hazardous Sites List

The Hazardous Sites List is a subset of the CSCSL Report. It includes sites which have been assessed and ranked using the Washington Ranking Method (WARM).

Date of Government Version: 02/22/2006  
Date Data Arrived at EDR: 03/27/2006  
Date Made Active in Reports: 04/13/2006  
Number of Days to Update: 17

Source: Department of Ecology  
Telephone: 360-407-7200  
Last EDR Contact: 06/06/2006  
Next Scheduled EDR Contact: 09/04/2006  
Data Release Frequency: Semi-Annually

### **WA CSCSL NFA:** Confirmed & Contaminated Sites - No Further Action

The data set contains information about sites previously on the Confirmed and Suspected Contaminated Sites list that have received a No Further Action (NFA) determination. Because it is necessary to maintain historical records of sites that have been investigated and cleaned up, sites are not deleted from the database when cleanup activities are completed. Instead, a No Further Action code is entered based upon the type of NFA determination the site received.

Date of Government Version: 02/09/2006  
Date Data Arrived at EDR: 02/14/2006  
Date Made Active in Reports: 03/15/2006  
Number of Days to Update: 29

Source: Department of Ecology  
Telephone: 360-407-7170  
Last EDR Contact: 05/16/2006  
Next Scheduled EDR Contact: 08/14/2006  
Data Release Frequency: Semi-Annually

### **WA SWF/LF:** Solid Waste Facility Database

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 10/01/2004  
Date Data Arrived at EDR: 01/06/2005  
Date Made Active in Reports: 02/02/2005  
Number of Days to Update: 27

Source: Department of Ecology  
Telephone: 360-407-6132  
Last EDR Contact: 04/05/2006  
Next Scheduled EDR Contact: 07/03/2006  
Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## OR SWF/LF: Solid Waste Facilities List

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 04/11/2006  
Date Data Arrived at EDR: 04/12/2006  
Date Made Active in Reports: 04/21/2006  
Number of Days to Update: 9

Source: Department of Environmental Quality  
Telephone: 503-229-6299  
Last EDR Contact: 04/10/2006  
Next Scheduled EDR Contact: 06/19/2006  
Data Release Frequency: Semi-Annually

## WA SWTIRE: Solid Waste Tire Facilities

This study identified sites statewide with unauthorized accumulations of scrap tires.

Date of Government Version: 11/01/2005  
Date Data Arrived at EDR: 03/16/2006  
Date Made Active in Reports: 04/13/2006  
Number of Days to Update: 28

Source: Department of Ecology  
Telephone: N/A  
Last EDR Contact: 04/05/2006  
Next Scheduled EDR Contact: 07/03/2006  
Data Release Frequency: Varies

## WA LUST: Leaking Underground Storage Tanks Site List

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 03/08/2006  
Date Data Arrived at EDR: 03/16/2006  
Date Made Active in Reports: 04/13/2006  
Number of Days to Update: 28

Source: Department of Ecology  
Telephone: 360-407-7200  
Last EDR Contact: 03/16/2006  
Next Scheduled EDR Contact: 06/12/2006  
Data Release Frequency: Quarterly

## OR LUST: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 01/12/2006  
Date Data Arrived at EDR: 03/15/2006  
Date Made Active in Reports: 04/12/2006  
Number of Days to Update: 28

Source: Department of Environmental Quality  
Telephone: 503-229-5790  
Last EDR Contact: 03/15/2006  
Next Scheduled EDR Contact: 06/12/2006  
Data Release Frequency: Quarterly

## WA UST: Underground Storage Tank Database

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 04/27/2006  
Date Data Arrived at EDR: 04/28/2006  
Date Made Active in Reports: 06/05/2006  
Number of Days to Update: 38

Source: Department of Ecology  
Telephone: 360-407-7170  
Last EDR Contact: 04/28/2006  
Next Scheduled EDR Contact: 06/12/2006  
Data Release Frequency: Quarterly

## OR UST: Underground Storage Tank Database

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 01/03/2006  
Date Data Arrived at EDR: 03/15/2006  
Date Made Active in Reports: 04/03/2006  
Number of Days to Update: 19

Source: Department of Environmental Quality  
Telephone: 503-229-5815  
Last EDR Contact: 03/15/2006  
Next Scheduled EDR Contact: 06/12/2006  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **WA AST:** Aboveground Storage Tank Locations

A listing of aboveground storage tank locations regulated by the Department of Ecology's Spill Prevention, Preparedness and Response Program.

Date of Government Version: 12/13/2005	Source: Department of Ecology
Date Data Arrived at EDR: 12/14/2005	Telephone: 360-407-7562
Date Made Active in Reports: 01/16/2006	Last EDR Contact: 05/30/2006
Number of Days to Update: 33	Next Scheduled EDR Contact: 08/28/2006
	Data Release Frequency: Varies

## **OR AST:** Aboveground Storage Tanks

Aboveground storage tank locations reported to the Office of State Fire Marshal.

Date of Government Version: 01/01/2006	Source: Office of State Fire Marshal
Date Data Arrived at EDR: 03/16/2006	Telephone: 503-378-3473
Date Made Active in Reports: 04/03/2006	Last EDR Contact: 05/30/2006
Number of Days to Update: 18	Next Scheduled EDR Contact: 08/28/2006
	Data Release Frequency: Semi-Annually

## **WA MANIFEST:** Hazardous Waste Manifest Data

Hazardous waste manifest information.

Date of Government Version: 12/31/2004	Source: Department of Ecology
Date Data Arrived at EDR: 04/24/2006	Telephone: N/A
Date Made Active in Reports: 05/31/2006	Last EDR Contact: 05/15/2006
Number of Days to Update: 37	Next Scheduled EDR Contact: 08/14/2006
	Data Release Frequency: Annually

## **OR MANIFEST:** Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2004	Source: Department of Environmental Quality
Date Data Arrived at EDR: 03/17/2006	Telephone: N/A
Date Made Active in Reports: 04/21/2006	Last EDR Contact: 05/23/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 08/21/2006
	Data Release Frequency: Annually

## **WA SPILLS:** Reported Spills

Spills reported to the Spill Prevention, Preparedness and Response Division.

Date of Government Version: 03/29/2006	Source: Department of Ecology
Date Data Arrived at EDR: 04/13/2006	Telephone: 360-407-7450
Date Made Active in Reports: 05/31/2006	Last EDR Contact: 04/12/2006
Number of Days to Update: 48	Next Scheduled EDR Contact: 07/03/2006
	Data Release Frequency: Semi-Annually

## **OR SPILLS:** Spill Data

Date of Government Version: 03/22/2006	Source: Department of Environmental Quality
Date Data Arrived at EDR: 03/23/2006	Telephone: 503-229-5815
Date Made Active in Reports: 04/12/2006	Last EDR Contact: 03/23/2006
Number of Days to Update: 20	Next Scheduled EDR Contact: 06/12/2006
	Data Release Frequency: Semi-Annually

## **OR HAZMAT:** Hazmat/Incidents

Hazardous material incidents reported to the State Fire Marshal by emergency responders. The hazardous material may or may not have been released.

Date of Government Version: 08/31/2004	Source: State Fire Marshal's Office
Date Data Arrived at EDR: 10/12/2004	Telephone: 503-373-1540
Date Made Active in Reports: 11/05/2004	Last EDR Contact: 05/23/2006
Number of Days to Update: 24	Next Scheduled EDR Contact: 08/21/2006
	Data Release Frequency: Semi-Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **WA INST CONTROL:** Institutional Control Site List

Sites that have institutional controls.

Date of Government Version: 03/07/2006	Source: Department of Ecology
Date Data Arrived at EDR: 03/08/2006	Telephone: 360-407-7170
Date Made Active in Reports: 04/13/2006	Last EDR Contact: 06/05/2006
Number of Days to Update: 36	Next Scheduled EDR Contact: 09/04/2006
	Data Release Frequency: Varies

## **OR INST CONTROL:** Institutional Controls Recorded at ESCI Sites

An institutional control is a legal or administrative tool or action taken to reduce the potential for exposure to hazardous substances. Institutional controls may include, but are not limited to, use restrictions, environmental monitoring requirements, and site access and security measures.

Date of Government Version: 05/01/2006	Source: Department of Environmental Quality
Date Data Arrived at EDR: 05/16/2006	Telephone: 503-229-5193
Date Made Active in Reports: 06/01/2006	Last EDR Contact: 05/15/2006
Number of Days to Update: 16	Next Scheduled EDR Contact: 08/14/2006
	Data Release Frequency: Quarterly

## **WA VCP:** Voluntary Cleanup Program Sites

Sites that have entered either the Voluntary Cleanup Program or its predecessor Independent Remedial Action Program.

Date of Government Version: 03/08/2006	Source: Department of Ecology
Date Data Arrived at EDR: 03/08/2006	Telephone: 360-407-7200
Date Made Active in Reports: 04/13/2006	Last EDR Contact: 05/16/2006
Number of Days to Update: 36	Next Scheduled EDR Contact: 08/14/2006
	Data Release Frequency: Varies

## **WA ICR:** Independent Cleanup Reports

These are remedial action reports Ecology has received from either the owner or operator of the sites. These actions have been conducted without department oversight or approval and are not under an order or decree. This database is no longer updated by the Department of Ecology.

Date of Government Version: 12/01/2002	Source: Department of Ecology
Date Data Arrived at EDR: 01/03/2003	Telephone: 360-407-7200
Date Made Active in Reports: 01/22/2003	Last EDR Contact: 05/15/2006
Number of Days to Update: 19	Next Scheduled EDR Contact: 08/14/2006
	Data Release Frequency: No Update Planned

## **OR VCS:** Voluntary Cleanup Program Sites

Responsible parties have entered into an agreement with DEQ to voluntarily address contamination associated with their property.

Date of Government Version: 02/14/2006	Source: DEQ
Date Data Arrived at EDR: 02/15/2006	Telephone: 503-229-5256
Date Made Active in Reports: 03/15/2006	Last EDR Contact: 06/05/2006
Number of Days to Update: 28	Next Scheduled EDR Contact: 07/31/2006
	Data Release Frequency: Quarterly

## **WA DRYCLEANERS:** Drycleaner List

A listing of registered drycleaners who registered with the Department of Ecology (using the SIC code of 7215 and 7216) as hazardous waste generators.

Date of Government Version: 01/12/2006	Source: Department of Ecology
Date Data Arrived at EDR: 03/23/2006	Telephone: 360-407-6732
Date Made Active in Reports: 04/13/2006	Last EDR Contact: 05/15/2006
Number of Days to Update: 21	Next Scheduled EDR Contact: 08/14/2006
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **OR DRYCLEANERS:** Drycleaning Facilities

A listing of registered drycleaning facilities in Oregon.

Date of Government Version: 12/01/2005  
Date Data Arrived at EDR: 12/13/2005  
Date Made Active in Reports: 01/05/2006  
Number of Days to Update: 23

Source: Department of Environmental Quality  
Telephone: 503-229-6783  
Last EDR Contact: 05/30/2006  
Next Scheduled EDR Contact: 08/28/2006  
Data Release Frequency: Varies

## **WA CDL:** Clandestine Drug Lab Contaminated Site List

Illegal methamphetamine labs use hazardous chemicals that create public health hazards. Chemicals and residues can cause burns, respiratory and neurological damage, and death. Biological hazards associated with intravenous needles, feces, and blood also pose health risks.

Date of Government Version: 02/16/2006  
Date Data Arrived at EDR: 03/07/2006  
Date Made Active in Reports: 04/13/2006  
Number of Days to Update: 37

Source: Department of Health  
Telephone: 360-236-3380  
Last EDR Contact: 06/07/2006  
Next Scheduled EDR Contact: 09/04/2006  
Data Release Frequency: Varies

## **OR CDL:** Uninhabitable Drug Lab Properties

The properties listed on these county pages have been declared by a law enforcement agency to be unfit for use due to meth lab and/or storage activities. The properties are considered uninhabitable until cleaned up by a state certified decontamination contractor and a certificate of fitness is issued by the Oregon Health Division.

Date of Government Version: 03/15/2006  
Date Data Arrived at EDR: 03/29/2006  
Date Made Active in Reports: 04/12/2006  
Number of Days to Update: 14

Source: Department of Consumer & Business Services  
Telephone: 503-378-4133  
Last EDR Contact: 03/15/2006  
Next Scheduled EDR Contact: 06/12/2006  
Data Release Frequency: Varies

## **WA EMI:** Washington Emissions Data System

Date of Government Version: 12/31/2004  
Date Data Arrived at EDR: 03/16/2006  
Date Made Active in Reports: 04/13/2006  
Number of Days to Update: 28

Source: Department of Ecology  
Telephone: 360-407-6040  
Last EDR Contact: 04/11/2006  
Next Scheduled EDR Contact: 07/17/2006  
Data Release Frequency: Annually

## **OR AIRS:** Oregon Title V Facility Listing

A listing of Title V facility source and emissions information.

Date of Government Version: 12/31/2002  
Date Data Arrived at EDR: 05/04/2006  
Date Made Active in Reports: 06/01/2006  
Number of Days to Update: 28

Source: Department of Environmental Quality  
Telephone: 503-229-6459  
Last EDR Contact: 05/03/2006  
Next Scheduled EDR Contact: 07/24/2006  
Data Release Frequency: Varies

## **WA INACTIVE DRYCLEANERS:** Inactive Drycleaners

A listing of inactive drycleaner facility locations.

Date of Government Version: 01/12/2006  
Date Data Arrived at EDR: 03/23/2006  
Date Made Active in Reports: 04/13/2006  
Number of Days to Update: 21

Source: Department of Ecology  
Telephone: 360-407-6732  
Last EDR Contact: 05/15/2006  
Next Scheduled EDR Contact: 08/14/2006  
Data Release Frequency: Annually

## **TRIBAL RECORDS**

### **INDIAN RESERV:** Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2004	Source: USGS
Date Data Arrived at EDR: 02/08/2005	Telephone: 202-208-3710
Date Made Active in Reports: 08/04/2005	Last EDR Contact: 05/12/2006
Number of Days to Update: 177	Next Scheduled EDR Contact: 08/07/2006
	Data Release Frequency: Semi-Annually

**WA INDIAN LUST:** Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 03/14/2006	Source: EPA Region 10
Date Data Arrived at EDR: 03/21/2006	Telephone: 206-553-2857
Date Made Active in Reports: 04/13/2006	Last EDR Contact: 05/23/2006
Number of Days to Update: 23	Next Scheduled EDR Contact: 08/21/2006
	Data Release Frequency: Varies

**OR INDIAN LUST:** Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 03/14/2006	Source: EPA Region 10
Date Data Arrived at EDR: 03/21/2006	Telephone: 206-553-2857
Date Made Active in Reports: 04/12/2006	Last EDR Contact: 05/23/2006
Number of Days to Update: 22	Next Scheduled EDR Contact: 08/21/2006
	Data Release Frequency: Varies

**WA INDIAN UST:** Underground Storage Tanks on Indian Land

Date of Government Version: 04/05/2006	Source: EPA Region 10
Date Data Arrived at EDR: 04/05/2006	Telephone: 206-553-2857
Date Made Active in Reports: 04/13/2006	Last EDR Contact: 05/23/2006
Number of Days to Update: 8	Next Scheduled EDR Contact: 08/21/2006
	Data Release Frequency: Varies

**OR INDIAN UST:** Underground Storage Tanks on Indian Land

Date of Government Version: 04/05/2006	Source: EPA Region 10
Date Data Arrived at EDR: 04/05/2006	Telephone: 206-553-2857
Date Made Active in Reports: 04/12/2006	Last EDR Contact: 05/23/2006
Number of Days to Update: 7	Next Scheduled EDR Contact: 08/21/2006
	Data Release Frequency: Varies

## EDR PROPRIETARY RECORDS

**Manufactured Gas Plants:** EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

**EDR Historical Auto Stations:** EDR Proprietary Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## **EDR Historical Cleaners:** EDR Proprietary Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## **COUNTY RECORDS**

### **KING COUNTY:**

#### **Abandoned Landfill Study in King County**

The King County Abandoned Landfill Survey was conducted from October through December 1984 by the Health Department's Environmental Health Division at the request of the King County Council. The primary objective of the survey was to determine if any public health problems existed at the predetermined 24 sites.

Date of Government Version: 04/30/1985  
Date Data Arrived at EDR: 11/07/1994  
Date Made Active in Reports: N/A  
Number of Days to Update: 0

Source: Seattle-King County Department of Public Health  
Telephone: 206-296-4785  
Last EDR Contact: 10/21/1994  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### **KITSAP COUNTY:**

#### **Water Wells in Kitsap County**

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: 0

Source: N/A  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: N/A

### **SEATTLE COUNTY:**

#### **Abandoned Landfill Study in the City of Seattle**

The Seattle Abandoned Landfill Survey was conducted in June and July of 1984 by the Health Department's Environmental Health Division at the request of the Mayor's Office. The primary objective of the survey was to determine if any public health problems existed at the predetermined 12 sites.

Date of Government Version: 07/30/1984  
Date Data Arrived at EDR: 11/07/1994  
Date Made Active in Reports: N/A  
Number of Days to Update: 0

Source: Seattle - King County Department of Public Health  
Telephone: 206-296-4785  
Last EDR Contact: 10/21/1994  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### **SEATTLE/KING COUNTY:**

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Seattle - King County Abandoned Landfill Toxicity / Hazard Assessment Project

This report presents the Seattle-King County Health Department's follow-up investigation of two city owned and four county owned abandoned landfills which was conducted from February to December 1986.

Date of Government Version: 12/31/1986  
Date Data Arrived at EDR: 08/18/1995  
Date Made Active in Reports: 09/20/1995  
Number of Days to Update: 33

Source: Department of Public Health  
Telephone: 206-296-4785  
Last EDR Contact: 08/14/1995  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## SNOHOMISH COUNTY:

### Solid Waste Sites of Record at Snohomish Health District

Date of Government Version: 01/26/2006  
Date Data Arrived at EDR: 05/01/2006  
Date Made Active in Reports: 05/31/2006  
Number of Days to Update: 30

Source: Snohomish Health District  
Telephone: 206-339-5250  
Last EDR Contact: 04/12/2006  
Next Scheduled EDR Contact: 07/17/2006  
Data Release Frequency: Semi-Annually

## TACOMA/PIERCE COUNTY:

### Closed Landfill Survey

Following numerous requests for information about closed dumpsites and landfills in Pierce County, the Tacoma-Pierce County Health Department decided to conduct a study on the matter. The aim of the study was to evaluate public health risks associated with the closed dumpsites and landfills, and to determine the need, if any, for further investigations of a more detailed nature. The sites represent all of the known dumpsites and landfills closed after 1950.

Date of Government Version: 09/01/2002  
Date Data Arrived at EDR: 03/24/2003  
Date Made Active in Reports: 05/14/2003  
Number of Days to Update: 51

Source: Tacoma-Pierce County Health Department  
Telephone: 206-591-6500  
Last EDR Contact: 03/19/2003  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

### **CT MANIFEST:** Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/31/2004  
Date Data Arrived at EDR: 02/17/2006  
Date Made Active in Reports: 04/07/2006  
Number of Days to Update: 49

Source: Department of Environmental Protection  
Telephone: 860-424-3375  
Last EDR Contact: 03/13/2006  
Next Scheduled EDR Contact: 06/12/2006  
Data Release Frequency: Annually

### **NY MANIFEST:** Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 03/01/2006  
Date Made Active in Reports: 04/20/2006  
Number of Days to Update: 50

Source: Department of Environmental Conservation  
Telephone: 518-402-8651  
Last EDR Contact: 05/31/2006  
Next Scheduled EDR Contact: 08/28/2006  
Data Release Frequency: Annually

## **PA MANIFEST:** Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 05/04/2006  
Date Made Active in Reports: 06/06/2006  
Number of Days to Update: 33

Source: Department of Environmental Protection  
Telephone: N/A  
Last EDR Contact: 03/17/2006  
Next Scheduled EDR Contact: 06/12/2006  
Data Release Frequency: Annually

## **WI MANIFEST:** Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 03/17/2006  
Date Made Active in Reports: 05/02/2006  
Number of Days to Update: 46

Source: Department of Natural Resources  
Telephone: N/A  
Last EDR Contact: 03/17/2006  
Next Scheduled EDR Contact: 07/10/2006  
Data Release Frequency: Annually

**Oil/Gas Pipelines:** This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

## **Electric Power Transmission Line Data**

Source: PennWell Corporation  
Telephone: (800) 823-6277

This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

**Sensitive Receptors:** There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

## **AHA Hospitals:**

Source: American Hospital Association, Inc.  
Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

## **Medical Centers: Provider of Services Listing**

Source: Centers for Medicare & Medicaid Services  
Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

## **Nursing Homes**

Source: National Institutes of Health  
Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

## **Public Schools**

Source: National Center for Education Statistics  
Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

## **Private Schools**

Source: National Center for Education Statistics  
Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **Daycare Centers: Daycare Center Listing**

Source: Department of Social & Health Services  
Telephone: 253-383-1735

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

## **Scanned Digital USGS 7.5' Topographic Map (DRG)**

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

## **STREET AND ADDRESS INFORMATION**

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## **GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM**

### **TARGET PROPERTY ADDRESS**

VANCOUVER BARRACKS  
638 HATHAWAY ROAD  
VANCOUVER, WA 98661

### **TARGET PROPERTY COORDINATES**

Latitude (North):	45.62500 - 45° 37' 30.0"
Longitude (West):	122.6657 - 122° 39' 56.5"
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	526060.7
UTM Y (Meters):	5052220.5

### **USGS TOPOGRAPHIC MAP**

Target Property Map:	45122-F6 VANCOUVER, WA
Most Recent Revision:	1990
South Map:	45122-E6 PORTLAND, OR
Most Recent Revision:	1990

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

## **GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY**

### **GROUNDWATER FLOW DIRECTION INFORMATION**

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

### **TOPOGRAPHIC INFORMATION**

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

### **TARGET PROPERTY TOPOGRAPHY**

General Topographic Gradient: General South

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

## FEMA FLOOD ZONE

<u>Target Property County</u> CLARK, WA	FEMA Flood <u>Electronic Data</u> YES - refer to the Overview Map and Detail Map
Flood Plain Panel at Target Property:	5300240000A
Additional Panels in search area:	5300270003B 5300270004B 5300270006B 5300270007B 5300240293B 5300240294B 4101790160B

## NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u> VANCOUVER	NWI Electronic <u>Data Coverage</u> YES - refer to the Overview Map and Detail Map
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## HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

### *Site-Specific Hydrogeological Data\*:*

Search Radius:	1.25 miles
Status:	Not found

## AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
C4	1/4 - 1/2 Mile WNW	SSW
10	1/4 - 1/2 Mile West	Not Reported

For additional site information, refer to Physical Setting Source Map Findings.

\* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

### GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### ROCK STRATIGRAPHIC UNIT

Era: Cenozoic  
System: Quaternary  
Series: Quaternary  
Code: Q (*decoded above as Era, System & Series*)

#### GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: SAUVIE

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Poorly. Soils may have a saturated zone, a layer of low hydraulic conductivity, or seepage. Depth to water table is less than 1 foot.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: MODERATE

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	15 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 0.60 Min: 0.20	Max: 6.50 Min: 5.60
2	15 inches	39 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 0.60 Min: 0.20	Max: 6.50 Min: 5.60
3	39 inches	60 inches	stratified	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 6.00 Min: 2.00	Max: 6.50 Min: 6.10

### OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: fine sandy loam  
silt loam  
loam  
gravelly - loam  
loamy sand  
very fine sandy loam  
unweathered bedrock  
very gravelly - loam

Surficial Soil Types: fine sandy loam  
silt loam  
loam  
gravelly - loam  
loamy sand  
very fine sandy loam  
unweathered bedrock  
very gravelly - loam

Shallow Soil Types: fine sandy loam  
sandy loam  
very fine sandy loam  
gravelly - loam  
very gravelly - loam  
stratified  
loamy sand

Deeper Soil Types: indurated  
silt loam

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

extremely cobbly - coarse sand  
 very gravelly - coarse sandy loam  
 very gravelly - loamy sand  
 extremely gravelly - sand  
 loamy fine sand  
 sandy loam  
 unweathered bedrock  
 sandy clay  
 very gravelly - loam

### LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

### WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

### FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A1	USGS3242958	1/4 - 1/2 Mile West
A2	USGS3242959	1/4 - 1/2 Mile West
B3	USGS3242849	1/4 - 1/2 Mile North
5	USGS3242843	1/4 - 1/2 Mile NNE
C6	USGS3242818	1/4 - 1/2 Mile WNW
7	USGS3242857	1/4 - 1/2 Mile NNE
B8	USGS3242867	1/4 - 1/2 Mile NNE
B9	USGS3242868	1/4 - 1/2 Mile NNE
D11	USGS3242851	1/4 - 1/2 Mile NW
D12	USGS3242850	1/4 - 1/2 Mile NW
E13	USGS3242944	1/4 - 1/2 Mile West
E14	USGS3242942	1/4 - 1/2 Mile West
E15	USGS3242943	1/4 - 1/2 Mile West
E16	USGS3242946	1/4 - 1/2 Mile West
E17	USGS3242947	1/4 - 1/2 Mile West
E18	USGS3242945	1/4 - 1/2 Mile West
19	USGS3242735	1/2 - 1 Mile NNW
F20	USGS3242960	1/2 - 1 Mile West
F21	USGS3242951	1/2 - 1 Mile West
23	USGS3242858	1/2 - 1 Mile WNW
G24	USGS3243026	1/2 - 1 Mile SE
G25	USGS3243025	1/2 - 1 Mile SE
G26	USGS3243024	1/2 - 1 Mile SE

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
G27	USGS3243027	1/2 - 1 Mile SE
28	USGS3242964	1/2 - 1 Mile West
29	USGS3242764	1/2 - 1 Mile NE
30	USGS3242804	1/2 - 1 Mile West
31	USGS3242770	1/2 - 1 Mile NE
32	USGS3242805	1/2 - 1 Mile West
33	USGS3243017	1/2 - 1 Mile SE

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

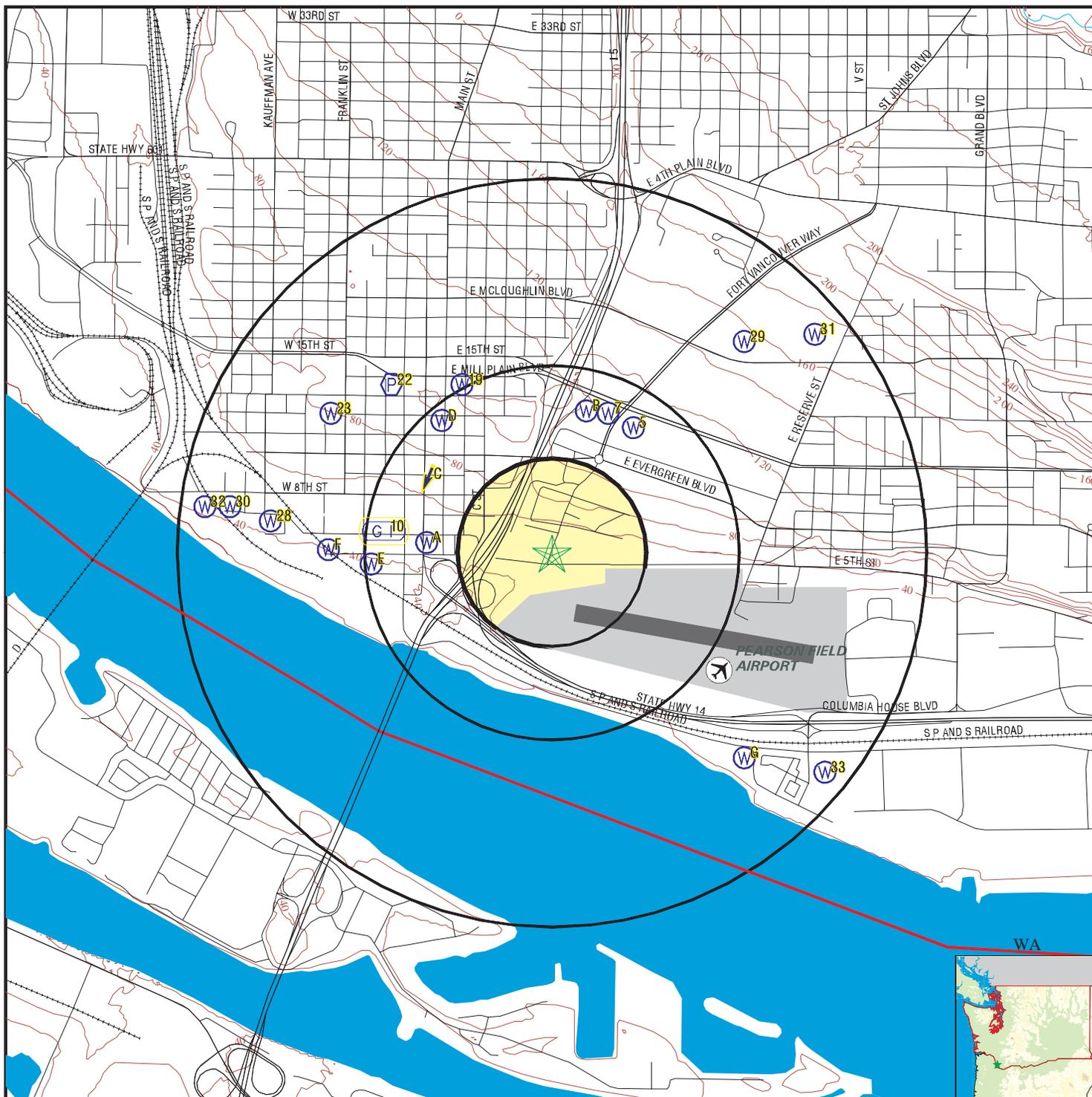
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
22	WA5368850	1/2 - 1 Mile NW

Note: PWS System location is not always the same as well location.

## STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

# PHYSICAL SETTING SOURCE MAP - 1692827.2s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons



- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data



SITE NAME: Vancouver Barracks  
 ADDRESS: 638 Hathaway Road  
 Vancouver WA 98661  
 LAT/LONG: 45.6250 / 122.6657

CLIENT: CH2M Hill, Inc.  
 CONTACT: Heather Rectenwald  
 INQUIRY #: 1692827.2s  
 DATE: June 09, 2006

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Database      EDR ID Number

**A1**  
**West**  
**1/4 - 1/2 Mile**  
**Higher**

**FED USGS      USGS3242958**

Agency cd:	USGS	Site no:	453732122401701
Site name:	02N/01E-27L01		
Latitude:	453732		
Longitude:	1224017	Dec lat:	45.62539483
Dec lon:	-122.67259728	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	53
State:	53	County:	011
Country:	US	Land net:	NE SW S27 T02N R01E W
Location map:	VANCOUVER	Map scale:	24000
Altitude:	40	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower ColumbiaSandy. Oregon, Washington. Area = 1110 sq.mi.		
Topographic:	Hillside (slope)		
Site type:	Ground-water other than Spring	Date construction:	19440901
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	ALLUVIUM (QUATERNARY)		
Well depth:	108	Hole depth:	Not Reported
Source of depth data:	other	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1949-03-02
Water quality data end date:	1949-03-02	Water quality data count:	1
Ground water data begin date:	1944-09-01	Ground water data end date:	1944-09-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1944-09-01	35	

**A2**  
**West**  
**1/4 - 1/2 Mile**  
**Higher**

**FED USGS      USGS3242959**

Agency cd:	USGS	Site no:	453732122401702
Site name:	02N/01E-27L02		
Latitude:	453732		
Longitude:	1224017	Dec lat:	45.62539483
Dec lon:	-122.67259728	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	53
State:	53	County:	011
Country:	US	Land net:	NE SW S27 T02N R01E W
Location map:	VANCOUVER	Map scale:	24000

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Altitude:	40	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower ColumbiaSandy. Oregon, Washington. Area = 1110 sq.mi.		
Topographic:	Hillside (slope)		
Site type:	Ground-water other than Spring	Date construction:	19320101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	ALLUVIUM (QUATERNARY)		
Well depth:	98	Hole depth:	Not Reported
Source of depth data:	other	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1949-03-02
Water quality data end date:	1949-03-02	Water quality data count:	1
Ground water data begin date:	1973-11-01	Ground water data end date:	1973-11-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1973-11-01	35	

**B3**  
**North**  
**1/4 - 1/2 Mile**  
**Higher**

**FED USGS      USGS3242849**

Agency cd:	USGS	Site no:	453749122394801
Site name:	02N/01E-27H03		
Latitude:	453749	Dec lat:	45.63011706
Longitude:	1223948	Coor meth:	M
Dec lon:	-122.66454162	Latlong datum:	NAD27
Coor accr:	F	District:	53
Dec latlong datum:	NAD83	County:	011
State:	53	Land net:	SE NE S27 T02N R01E W
Country:	US	Map scale:	24000
Location map:	VANCOUVER	Altitude method:	M
Altitude:	100	Altitude datum:	NGVD29
Altitude accuracy:	5		
Hydrologic:	Lower ColumbiaSandy. Oregon, Washington. Area = 1110 sq.mi.		
Topographic:	Hilltop		
Site type:	Ground-water other than Spring	Date construction:	19680118
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	221	Hole depth:	Not Reported
Source of depth data:	reporting agency (generally USGS)	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1968-06-01	Ground water data end date:	1968-06-01
Ground water data count:	1		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1968-06-01	150	

**C4  
WNW  
1/4 - 1/2 Mile  
Higher**

Site ID: 4751  
 Groundwater Flow: SSW  
 Shallowest Water Table Depth: Not Reported  
 Deepest Water Table Depth: Not Reported  
 Average Water Table Depth: Not Reported  
 Date: 04/25/1990

**AQUIFLOW 41682**

**5  
NNE  
1/4 - 1/2 Mile  
Higher**

Agency cd:	USGS	Site no:	453748122393601
Site name:	02N/01E-26E01		
Latitude:	453748		
Longitude:	1223936	Dec lat:	45.62983931
Dec lon:	-122.66120821	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	53
State:	53	County:	011
Country:	US	Land net:	SW NW S26 T02N R01E W
Location map:	VANCOUVER	Map scale:	24000
Altitude:	109	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower ColumbiaSandy. Oregon, Washington. Area = 1110 sq.mi.		
Topographic:	Hillside (slope)		
Site type:	Ground-water other than Spring	Date construction:	19611001
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	141	Hole depth:	Not Reported
Source of depth data:	reporting agency (generally USGS)	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1961-10-01	Ground water data end date:	1961-10-01
Ground water data count:	1		

**FED USGS USGS3242843**

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1961-10-01	106	

**C6  
WNW  
1/4 - 1/2 Mile  
Higher**

**FED USGS USGS3242818**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Agency cd:	USGS	Site no:	453741122401801
Site name:	02N/01E-27(1)		
Latitude:	453741		
Longitude:	1224018	Dec lat:	45.6278948
Dec lon:	-122.67287509	Coor meth:	M
Coor accr:	T	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	53
State:	53	County:	011
Country:	US	Land net:	S27 T02N R01E W
Location map:	VANCOUVER	Map scale:	24000
Altitude:	60	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower ColumbiaSandy. Oregon, Washington. Area = 1110 sq.mi.		
Topographic:	Hillside (slope)		
Site type:	Ground-water other than Spring	Date construction:	19600521
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	184	Hole depth:	Not Reported
Source of depth data:	reporting agency (generally USGS)	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1960-05-21	Ground water data end date:	1960-05-21
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1960-05-21	20	

7

**NNE  
1/4 - 1/2 Mile  
Higher**

**FED USGS USGS3242857**

Agency cd:	USGS	Site no:	453750122394101
Site name:	02N/01E-27H04		
Latitude:	453750		
Longitude:	1223941	Dec lat:	45.63039484
Dec lon:	-122.66259714	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	53
State:	53	County:	011
Country:	US	Land net:	SE NE S27 T02N R01E W
Location map:	VANCOUVER	Map scale:	24000
Altitude:	100	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower ColumbiaSandy. Oregon, Washington. Area = 1110 sq.mi.		
Topographic:	Hilltop		
Site type:	Ground-water other than Spring	Date construction:	19611024
Date inventoried:	Not Reported	Mean greenwich time offset:	PST



# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1955-09-05		98

**B9  
NNE  
1/4 - 1/2 Mile  
Higher**

**FED USGS      USGS3242868**

Agency cd:	USGS	Site no:	453751122394402
Site name:	02N/01E-27H02		
Latitude:	453751		
Longitude:	1223944	Dec lat:	45.63067261
Dec lon:	-122.66343049	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	53
State:	53	County:	011
Country:	US	Land net:	SE NE S27 T02N R01E W
Location map:	VANCOUVER	Map scale:	24000
Altitude:	95	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower ColumbiaSandy. Oregon, Washington. Area = 1110 sq.mi.		
Topographic:	Hilltop		
Site type:	Ground-water other than Spring	Date construction:	19550925
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	137	Hole depth:	Not Reported
Source of depth data:	reporting agency (generally USGS)	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1955-09-25	Ground water data end date:	1955-09-25
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1955-09-25		91

**10  
West  
1/4 - 1/2 Mile  
Higher**

Site ID:	6618	<b>AQUIFLOW</b>	<b>42390</b>
Groundwater Flow:	Not Reported		
Shallowest Water Table Depth:	25		
Deepest Water Table Depth:	32		
Average Water Table Depth:	Not Reported		
Date:	10/08/1992		

**D11  
NW  
1/4 - 1/2 Mile  
Higher**

**FED USGS      USGS3242851**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Agency cd:	USGS	Site no:	453749122401402
Site name:	02N/01E-27G02		
Latitude:	453749		
Longitude:	1224014	Dec lat:	45.630117
Dec lon:	-122.67176399	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	53
State:	53	County:	011
Country:	US	Land net:	SW NE S27 T02N R01E W
Location map:	VANCOUVER	Map scale:	24000
Altitude:	88	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower ColumbiaSandy. Oregon, Washington. Area = 1110 sq.mi.		
Topographic:	Hillside (slope)		
Site type:	Ground-water other than Spring	Date construction:	19600523
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	146	Hole depth:	Not Reported
Source of depth data:	reporting agency (generally USGS)	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1960-05-23	Ground water data end date:	1960-05-23
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1960-05-23	89	

**D12  
NW  
1/4 - 1/2 Mile  
Higher**

**FED USGS      USGS3242850**

Agency cd:	USGS	Site no:	453749122401401
Site name:	02N/01E-27G01		
Latitude:	453749		
Longitude:	1224014	Dec lat:	45.630117
Dec lon:	-122.67176399	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	53
State:	53	County:	011
Country:	US	Land net:	SW NE S27 T02N R01E W
Location map:	VANCOUVER	Map scale:	24000
Altitude:	88	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower ColumbiaSandy. Oregon, Washington. Area = 1110 sq.mi.		
Topographic:	Hillside (slope)		
Site type:	Ground-water other than Spring	Date construction:	19600523
Date inventoried:	Not Reported	Mean greenwich time offset:	PST



# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1973-11-01	30	

**E14**  
West  
1/4 - 1/2 Mile  
Higher

**FED USGS      USGS3242942**

Agency cd:	USGS	Site no:	453729122402801
Site name:	02N/01E-27M01		
Latitude:	453729		
Longitude:	1224028	Dec lat:	45.62456148
Dec lon:	-122.67565289	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	53
State:	53	County:	011
Country:	US	Land net:	NW SW S27 T02N R01E W
Location map:	PORTLAND	Map scale:	24000
Altitude:	35	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower ColumbiaSandy, Oregon, Washington. Area = 1110 sq.mi.		
Topographic:	Alluvial or marine terrace		
Site type:	Ground-water other than Spring	Date construction:	19280101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	70	Hole depth:	Not Reported
Source of depth data:	reporting agency (generally USGS)	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1973-11-01	Ground water data end date:	1973-11-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1973-11-01	30	

**E15**  
West  
1/4 - 1/2 Mile  
Higher

**FED USGS      USGS3242943**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Agency cd:	USGS	Site no:	453729122402802
Site name:	02N/01E-27M02		
Latitude:	453729		
Longitude:	1224028	Dec lat:	45.62456148
Dec lon:	-122.67565289	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	53
State:	53	County:	011
Country:	US	Land net:	NW SW S27 T02N R01E W
Location map:	PORTLAND	Map scale:	24000
Altitude:	35	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower ColumbiaSandy. Oregon, Washington. Area = 1110 sq.mi.		
Topographic:	Alluvial or marine terrace		
Site type:	Ground-water other than Spring	Date construction:	19280101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	90	Hole depth:	Not Reported
Source of depth data:	reporting agency (generally USGS)	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1973-11-01	Ground water data end date:	1973-11-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1973-11-01	30	

**E16  
West  
1/4 - 1/2 Mile  
Higher**

**FED USGS      USGS3242946**

Agency cd:	USGS	Site no:	453729122402805
Site name:	02N/01E-27M05		
Latitude:	453729		
Longitude:	1224028	Dec lat:	45.62456148
Dec lon:	-122.67565289	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	53
State:	53	County:	011
Country:	US	Land net:	NW SW S27 T02N R01E W
Location map:	PORTLAND	Map scale:	24000
Altitude:	35	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower ColumbiaSandy. Oregon, Washington. Area = 1110 sq.mi.		
Topographic:	Alluvial or marine terrace		
Site type:	Ground-water other than Spring	Date construction:	19280101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1973-11-01	30	

**E18**  
**West**  
**1/4 - 1/2 Mile**  
**Higher**

**FED USGS      USGS3242945**

Agency cd:	USGS	Site no:	453729122402804
Site name:	02N/01E-27M04		
Latitude:	453729		
Longitude:	1224028	Dec lat:	45.62456148
Dec lon:	-122.67565289	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	53
State:	53	County:	011
Country:	US	Land net:	NW SW S27 T02N R01E W
Location map:	PORTLAND	Map scale:	24000
Altitude:	35	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower ColumbiaSandy. Oregon, Washington. Area = 1110 sq.mi.		
Topographic:	Alluvial or marine terrace		
Site type:	Ground-water other than Spring	Date construction:	19280101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	90	Hole depth:	Not Reported
Source of depth data:	reporting agency (generally USGS)	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1973-11-01	Ground water data end date:	1973-11-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1973-11-01	30	

**19**  
**NNW**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS3242735**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Agency cd:	USGS	Site no:	453754122401001
Site name:	02N/01E-27G03		
Latitude:	453754		
Longitude:	1224010	Dec lat:	45.63150588
Dec lon:	-122.67065287	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	53
State:	53	County:	011
Country:	US	Land net:	SW NE S27 T02N R01E W
Location map:	VANCOUVER	Map scale:	24000
Altitude:	89	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower ColumbiaSandy. Oregon, Washington. Area = 1110 sq.mi.		
Topographic:	Hilltop		
Site type:	Ground-water other than Spring	Date construction:	19650917
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	140	Hole depth:	Not Reported
Source of depth data:	reporting agency (generally USGS)	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1965-09-17	Ground water data end date:	1965-09-17
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1965-09-17	85	

**F20  
West  
1/2 - 1 Mile  
Higher**

**FED USGS      USGS3242960**

Agency cd:	USGS	Site no:	453732122403601
Site name:	02N/01E-27M08		
Latitude:	453732		
Longitude:	1224036	Dec lat:	45.62539479
Dec lon:	-122.67787517	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	53
State:	53	County:	011
Country:	US	Land net:	NW SW S27 T02N R01E W
Location map:	VANCOUVER	Map scale:	24000
Altitude:	42	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower ColumbiaSandy. Oregon, Washington. Area = 1110 sq.mi.		
Topographic:	Alluvial or marine terrace		
Site type:	Ground-water other than Spring	Date construction:	19480101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	137	Hole depth:	Not Reported
Source of depth data:	owner	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1949-03-01	Ground water data end date:	1949-03-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1949-03-01	22	

**F21  
West  
1/2 - 1 Mile  
Higher**

**FED USGS USGS3242951**

Agency cd:	USGS	Site no:	453730122403701
Site name:	02N/01E-27M07		
Latitude:	453730		
Longitude:	1224037	Dec lat:	45.62483924
Dec lon:	-122.67815294	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	53
State:	53	County:	011
Country:	US	Land net:	NW SW S27 T02N R01E W
Location map:	VANCOUVER	Map scale:	24000
Altitude:	38	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower ColumbiaSandy. Oregon, Washington. Area = 1110 sq.mi.		
Topographic:	Alluvial or marine terrace		
Site type:	Ground-water other than Spring	Date construction:	19470331
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	150	Hole depth:	Not Reported
Source of depth data:	owner	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1949-03-01	Ground water data end date:	1949-03-01
Ground water data count:	1		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1949-03-01	22	

**22  
NW  
1/2 - 1 Mile  
Higher**

**FRDS PWS WA5368850**

PWS ID: WA5368850 PWS Status: Active  
 Date Initiated: Not Reported Date Deactivated: Not Reported  
 PWS Name: PORT OF VANCOUVER  
 VANCOUVER, WA 98660

Addressee / Facility: Not Reported

Facility Latitude: 45 37 54 Facility Longitude: 122 40 24  
 City Served: Not Reported  
 Treatment Class: Treated Population: 00000713

PWS currently has or had major violation(s) or enforcement: Yes

Violations information not reported.

**ENFORCEMENT INFORMATION:**

System Name:	PORT OF VANCOUVER		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1999-07-01 - 2000-10-01	Analytical Value:	0000000.000000000
Violation ID:	0093003	Enforcement ID:	Not Reported
Enforcement Date:	Not Reported	Enf. Action:	Not Reported
System Name:	PORT OF VANCOUVER		
Violation Type:	Initial Tap Sampling for Pb and Cu		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1999-07-01 - 2015-12-31	Analytical Value:	0000000.000000000
Violation ID:	0093003	Enforcement ID:	Not Reported
Enforcement Date:	Not Reported	Enf. Action:	Not Reported
System Name:	PORT OF VANCOUVER		
Violation Type:	Follow-up and Routine Tap Sampling		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	2004-01-01 - 2015-12-31	Analytical Value:	0
Violation ID:	0308371	Enforcement ID:	0193001
Enforcement Date:	2000-10-01	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	Follow-up and Routine Tap Sampling		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	1/1/2004 0:00:00 - 12/31/2015 0:00:00	Analytical Value:	0
Violation ID:	0308371	Enforcement ID:	Not Reported
Enforcement Date:	Not Reported	Enf. Action:	NO ENF ACT
System Name:	PORT OF VANCOUVER WS		
Violation Type:	Follow-up and Routine Tap Sampling		
Contaminant:	LEAD & COPPER RULE		
Compliance Period:	2004-01-01 - 2015-12-31	Analytical Value:	0
Violation ID:	0308371	Enforcement ID:	Not Reported
Enforcement Date:	Not Reported	Enf. Action:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

### ENFORCEMENT INFORMATION:

System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	METHYLCHLORIDE (CHLOROEMETHANE)		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972210	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	BROMOMETHANE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972214	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	CHLOROETHANE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972216	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	1,2,4-TRICHLOROBENZENE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972378	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	CIS-1,2-DICHLOROETHYLENE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972380	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	DIBROMOMETHANE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972408	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	1,1-DICHLOROPROPENE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972410	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	1,3-DICHLOROPROPANE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972412	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	1,2,3-TRICHLOROPROPANE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972414	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

### ENFORCEMENT INFORMATION:

System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	2,2-DICHLOROPROPANE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972416	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	METHYLENE CHLORIDE (DICHLOROMETHANE)		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972964	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	O-CHLOROTOLUENE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972965	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	P-CHLOROTOLUENE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972966	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	M-DICHLOROBENZENE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972967	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	O-DICHLOROBENZENE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972968	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	P-DICHLOROBENZENE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972969	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	VINYL CHLORIDE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972976	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	1,1-DICHLOROETHYLENE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972977	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

**ENFORCEMENT INFORMATION:**

System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	1,1-DICHLOROETHANE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972978	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	TRANS-1,2-DICHLOROETHYLENE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972979	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	1,2-DICHLOROETHANE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972980	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	1,1,1-TRICHLOROETHANE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972981	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	CARBON TETRACHLORIDE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972982	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	1,2-DICHLOROPROPANE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972983	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	TRICHLOROETHYLENE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972984	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	1,1,2-TRICHLOROETHANE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972985	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	1,1,1,2-TETRACHLOROETHANE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972986	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

### ENFORCEMENT INFORMATION:

System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	TETRACHLOROETHYLENE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972987	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	1,1,2,2-TETRACHLOROETHANE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972988	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	MONOCHLOROBENZENE (CHLOROBENZENE)		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972989	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	BENZENE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972990	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	TOLUENE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972991	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	ETHYLBENZENE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972992	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	BROMOBENZENE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972993	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	3		
Contaminant:	STYRENE		
Compliance Period:	10/1/2004 0:00:00 - 12/31/2004 0:00:00	Analytical Value:	Not Reported
Violation ID:	04650972996	Enforcement ID:	Not Reported
Enforcement Date:	2/10/2005 0:00:00	Enf. Action:	State Compliance Achieved
System Name:	PORT OF VANCOUVER		
Violation Type:	MCL, Monthly (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	1995-04-01 - 1995-04-30	Analytical Value:	00000000.00
Violation ID:	9550359	Enforcement ID:	9500034
Enforcement Date:	1995-04-30	Enf. Action:	State Violation/Reminder Notice

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

### ENFORCEMENT INFORMATION:

System Name:	PORT OF VANCOUVER	Analytical Value:	00000000.00
Violation Type:	MCL, Monthly (TCR)	Enforcement ID:	9500036
Contaminant:	COLIFORM (TCR)	Enf. Action:	State Violation/Reminder Notice
Compliance Period:	1995-09-01 - 1995-09-30		
Violation ID:	9575475		
Enforcement Date:	1995-09-30		
System Name:	PORT OF VANCOUVER	Analytical Value:	0000000.000000000
Violation Type:	Initial Tap Sampling for Pb and Cu	Enforcement ID:	Not Reported
Contaminant:	LEAD & COPPER RULE	Enf. Action:	Not Reported
Compliance Period:	1998-07-01 - 1998-12-31		
Violation ID:	99000001		
Enforcement Date:	Not Reported		
System Name:	PORT OF VANCOUVER	Analytical Value:	0000000.000000000
Violation Type:	Initial Tap Sampling for Pb and Cu	Enforcement ID:	Not Reported
Contaminant:	LEAD & COPPER RULE	Enf. Action:	Not Reported
Compliance Period:	1998-07-01 - 2015-12-31		
Violation ID:	99000001		
Enforcement Date:	Not Reported		
System Name:	PORT OF VANCOUVER	Analytical Value:	0000000.000000000
Violation Type:	Initial Tap Sampling for Pb and Cu	Enforcement ID:	Not Reported
Contaminant:	LEAD & COPPER RULE	Enf. Action:	Not Reported
Compliance Period:	1999-01-01 - 2015-12-31		
Violation ID:	99000002		
Enforcement Date:	Not Reported		
System Name:	PORT OF VANCOUVER	Analytical Value:	0
Violation Type:	Initial Tap Sampling for Pb and Cu	Enforcement ID:	0193001
Contaminant:	LEAD & COPPER RULE	Enf. Action:	State Compliance Achieved
Compliance Period:	1999-01-01 - 2000-10-01		
Violation ID:	9993001		
Enforcement Date:	2000-10-01		
System Name:	PORT OF VANCOUVER	Analytical Value:	0
Violation Type:	Initial Tap Sampling for Pb and Cu	Enforcement ID:	Not Reported
Contaminant:	LEAD & COPPER RULE	Enf. Action:	State Compliance Achieved
Compliance Period:	1/1/1999 0:00:00 - 10/1/2000 0:00:00		
Violation ID:	9993001		
Enforcement Date:	10/1/2000 0:00:00		
System Name:	PORT OF VANCOUVER	Analytical Value:	Not Reported
Violation Type:	Initial Tap Sampling for Pb and Cu	Enforcement ID:	Not Reported
Contaminant:	LEAD & COPPER RULE	Enf. Action:	State Compliance Achieved
Compliance Period:	1/1/1999 0:00:00 - 10/1/2000 0:00:00		
Violation ID:	9993001		
Enforcement Date:	10/1/2000 0:00:00		
System Name:	PORT OF VANCOUVER	Analytical Value:	0000000.000000000
Violation Type:	Initial Tap Sampling for Pb and Cu	Enforcement ID:	Not Reported
Contaminant:	LEAD & COPPER RULE	Enf. Action:	Not Reported
Compliance Period:	1998-07-01 - 2000-10-01		
Violation ID:	9993001		
Enforcement Date:	Not Reported		
System Name:	PORT OF VANCOUVER WS	Analytical Value:	0
Violation Type:	Initial Tap Sampling for Pb and Cu	Enforcement ID:	Not Reported
Contaminant:	LEAD & COPPER RULE	Enf. Action:	Not Reported
Compliance Period:	1999-01-01 - 2000-10-01		
Violation ID:	9993001		
Enforcement Date:	Not Reported		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

**ENFORCEMENT INFORMATION:**

System Name:	PORT OF VANCOUVER	Analytical Value:	0
Violation Type:	Initial Tap Sampling for Pb and Cu	Enforcement ID:	Not Reported
Contaminant:	LEAD & COPPER RULE	Enf. Action:	Not Reported
Compliance Period:	1998-07-01 - 2015-12-31		
Violation ID:	9993001		
Enforcement Date:	Not Reported		
System Name:	PORT OF VANCOUVER	Analytical Value:	0000000.000000000
Violation Type:	Initial Tap Sampling for Pb and Cu	Enforcement ID:	Not Reported
Contaminant:	LEAD & COPPER RULE	Enf. Action:	Not Reported
Compliance Period:	1998-07-01 - 2015-12-31		
Violation ID:	9993001		
Enforcement Date:	Not Reported		
System Name:	PORT OF VANCOUVER	Analytical Value:	0000000.000000000
Violation Type:	Initial Tap Sampling for Pb and Cu	Enforcement ID:	Not Reported
Contaminant:	LEAD & COPPER RULE	Enf. Action:	Not Reported
Compliance Period:	1999-01-01 - 2000-10-01		
Violation ID:	9993002		
Enforcement Date:	Not Reported		
System Name:	PORT OF VANCOUVER	Analytical Value:	0000000.000000000
Violation Type:	Initial Tap Sampling for Pb and Cu	Enforcement ID:	Not Reported
Contaminant:	LEAD & COPPER RULE	Enf. Action:	Not Reported
Compliance Period:	1999-01-01 - 2015-12-31		
Violation ID:	9993002		
Enforcement Date:	Not Reported		

**23  
WNW  
1/2 - 1 Mile  
Higher**

**FED USGS      USGS3242858**

Agency cd:	USGS	Site no:	453750122403601
Site name:	02N/01E-27F01		
Latitude:	453750	Dec lat:	45.63039473
Longitude:	1224036	Coor meth:	M
Dec lon:	-122.67787523	Latlong datum:	NAD27
Coor accr:	F	District:	53
Dec latlong datum:	NAD83	County:	011
State:	53	Land net:	SE NW S27 T02N R01E W
Country:	US	Map scale:	24000
Location map:	VANCOUVER	Altitude method:	M
Altitude:	75	Altitude datum:	NGVD29
Altitude accuracy:	5		
Hydrologic:	Lower ColumbiaSandy. Oregon, Washington. Area = 1110 sq.mi.		
Topographic:	Hillside (slope)		
Site type:	Ground-water other than Spring	Date construction:	19010101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	111	Hole depth:	Not Reported
Source of depth data:	owner	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Peak flow data count: 0	Water quality data begin date: 0000-00-00
Water quality data end date: 0000-00-00	Water quality data count: 0
Ground water data begin date: 1949-03-01	Ground water data end date: 1949-03-01
Ground water data count: 1	

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1949-03-01	36	

**G24**  
**SE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS3243026**

Agency cd: USGS	Site no: 453702122391403
Site name: 02N/01E-35F03	
Latitude: 453702	
Longitude: 1223914	Dec lat: 45.61706172
Dec lon: -122.65509679	Coor meth: M
Coor accr: F	Latlong datum: NAD27
Dec latlong datum: NAD83	District: 53
State: 53	County: 011
Country: US	Land net: SE NW S35 T02N R01E W
Location map: PORTLAND	Map scale: 24000
Altitude: 30	Altitude method: M
Altitude accuracy: 5	Altitude datum: NGVD29
Hydrologic: Lower ColumbiaSandy. Oregon, Washington. Area = 1110 sq.mi.	
Topographic: Alluvial or marine terrace	
Site type: Ground-water other than Spring	Date construction: 19511008
Date inventoried: Not Reported	Mean greenwich time offset: PST
Local standard time flag: Y	
Type of ground water site: Single well, other than collector or Ranney type	
Aquifer Type: Not Reported	
Aquifer: Not Reported	
Well depth: 96	Hole depth: Not Reported
Source of depth data: owner	Project number: Not Reported
Real time data flag: 0	Daily flow data begin date: 0000-00-00
Daily flow data end date: 0000-00-00	Daily flow data count: 0
Peak flow data begin date: 0000-00-00	Peak flow data end date: 0000-00-00
Peak flow data count: 0	Water quality data begin date: 0000-00-00
Water quality data end date: 0000-00-00	Water quality data count: 0
Ground water data begin date: 1951-10-08	Ground water data end date: 1951-10-08
Ground water data count: 1	

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1951-10-08	27	

**G25**  
**SE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS3243025**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Agency cd:	USGS	Site no:	453702122391402
Site name:	02N/01E-35F02		
Latitude:	453702		
Longitude:	1223914	Dec lat:	45.61706172
Dec lon:	-122.65509679	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	53
State:	53	County:	011
Country:	US	Land net:	SE NW S35 T02N R01E W
Location map:	PORTLAND	Map scale:	24000
Altitude:	29	Altitude method:	L
Altitude accuracy:	0.5	Altitude datum:	NGVD29
Hydrologic:	Lower ColumbiaSandy. Oregon, Washington. Area = 1110 sq.mi.		
Topographic:	Alluvial or marine terrace		
Site type:	Ground-water other than Spring	Date construction:	19510101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	160	Hole depth:	Not Reported
Source of depth data:	owner	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1951-07-01	Ground water data end date:	1951-07-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1951-07-01	12	

**G26  
SE  
1/2 - 1 Mile  
Higher**

**FED USGS      USGS3243024**

Agency cd:	USGS	Site no:	453702122391401
Site name:	02N/01E-35F01		
Latitude:	453702		
Longitude:	1223914	Dec lat:	45.61706172
Dec lon:	-122.65509679	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	53
State:	53	County:	011
Country:	US	Land net:	SE NW S35 T02N R01E W
Location map:	PORTLAND	Map scale:	24000
Altitude:	30	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower ColumbiaSandy. Oregon, Washington. Area = 1110 sq.mi.		
Topographic:	Alluvial or marine terrace		
Site type:	Ground-water other than Spring	Date construction:	19490810
Date inventoried:	Not Reported	Mean greenwich time offset:	PST



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1951-11-08	27	

**28**  
**West**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS3242964**

Agency cd:	USGS	Site no:	453735122404801
Site name:	02N/01E-27M09		
Latitude:	453735		
Longitude:	1224048	Dec lat:	45.62622809
Dec lon:	-122.68120858	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	53
State:	53	County:	011
Country:	US	Land net:	NW SW S27 T02N R01E W
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	42	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower ColumbiaSandy. Oregon, Washington. Area = 1110 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	19570510
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	128	Hole depth:	Not Reported
Source of depth data:	driller	Project number:	WA33100
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1988-05-25
Water quality data end date:	1991-05-07	Water quality data count:	3
Ground water data begin date:	0000-00-00	Ground water data end date:	0000-00-00
Ground water data count:	0		

Ground-water levels, Number of Measurements: 0

**29**  
**NE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS3242764**

Agency cd:	USGS	Site no:	453800122391401
Site name:	02N/01E-26C01		
Latitude:	453800		
Longitude:	1223914	Dec lat:	45.63317264
Dec lon:	-122.65509702	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	53
State:	53	County:	011
Country:	US	Land net:	NE NW S26 T02N R01E W
Location map:	VANCOUVER	Map scale:	24000

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Altitude:	150	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower ColumbiaSandy. Oregon, Washington. Area = 1110 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	19740520
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	146	Hole depth:	Not Reported
Source of depth data:	driller	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1974-06-07	Ground water data end date:	1974-06-07
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1974-06-07	71	

**30  
West  
1/2 - 1 Mile  
Higher**

**FED USGS USGS3242804**

Agency cd:	USGS	Site no:	453737122405601
Site name:	02N/01E-28J01		
Latitude:	453737		
Longitude:	1224056	Dec lat:	45.62678362
Dec lon:	-122.68343086	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	53
State:	53	County:	011
Country:	US	Land net:	NE SE S28 T02N R01E W
Location map:	VANCOUVER	Map scale:	24000
Altitude:	42	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower ColumbiaSandy. Oregon, Washington. Area = 1110 sq.mi.		
Topographic:	Alluvial or marine terrace		
Site type:	Ground-water other than Spring	Date construction:	19340101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	82	Hole depth:	Not Reported
Source of depth data:	owner	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1949-03-01	Ground water data end date:	1949-03-01
Ground water data count:	1		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1949-03-01	20	

**31**  
**NE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS3242770**

Agency cd:	USGS	Site no:	453801122390001
Site name:	02N/03E-35B01		
Latitude:	453801		
Longitude:	1223900	Dec lat:	45.63345045
Dec lon:	-122.65120805	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	53
State:	53	County:	011
Country:	US	Land net:	NW NE S35 T02N R03E W
Location map:	CAMAS	Map scale:	24000
Altitude:	350	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower ColumbiaSandy. Oregon, Washington. Area = 1110 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	19730828
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	160	Hole depth:	Not Reported
Source of depth data:	driller	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1973-08-28	Ground water data end date:	1973-08-28
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1973-08-28	120	

**32**  
**West**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS3242805**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Agency cd:	USGS	Site no:	453737122410101
Site name:	02N/01E-28J02		
Latitude:	453737		
Longitude:	1224101	Dec lat:	45.62678361
Dec lon:	-122.68481978	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	53
State:	53	County:	011
Country:	US	Land net:	NE SE S28 T02N R01E W
Location map:	VANCOUVER	Map scale:	24000
Altitude:	39	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower ColumbiaSandy. Oregon, Washington. Area = 1110 sq.mi.		
Topographic:	Alluvial or marine terrace		
Site type:	Ground-water other than Spring	Date construction:	19010101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	32	Hole depth:	Not Reported
Source of depth data:	reporting agency (generally USGS)	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1973-11-01	Ground water data end date:	1973-11-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1973-11-01	20	

**33  
SE  
1/2 - 1 Mile  
Higher**

**FED USGS      USGS3243017**

Agency cd:	USGS	Site no:	453700122385801
Site name:	02N/01E-35(1)		
Latitude:	453700		
Longitude:	1223858	Dec lat:	45.6165062
Dec lon:	-122.65065224	Coor meth:	M
Coor accr:	T	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	53
State:	53	County:	011
Country:	US	Land net:	S35 T02N R01E W
Location map:	PORTLAND	Map scale:	24000
Altitude:	35	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Lower ColumbiaSandy. Oregon, Washington. Area = 1110 sq.mi.		
Topographic:	Alluvial or marine terrace		
Site type:	Ground-water other than Spring	Date construction:	19600623
Date inventoried:	Not Reported	Mean greenwich time offset:	PST

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	84	Hole depth:	Not Reported
Source of depth data:	reporting agency (generally USGS)	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1960-06-23	Ground water data end date:	1960-06-23
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1960-06-23	29	

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

Federal EPA Radon Zone for CLARK County: 1

- Note: Zone 1 indoor average level > 4 pCi/L.  
 : Zone 2 indoor average level  $\geq$  2 pCi/L and  $\leq$  4 pCi/L.  
 : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 98661

Number of sites tested: 4

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.450 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	3.033 pCi/L	100%	0%	0%

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### **USGS 7.5' Digital Elevation Model (DEM)**

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

### **Scanned Digital USGS 7.5' Topographic Map (DRG)**

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

## HYDROLOGIC INFORMATION

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

## HYDROGEOLOGIC INFORMATION

### **AQUIFLOW<sup>R</sup> Information System**

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

### **Geologic Age and Rock Stratigraphic Unit**

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### **STATSGO: State Soil Geographic Database**

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

### **SSURGO: Soil Survey Geographic Database**

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

### FEDERAL WATER WELLS

#### **PWS:** Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

#### **PWS ENF:** Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

#### **USGS Water Wells:** USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

### STATE RECORDS

#### **Water Wells**

Source: Department of Health

Telephone: 360-236-3148

Group A and B well locations.

## OTHER STATE DATABASE INFORMATION

### RADON

#### **Area Radon Information**

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

#### **EPA Radon Zones**

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

### OTHER

#### **Airport Landing Facilities:** Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

#### **Epicenters:** World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## STREET AND ADDRESS INFORMATION

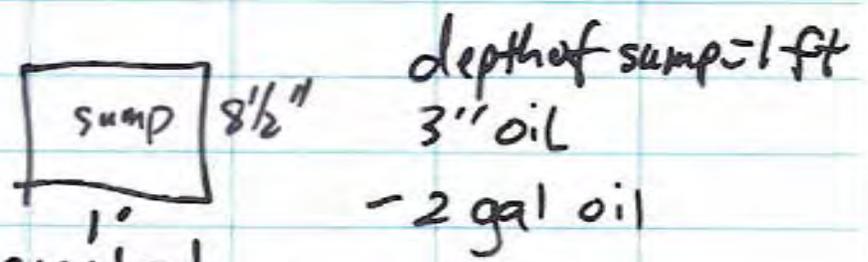
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ARMY CORP OF ENGINEERS - LOUISVILLE DIST.  
VANCOUVER BARRACKS - VANCOUVER, WA

JAN. 10, 2007 ONSITE VISIT WITH  
BILL SCHELL + BOB BAERNWOLF - FACILITY CONTACTS  
Heather Reitenwald, Kira Sykes, Jeremiah Knuth  
13:00 OFFICE MEETING: DISCUSS FSP, HSP,  
and field work.

Building 410

- open hole - oil and cloth in sump  
oil ~12" from top of sump
- 2 photos of contents
- TOOK 5 mL oil and water
- performed chlor-n-oil test
- results dark purple indicate <50 ppm  
on the lowest end of detection scale.



Bill Schell requested  
fill hole with <sup>sand and</sup> concrete when done.

- Sump secured with card board  
cover and duct tape, labeled

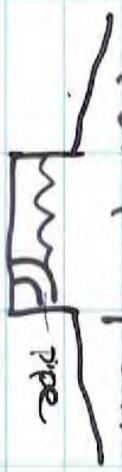
# Building 408

- Sump cover in place
- Standing water over cover plate: Vegetation and dirt preventing drainage under cover to sump

- Removed cover - water drained into sump

- Sump drained partially until pipe invert - ~3ft water (depth) remaining

- some pitting, cracks in concrete
- 2 photos taken of sump contents



40

2/9/07

Uncover Barrels Sump Inspection

Arrived on site @ 10:40 AM

Site Personnel: Technical Smith & Heather Richmond

Weather: ~55°F, cloudy,

10:40 arrived on site & called Bill Schell. Set up

@ Used Wash Rack Sump.

Photo 1: Used wash Rack sump ~17" of water

21" x 45" x 43" (depth)

Center of pipe 14" from surface where it enters the wall of the sump.

Photo 2: Used Oil Sump full

11:25 cleaned out used oil sump. Clear

liquid (water?) still present in

down. Clear liquid observed below

heavy oil. Removed ~3 gallons of

used oil

Photo 3-5: inside of Used oil Sump.

12" (depth) x 12" x 15" → Sump (Bldg. 410

Used Oil Sump) Dimensions. Steels

11:47 Head back to office to pick-up Multiflex,

peristaltic w/ tubing, extension cord

w/ GFCl.

13:30 Arrive back at site. Begin to purge BLDG 409 WASH RACK SUMP.

Calibrate Multi:Kae Rental -

Rental from:

Ashtead Technology Rentals

18195 Mc Dornth East Suite A/B

1801NE, CA 97264

(949) 955-3530

# H4460 Serial # PG M50-5P

501556

13:40 Zero Gas Cal - Ambient Air

Span Gas Cal - 25 ppm  $H_2S$

50 ppm CO

2.5% (50% LEL) Methane

20.9%  $O_2$

Sponges readings =

~~$H_2S$~~

~~95~~

$H_2S$  = 24 ppm

~~CO = 50~~

CO = 49 ppm

~~LEL = 32~~ 32 %

LEL = 50 %

~~$O_2$  = 18.0~~ 18.0 %

$O_2$  = 20.9 %

~~VOC = 180~~ 180 ppm

Zero Gas =

~~$H_2S$  = 0 ppm~~ LEL = 0 % VOC = 0.0 ppm

~~CO = 0 ppm~~

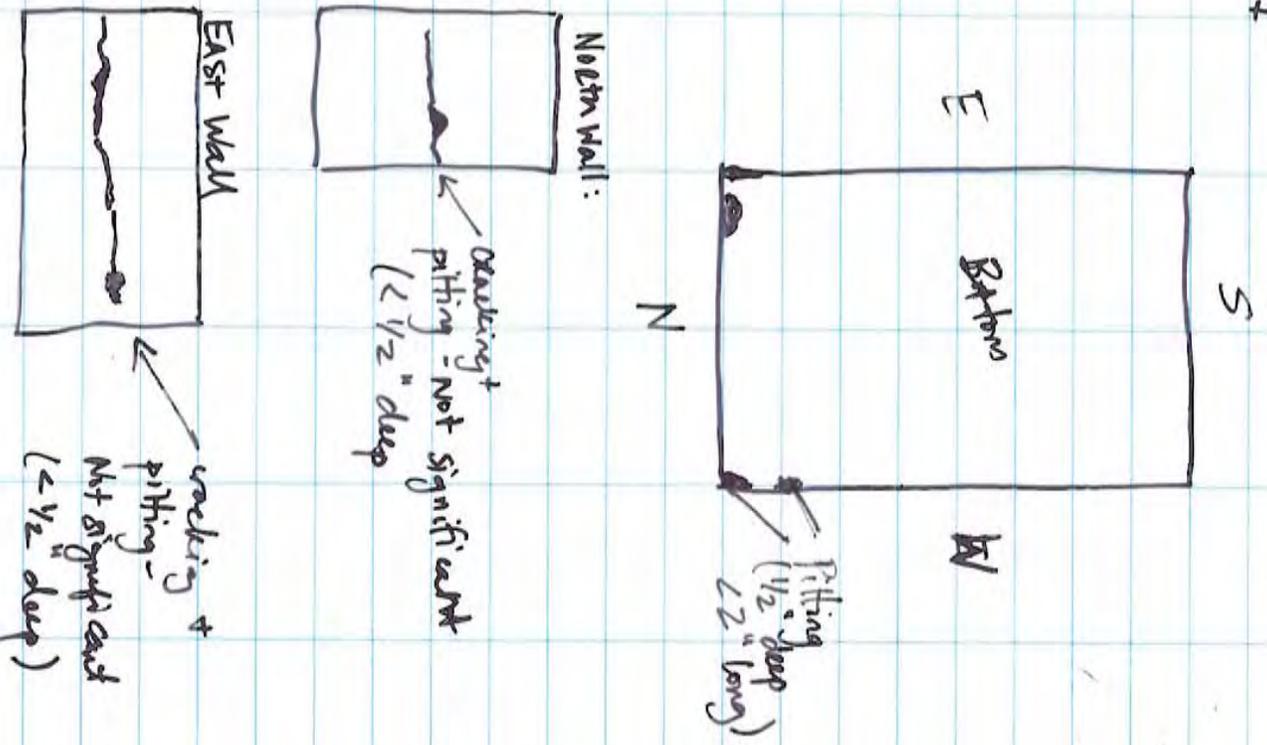
~~$O_2$  = 20.9 %~~

Washrack Sump Photos:

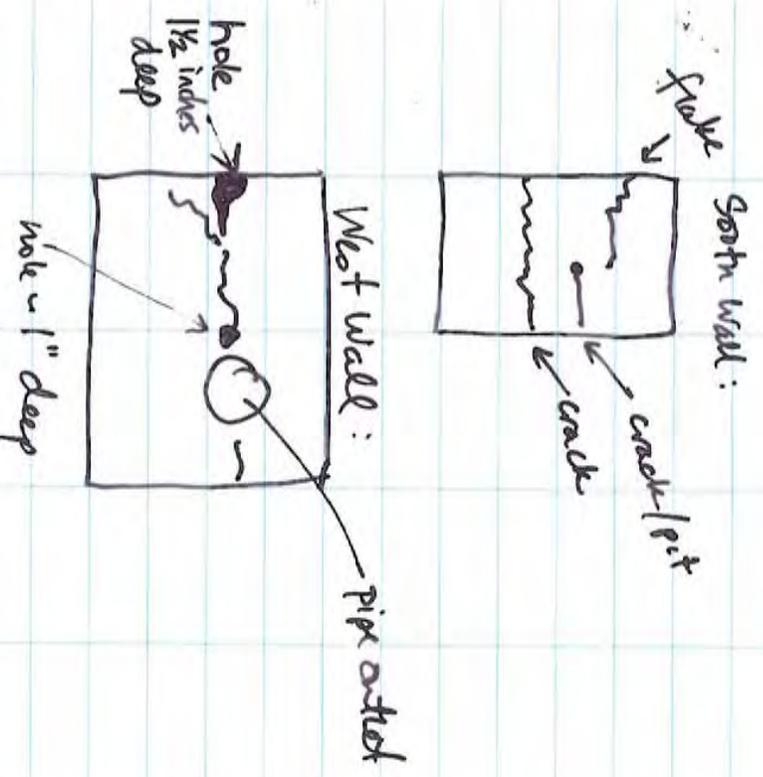
- 6: Bottom of Sump (South Side)
- 7: Bottom of Sump (North Side)
- 8: " NW corner (Pitting)
- 9: " NE corner (Pitting)
- 10: Under Drain Pipe
- 11: North Wall (crack/pitting)
- 12: NE corner wall
- 13: E wall (crack/pitting)
- 14: SE corner wall
- 15: top flake on South wall
- 16: Bottom Crack on South wall
- 17: SW corner
- 19: hole in West wall (~1/2" deep)
- 20: West wall (South of pipe inlet)
- 21: W wall under pipe
- 22: Draining outlet pipe

Washrack  
2/19/07

2/5/07



2/9/07



15:55 - 1 1/2 drums of sump contents left on site in drums located adjacent to Building 408

16:10 - Relocate to Used Oil Sump.

set-up peristaltic pump to drain clean liquid out of pipeline. (~1 gallon clean liquid) Water up pump to be coming into drain from the pipeline.

Bldg 410 Sump - No holes/cracks

Photos of used oil sump

- 1: East Side
- 2: North Side
- 3: South Side
- 4: West Side
- 5: Drain on Bottom

16:40 Label drums (2 drums; 1

W/ ~ 40 gallons + 1 w/ ~ 25 gallons)

left bucket (~ 3 gallons) used  
oil next to drums on wooden  
pallet, adjacent to Bldg. 408

APR  
2/15/07

Lawrence Remaker Sump Inspection # 2

2/15/07

Leave on site: 12:30

Site Personnel: H. Retanwald and J. Kueh

Weather: light rain, calm, ~ 55°F

12:30 check in w/ Bob B:

Uncover Engine Wash Rack Sump

# Photo 1: Surface water has filled  
the sump to below to the drain  
outlet. (This is the standing oil, before  
spills out the drain).

Boiled water out of sump using 5-gal.  
buckets.

Removed ~ 75 gallons of water  
from the sump.

13:37

Drilled holes in top side of  
sump to determine the level  
of sump wells

Photo # 2 screws in the length =  
# 17.5" screwdance

Photo # 3 top hole 4.5" deep

Photo # 4 bottom hole 5.5" deep

Photo # 5 top hole concrete on  
screw driver shows that  
we were unable to drill to soil

2/15/07

Photo #1: bottom hole concrete on screws  
drivers shows that we were unable to  
drill to soil

Bottom hole: 12" from top  
top hole = 7" from top of survey

Photo #2 distance of holes from  
east wall.

14:30: Deep off used oil @ Bill + Bob's  
office, they will dispose at  
Building 400

14:45 left site



3/29

10M Sampling

13:30: Arrived on site  
Site Personnel: H. Reiterwald  
Weather: Partly cloudy, calm, w/lot

13:30: Check in w/ Bob Paarncopt. Remove

'Hazardous' label from bucket w/  
used oil. Labeled w/ white

label as follows:

CONTENTS: USED OIL (ACBS < 50 ppm)

DATE: 2/9/07

CONTACT: BILL SCHEZL 360.695.4746

13:58 Collect 10M sample @ Building 408

Sample time = 14:00

Sample ID - ~~408-01111~~  
408-0111

Observations: Clean, colorless, no odor

collected sample from 20-gallon drum

14:20 left site

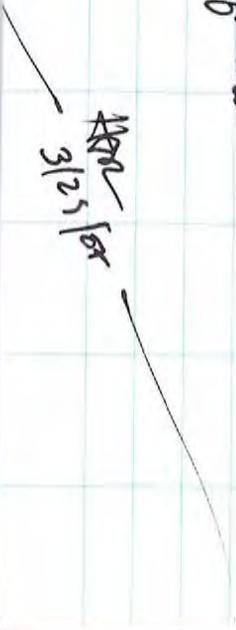


PHOTO  
3/25/07



2055 East Rio Salado Parkway, Suite 201  
Tempe, Arizona 85281  
Phone: (480) 967-6752  
Fax Number: (480) 966-9422  
Web Site: [www.netronline.com](http://www.netronline.com)

## **HISTORICAL CHAIN OF TITLE REPORT**

**VANCOUVER BARRACKS  
638 HATHAWAY ROAD  
VANCOUVER, WASHINGTON**

**Submitted to:**

**ENVIRONMENTAL DATA RESOURCES, INC.**

**C/O**

**CH2M HILL, INC.**

3 Hutton Centre Drive, Suite 200

Santa Ana, California 92707

(503) 736-4044

**Attention: Heather Rectenwald**

**Project No. N06-3514**

**Wednesday, June 21, 2006**

**NETR- Real Estate Research & Information** hereby submits the following ASTM historical chain-of-title to the land described below, subject to the leases/miscellaneous shown in Section 2. Title to the estate or interest covered by this report appears to be vested in:

**USA WAR ASSETS ADMINISTRATION**

The following is the current property legal description:

All those certain pieces or parcels of land being in the Northeast  $\frac{1}{4}$  of the Southwest  $\frac{1}{4}$  of Section 26 and the Southeast  $\frac{1}{4}$  of the Southeast  $\frac{1}{4}$  of the Northeast  $\frac{1}{4}$  of Section 27, both in Township 2 North, Range 1 East, lying and situate in the County of Clark and State of Washington.

Assessor's Parcel Number: 038279-906

## **1. HISTORICAL CHAIN OF TITLE**

The current owner of the subject property is the USA War Assets Administration. Records were searched at the Clark County Recorder's office back to 1940. No conveyances were found of record transferring fee title ownership to the USA War Assets Administration. Based on our research it appears that the USA War Assets Administration acquired title prior to 1940.

Additionally, the Department of the Army, US Department of the Army, Vancouver Barracks and Vancouver National Historic Reserve, were all searched at the Clark County Recorder's office back to 1940, with no results for the subject property.

## **2. LEASES AND MISCELLANEOUS**

1. No leases were found of record.

### **3. LIMITATION**

This report was prepared for the use of Environmental Data Resources, Inc., and CH2M Hill, Inc., exclusively. This report is neither a guarantee of title, a commitment to insure, or a policy of title insurance. NETR- Real Estate Research & Information does not guarantee nor include any warranty of any kind whether expressed or implied, about the validity of all information included in this report since this information is retrieved as it is recorded from the various agencies that make it available. The total liability is limited to the fee paid for this report.



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

408-01W

Lab Name: Laucks Testing Laboratories, Inc.

Contract: 920293

SDG No.: CVB01

Run Sequence: R016407

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: CVB01-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: B0402010.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 03/29/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 04/02/2007 10:37

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
107-13-1	Acrylonitrile	5.0		U
124-48-1	Dibromochloromethane	1.0		U
1330-20-7	Xylenes, Total	1.0		U
75-71-8	Dichlorodifluoromethane	1.0		U
74-87-3	Chloromethane	1.0		U
75-01-4	Vinyl chloride	1.0		U
74-83-9	Bromomethane	1.0		U
75-00-3	Chloroethane	1.0		U
75-69-4	Trichlorofluoromethane	1.0		U
75-35-4	1,1-Dichloroethene	1.0		U
67-64-1	Acetone	5.0		U
75-15-0	Carbon disulfide	1.0		U
75-09-2	Methylene chloride	3.0		U
1634-04-4	Methyl tert-butyl ether	1.0		U
156-60-5	trans-1,2-Dichloroethene	1.0		U
75-34-3	1,1-Dichloroethane	1.0		U
594-20-7	2,2-Dichloropropane	1.0		U
156-59-2	cis-1,2-Dichloroethene	1.0		U
78-93-3	2-Butanone	5.0		U
74-97-5	Bromochloromethane	1.0		U
67-66-3	Chloroform	1.0		U
71-55-6	1,1,1-Trichloroethane	1.0		U
56-23-5	Carbon tetrachloride	1.0		U
563-58-6	1,1-Dichloropropene	1.0		U
71-43-2	Benzene	1.0		U
107-06-2	1,2-Dichloroethane	1.0		U
79-01-6	Trichloroethene	1.0		U
78-87-5	1,2-Dichloropropane	1.0		U
74-95-3	Dibromomethane	1.0		U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

408-01W

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: CVB01  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: 920293  
 Run Sequence: R016407  
 Lab Sample ID: CVB01-001  
 Lab File ID: B0402010.D  
 Date Collected: 03/29/2007  
 Date/Time Analyzed: 04/02/2007 10:37  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-27-4	Bromodichloromethane	1.0	U
10061-01-	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
591-78-6	2-Hexanone	5.0	U
142-28-9	1,3-Dichloropropane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
179601-23	m,p-Xylene	2.0	U
95-47-6	o-Xylene	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
103-65-1	n-Propylbenzene	1.0	U
108-86-1	Bromobenzene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

408-01W

Lab Name: Laucks Testing Laboratories, Inc.

Contract: 920293

SDG No.: CVB01

Run Sequence: R016407

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: CVB01-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: B0402010.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 03/29/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 04/02/2007 10:37

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_\_(uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
91-20-3	Naphthalene	1.0	U

Comments:

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

408-02TB

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: CVB01  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: 920293  
 Run Sequence: R016389  
 Lab Sample ID: CVB01-002  
 Lab File ID: B0331012.D  
 Date Collected: 03/29/2007  
 Date/Time Analyzed: 03/31/2007 17:31  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
107-13-1	Acrylonitrile	5.0	U
124-48-1	Dibromochloromethane	1.0	U
1330-20-7	Xylenes, Total	1.0	U
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	1.0	U
75-09-2	Methylene chloride	3.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
71-43-2	Benzene	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
74-95-3	Dibromomethane	1.0	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

408-02TB

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: CVB01  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: 920293  
 Run Sequence: R016389  
 Lab Sample ID: CVB01-002  
 Lab File ID: B0331012.D  
 Date Collected: 03/29/2007  
 Date/Time Analyzed: 03/31/2007 17:31  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-27-4	Bromodichloromethane	1.0	U
10061-01-	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
591-78-6	2-Hexanone	5.0	U
142-28-9	1,3-Dichloropropane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
179601-23	m,p-Xylene	2.0	U
95-47-6	o-Xylene	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
103-65-1	n-Propylbenzene	1.0	U
108-86-1	Bromobenzene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

408-02TB

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: CVB01  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: 920293  
 Run Sequence: R016389  
 Lab Sample ID: CVB01-002  
 Lab File ID: B0331012.D  
 Date Collected: 03/29/2007  
 Date/Time Analyzed: 03/31/2007 17:31  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	ug/L
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
91-20-3	Naphthalene	1.0	U

Comments:

Laucks Testing Laboratories  
Preliminary Results  
Printed on: 4/6/2007

Method: Metals by Inductively Coupled Plasma-Mass Spectrometry (6020)

Client:	CH2M Hill, Inc.	Project:	Vancouver Barracks Phase II Investigation	
Sample ID:	408-01W	Lab sample ID:	CVB01-001	
Date/time collected:	03/29/2007 14:00	Date/time received:	03/30/2007 10:30	
Date/time prepared:	04/02/2007 10:00	SDG Number:	CVB01	Run Sequence ID: R016618

Preliminary Results

Analyte	DF	Result	Units	Date/time analyzed
Arsenic	1	0.34 J	ug/L	04/04/2007 12:29
Barium	1	7.2		
Cadmium	1	0.21 J		
Chromium	1	0.67 J		
Lead	1	1.8		
Nickel	1	1.3		
Selenium	1	0.11 U		
Silver	1	0.085 U		

Laucks does not certify that these results meet NELAC Standards because all NELAC required elements are not included in the facsimile. Please refer to the full report to review all NELAC required elements.

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Laucks Testing Laboratories

Preliminary Results

Printed on: 4/6/2007

Method: 7470A Mercury (7470A)

Client:	CH2M Hill, Inc.	Project:	Vancouver Barracks Phase II Investigation	
Sample ID:	408-01W	Lab sample ID:	CVB01-001	
Date/time collected:	03/29/2007 14:00	Date/time received:	03/30/2007 10:30	
Date/time prepared:	04/02/2007 14:30	SDG Number:	CVB01	Run Sequence ID: R016391

Preliminary Results

Analyte	DF	Result	Units	Date/time analyzed
Mercury	1	0.200 U	ug/L	04/04/2007 10:19

Laucks does not certify that these results meet NELAC Standards because all NELAC required elements are not included in the facsimile. Please refer to the full report to review all NELAC required elements.

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# Personnel Interview Questionnaire

Vancouver Barracks, Washington

Interview Date: 12 JUL 06

Interviewee: BOB BAERNCOFF

Affiliation: MOHA ARMM

Interviewer: \_\_\_\_\_

Affiliation: \_\_\_\_\_

## Interviewee Background

1. Please provide job title at or in relation to the installation, date range for each title, your responsibilities, and areas of oversight (area/building/site-wide) in chronological order.

SUPPLY TECH / FACILITY COORDINATOR | 1983 - PRESENT  
FACILITY MAINTENANCE, CONTRACTING REP  
Site Information

2. To the best of your knowledge, please describe the history of the site.

1ST MILITARY BASE PACIFIC-NW ESTABLISHED 15 MAY 1849  
ENTIRE SITE IS HISTORICAL

3. Is the property or any adjoining property used for any of the following?

Gasoline/fueling station	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know
Motor repair facility	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Dry cleaners	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Photo developing laboratory	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Plating shop	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Medical or dental facility	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Junkyard or landfill	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Training area	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Waste treatment, storage, disposal, processing or recycling facility	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know

Please describe:

4. Are there currently, or have there been previously any of the following stored on or used at the property or any adjoining property:

Asbestos	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Automotive batteries	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Drums, sacks, cartons, or bulk chemical containers	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Hazardous materials	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Industrial batteries	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know
Paints	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Pesticides (insecticides, herbicides, fungicides, avicides, rodenticides)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Petroleum products	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Radioactive materials	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know

Please describe (include site and length of time of storage/use and condition of item):

BASICALLY ALL BUILDINGS PRIOR TO 1990 (ASBESTOS MAINTENANCE SHOPS, UNIT SUPPLIES)

5. To the best of your knowledge, have any of the following been dumped, buried and/or burned on the property?

Asbestos	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know
Automotive batteries	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know
Hazardous substances	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know
Industrial batteries	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know
Ordnance/explosives	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know
Paints	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know
Pesticides	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know
Petroleum products	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know
Tires	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know
Any other waste materials	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know

Please describe (locations and time periods of disposal):

6. How were hazardous materials used at the site disposed of?

7. Was mercury used or contained in any machinery parts, or electrical, pressure, vacuum instruments, sprinkler check valves, or other items?

Yes  No  Don't Know

Please describe:

8. Have there been any discharges/spills of hazardous materials or petroleum products and their derivatives on the property?

Yes  No  Don't Know

Please describe:

If yes to Question 11, continue with Question 12, if no, continue to Question 14.

9. What regulatory agencies were notified of the discharge/spill?

Please describe:

10. Was soil and/or groundwater affected as a result of the discharges/spills? Were discharges/spills remediated, and if so how?

Please describe:

11. Was any of the property used as a firing and/or bombing range (including skeet/trap and indoor ranges)?

Yes  No  Don't Know

Please describe:

Bldgs 987, 989, 4993 INDOOR RANGES IN ATTICS

12. Was any of the property used for fire training?

Yes  No  Don't Know

Please describe:

13. Was there a pesticide shop, storage or mixing area located on-site?

Yes  No  Don't Know

Please describe:

14. Have there been any demolition activities in this area or in relation to this facility?

Yes  No  Don't Know

Please describe: VA LAUNDRY BLDG 775 (1991)  
NATIONAL GUARD GAS PUMPS 7474751 (1994)  
CHAPEL BLDG 701 (1997)

15. Are there currently, or have there been previously, any pits, ponds or lagoons located on the property in connection with waste treatment or waste disposal?

Yes  No  Don't Know

Please describe:

16. If wastewater was generated at the site, where/how was it treated?

17. Does the property discharge wastewater on or adjacent to the property other than storm water or into a sanitary sewer system?

Yes     No     Don't Know

Please describe:

18. Do you have knowledge of any documented environmental violations or environmental liens associated with the site?

Yes     No     Don't Know

Please describe:

19. Do you have knowledge of any environmental issues or information regarding properties adjacent to the site?

Yes     No     Don't Know

Please describe:

20. Are you aware of any other past activities or events or have you made any observations that you feel might be useful to this study?

Yes     No     Don't Know

Please describe:

21. Do you have knowledge of any other people who may have additional knowledge of activities at the site?

Yes     No     Don't Know

Please provide names:

22. Do you have knowledge of any documents that may provide additional useful information on potential impacts to the environment at the site? Examples: Environmental assessment reports, audits, permits, AST/UST registrations, MSDSs, community right-to-know plans, hydrogeologic reports, notices or other correspondence relating to past or current violations of environmental laws, SPCCs, hazardous waste generator notices, etc.

Yes       No       Don't Know

Please provide names:

Additional Information:

## Personnel Interview Questionnaire

Vancouver Barracks, Washington

Interview Date: 07/20/2006

Interviewee: Robert Cromwell, Ph.D. Affiliation: National Park Service

Interviewer: Heather Rectenwald Affiliation: Ch2MHill

### Interviewee Background

1. Please provide job title at or in relation to the installation, date range for each title, your responsibilities, and areas of oversight (area/building/site-wide) in chronological order.

Archaeologist, Fort Vancouver National Historic Site, 07-2000-Present  
Responsibilities: Sec. 106 Coordinator for the National Park Service, responsible for completing Sec. 106 review documentation for all agencies on the Vancouver National Historic Reserve (VNHR), including the U.S. Army Reserves and the City of Vancouver. The NPS completes these Sec. 106 reviews under Memoranda of Agreements with these agencies. My Sec. 106 review responsibilities for the Army are site-wide, including the West Barracks, the South Barracks, and the East Barracks.

### Site Information

2. To the best of your knowledge, please describe the history of the site.

\* Note, much of this pulled from Cromwell and Gembala, 2003: 6-16

Cromwell, Robert, and Danielle Gembala  
2003 Archaeological Survey of the West Barracks Area, Vancouver Barracks, Washington, The Vancouver National Historic Reserve. National Park Service, Fort Vancouver National Historic Site, Vancouver, Washington.

The Hudson's Bay Company Period, ca. 1824-1849

The Hudson's Bay Company moved its administrative headquarters of the Columbia River District from Fort George (Astoria) to Fort Vancouver in the winter of 1824-1825. This first fort was established on a bluff near the present site of the Washington State School for the Deaf. In 1829, the establishment was moved closer to the Columbia River, where it remained until its abandonment in 1860. The post remained an administrative headquarters until 1849, when that function was transferred to Fort Victoria, in present-day British Columbia. The Fort was

surrounded by forests, fields, and gardens, had auxiliary buildings and a Village to its west. Although historical maps of Fort Vancouver do not indicate structures or uses of the Vancouver Barracks area between ca. 1824-1845, much of the area was just north of the HBC Village and was likely seen by the Company as a part of its claims.

This fact is confirmed by the presence of the HBC cemetery, within the current boundaries of the Vancouver Barracks. Catholic church records indicate the presence of no less than 208 burials within this cemetery between 1839-1856, but this is likely not a complete list, as the cemetery was established perhaps as early as 1829, and burials before the presence of the Catholic priests at the post, went unrecorded. Recent efforts have been made by the U.S. Army and the National Park Service to record the boundaries of the cemetery, and it is clearly within the East Barracks portion of the Vancouver Barracks (Garnett 2001).

During the 1830s and 1840s the post was the primary population center of the Oregon Country, with an incredibly diverse demographic base including Scots, Englishmen, French-Canadians, Métis, Hawaiians, Chinooks, Iroquois, and Native Americans from dozens of tribal affiliations (Kardas 1971; Thomas and Hibbs 1984). Many of these employees, especially of French-Canadian heritage, were retiring from the Company and settling south of the Columbia River in the northern Willamette Valley. Many of these men were of Catholic upbringing, and most had not participated in a Catholic mass since leaving the St. Lawrence River area upwards of 10-20 years previously. Many had Indian wives and children, and a more settled, agrarian lifestyle led to a want of Catholic sacraments again, which inextricably linked the history of the Catholic Church with the HBC at Vancouver. With the aid of Chief Factor John McLoughlin, these Willamette Valley settlers forwarded two petitions requesting the Bishop of Juliopolis to send missionaries. These petitions went unanswered until 1838, when the Bishop of Quebec sent the Reverend Francis Norbert Blanchet and the Reverend Modeste Demers to Fort Vancouver (Blanchet 1878; Bolduc 1979).

Fort Vancouver became the headquarters for the priests during their early years in the Oregon Country, yet they were more often away from the fort than not. By 1839 they had established missions at St. Paul in the Willamette Valley, on the Cowlitz River, and at Nisqually (Blanchet 1878; Bolduc 1979; Hussey 1957: 178). Until 1844, the priests' residence was inside of the Fort walls. A rectory was provided, and an old store was converted into a chapel. According to the recollections of Bishop Blanchet, the missionaries purchased a house from a servant of the Company in the north end of the Village in 1839 or 1840. This house was utilized as a place for "teaching Indians and the Indian women, and children of the company's servants outside the fort" (BAJC 1865-1869: Vol. I).

Around 1844, the priests accepted a tract of land to the northwest of the Fort from the Company for the construction of a new church. The church was apparently completed by 1845, and on May 31, 1846, Father Peter De Vos of the Society of

Jesus dedicated the building and honored Chief Factor James Douglas, as its founder and builder (Warner and Munnick 1972: Vancouver Register II: 73):

The 31 May, 1846, we undersigned priest missionary of the Company of Jesus, provided with the necessary powers by Monsigneur F.N. Blanchet, have opened and solumenly blessed, at Fort Vancouver, according to the rite of the Catholic Church, the new church authorized and built by Monsieur James Douglas, Factor in Chief of the Honourable Company of Hudson, and governor of the said Fort Vancouver; have dedicated it by divine service under the auspices of the Sacred name of Marie and the Patronage of the Apostle St. Jacques the Greater.

Hussey (1957: 209) even suggests that the name of the church, St. James the Greater, was selected to recognize Douglas' patronage. It is not documented why this particular location was selected for the church, but Erigero (1992: 28) indicates that it is likely due to its proximity to the Village and cross roads leading to the Fort, farms, and the river.

The church was listed on an HBC inventory of property in 1846-1847, and Thomas (1984: 9) believes this indicates that the Company considered the church as its property. This inventory describes the church as being 83 x 36 ft. and valued at £1079. The attached rectory was described as being 30 x 21 ft., valued at £240, and "ceiled" (Elliott 1931: 34). Hussey (1957: 209) notes that period observations list the church as being 20 ft. tall, with an interior gallery 12 ft. across, and that it could accommodate approximately 500 persons.

#### The St. James Catholic Mission Period, ca. 1845-1887

Unfortunately, little documentation is readily available about the development of the St. James Catholic Mission between ca. 1845-1870. What little has been culled together in various records generally revolves around the competing claims for the Mission land between the U.S. Army and the Catholic Church (Anderson 1907; Ayers 1891; Thomas 1984). When the U.S. Army established Vancouver Barracks in 1849, they doubtless saw the Mission as a part of the HBC establishment, and respected the fenced-in improvements of the Mission. Still, Quartermaster Depot structures were constructed to the south and west of the Mission claim, while barracks structures were constructed to the north and east. The second proviso of the Oregon Territory Organic Act of 1848 provided for the granting of land to missionaries who had already settled in the territory before its creation (Burnham 1947; Thomas 1984). The Bishop of Nisqually, A.M.A. Blanchet filed a claim for the Mission with the new territorial government in 1852, but the claim was not surveyed due to the earlier possessory rights of the HBC. According to Thomas (1984), the Mission's claim was in direct competition with claims filed by Amos and Esther Short, Clark County, the U.S. Army, and the town of Vancouver. The primary claim of these lands by the HBC protected the Mission from incursions by the U.S. Army. This attitude is confirmed by an 1854 U.S. Army assessment of the HBC improvements,

which listed the church and rectory as being valued \$2000 and \$1000, respectively (BAJC 1865-1869: Vol. 9, pp. 104-106).

According to several researchers, the success and growth of the Mission in the 1850s can also be attributed to the Catholic patronage of the Vancouver Barracks commander at the time, Lieutenant Colonel Benjamin Bonneville (Hussey 1957: 211; Thomas 1984: 16). Bonneville apparently made friends and dined frequently with the Mission's priest at the time, Father JBA Brouillet, and was confirmed by him into the Catholic faith at the Mission on March 30, 1854 (Warner and Munnick 1972). Under Bonneville's encouragement, the Mission enclosed 5 acres of land with a fence, planted an orchard, and constructed a house for the Bishop (Hussey 1957).

In November 1856, Father Brouillet opened an academy for boys at the Mission, hiring a local layperson, Mr. Kinsela, as its instructor (Shoenberg 1962:39). This academy would eventually become the Holy Angels College for boys. In December of that year, five nuns from the Sisters of Providence religious community of Montreal arrived at the St. James Mission, including the revered Mother Joseph of the Sacred Heart. The Sisters expanded the academy for boys in April of 1857, opening the Providence Academy for "white children," with seven pupils reporting for classes on the first day. In 1858, the Sisters established the St. Joseph's hospital at the Mission, of which Schoenberg summarized (1962: 41):

The first hospital in the Pacific Northwest [note, the HBC had a hospital on the waterfront from ca. 1829-1845] was opened at Fort Vancouver by the Sisters of Charity of Providence. Mother Joseph of the Sacred Heart, superior of the Academy, erected a building for a laundry and bakery and, at the request of certain ladies, she included a special section with a four-bed hospital. The first patient, a woman with consumption, was admitted on May 19. The hospital was blessed on June 9 and during the first year admitted a total of fifteen patients.

The founding of St. Joseph's hospital by the Sisters marked the establishment of what is now the Providence Health Care System, still operating hospitals across the Northwest to this day. Interestingly, neither the 1866 Blanchet nor the 1872 Farnsworth maps of the Mission (Figures 4 and 5) note the presence of a hospital. According to Clevenger, the hospital was opened in a building "that was originally planned to house a laundry and bakery for the mission complex" (2001: 211). Both of these maps identify a bakery in the northeast corner of the complex, and it is likely that this structure was used in a dual role of bakery and hospital.

The Sisters continued to expand their roles in charity, and in 1860 they established within the Mission, St. Vincent's Orphanage for boys and St. Genevieve's Orphanage for girls. In October 1862, the Sisters negotiated a three-year contract with the territorial government of Washington to care for the insane on the Mission grounds "at eight dollars per week for each insane patient" (Schoenberg 1962: 49). This contract terminated in 1866, and the patients were moved to Monticello. Sometime in 1865, Bishop Blanchet established the Holy Angels College for boys,

placing Father Junger as its director, Father Paul Mans as assistant, Father St. Onge as a teacher, and Mr. J.B. Boulet as a teacher. A two-story structure was constructed for the College in the northwestern quarter of the Mission, and a south elevation of the structure is included on the 1866 Blanchet map.

Perhaps understanding the continuing legal friction with the U.S. Army after the HBC had left Fort Vancouver, the Sisters purchased the present site of the Providence Academy in 1863 (400 E. Evergreen Boulevard). Construction of this new academy would not begin until 1873, and it would expand in size and scope into the 20th century. The legal wrangling between the Catholic Church and the U.S. Army are summarized by Anderson (1907) and Thomas (1984). Suffice it to say that in 1872 the General Land Office concluded that the Mission claim was only valid for .44 acre, or just enough space for the church structure itself. This decision was unacceptable to the Church, and new courses of lobbying to Congress and appeals to the courts were made, while the Mission apparently continued to operate and expand as before. By 1872, the Mission grounds contained no less than 28 separate structures (Figure 6 and Table 1).

Still, these legal disputes came to a head 15 years later, when the Army forcefully removed all priests, nuns, orphans, patients and students from the grounds on April 9, 1887 (Anderson 1907; Thomas 1984). According to Schoenberg, all residents were given ten minutes notice to vacate the Mission grounds (1962: 127):

Lieutenant Yeatman of the United States Army, Fort Vancouver, appeared at the school with a guard and demanded that all leave at once under threat of imprisonment. To inquiries he replied in a very rude manner that the priests were in defiance of the law therefore they must vacate at once or be arrested.

The Catholic Church protested this action again, yet they were barred from re-entering the structures other than for specific entries to remove Church-owned property, under the supervision of the U.S. Army. The church structure burned at midnight on June 21, 1888, and several other Mission structures burned to the ground later that night. Arson was strongly suspected as the cause of these fires (Schoenberg 1962: 141). All remaining Mission structures were removed by the 1890s, except for the Holy Angels College structure, which was retained by the Army for use as an NCO Quarters (Vancouver Barracks 1886-1939; Thomas 1984).

#### The U.S. Army Period, ca. 1849-1948

On June 15, 1846, decades of a joint occupation policy in the Oregon Country between the United States and Great Britain came to an end with the signing of the Oregon Treaty. The treaty established the 49th parallel as the international boundary between the United States and Canada, giving the entire Oregon Country to the United States. After the signing of the treaty, Congress authorized President Polk to establish a military presence protecting immigrants and the overland immigration route, between the Mississippi and the Columbia Rivers. Although the treaty

eliminated political controls and aspirations of the HBC in the Oregon Country, it did respect the Company's possessory rights on its occupied lands and property (including Fort Vancouver and the St. James Mission). On August 14, 1848, Congress passed the Organic Act (9 Stat. 323), which created the Oregon Territory, and formally brought the Oregon Country into the political and legal control of the United States government.

The first detachment to the Columbia did not occur until 1848, when Mounted Riflemen left Fort Leavenworth, Kansas Territory for an overland trip to the Columbia. To compliment their arrival, Companies L and M of the U.S. First Artillery, under the command of Brevet Major J.S. Hatheway, left New York aboard the U.S.S. Massachusetts on November 10, 1848 (Hussey 1957: 101). The Massachusetts arrived on the Columbia River off of Fort Vancouver on May 13, 1849, and immediately established a military encampment on the shore. By May 21, Major Hatheway had gained approval from Chief Factor Peter Skene Ogden to move their encampment onto the terrace immediately overlooking Fort Vancouver to its north.

On May 25, 1849, Captain and Assistant Quartermaster Rufus Ingalls arrived from San Francisco. Ingalls' primary duty was to provide quarters for Hatheway's troops, and by the end of that summer, four barracks structures had been completed. Yet, these were insufficient for the First Artillery, and the Mounted Riflemen from Fort Leavenworth were still to arrive. Out of necessity, Captain Ingalls rented 13 structures from the HBC. The St. James rectory was one of the rented structures, which according to an 1849 Quartermaster's Clerk, Lloyd Brooke, was occupied by an Army officer (Ayers 1891). The HBC Fort Vancouver physician, Dr. Forbes Barclay, later recalled that a Lieutenant Denman resided in the rectory around 1849 (Ayers 1891).

The Army constructed their first enlisted men's barracks between ca. 1849-1851 just north of what is now the East Barracks, within the National Park Service managed parade ground. Many of these structures were replaced in the 1860s, and again in the 1870s, with structures within the current East Barracks boundaries. The 1880s brought a new building campaign throughout the Vancouver Barracks, with another following in the ca. 1904 period. Finally, many "temporary" structures were built during the Civilian Conservation Corps (CCC) period of the 1930s, and during World War II.

The active Army presence at Vancouver Barracks largely came to an end when the 7th U.S. Infantry mobilized from Vancouver Barracks to the North African and European Theatres of Operation from 1942-1945. Most of the post became surplus government property in 1946, and 135 acres of Vancouver Barracks was transferred to the National Park Service in 1948 for the establishment of Fort Vancouver National Monument (later Fort Vancouver National Historic Site). The West Barracks was retained by the Army, and was used in its new role as part of a training center for the U.S. Army Reserve until 2000.

3. Is the property or any adjoining property used for any of the following?

Gasoline/fueling station	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Motor repair facility	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Dry cleaners	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know
Photo developing laboratory	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know
Plating shop	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know
Medical or dental facility	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Junkyard or landfill	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Training area	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Waste treatment, storage, disposal, processing or recycling facility	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know

Please describe:

It appears that automotive maintenance activities occur in the South Barracks, with a motor pool of Army trucks.

4. Are there currently, or have there been previously any of the following stored on or used at the property or any adjoining property:

Asbestos	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Automotive batteries	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Drums, sacks, cartons, or bulk chemical containers	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know
Hazardous materials	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know
Industrial batteries	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know
Paints	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Pesticides (insecticides, herbicides, fungicides, avicides, rodenticides)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know
Petroleum products	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Radioactive materials	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know

Please describe (include site and length of time of storage/use and condition of item):

Based upon the recent asbestos remediation at the West Barracks complex, it can be assumed that there is asbestos present in many of the structures in the East and South Barracks as well.

Automotive batteries and petroleum products were likely stored in the ca. 1919 Automotive Shop facility into the World War II period, and it appears that automotive maintenance activities occurs presently in the South Barracks area, making the presence of these materials likely today.

It is clear that all of the wood structures have been painted several times, and the West Barracks facilities were recently remediated for lead paint, so it is likely that paint was stored at the facilities in the past.

5. To the best of your knowledge, have any of the following been dumped, buried and/or burned on the property?

Asbestos	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Automotive batteries	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know
Hazardous substances	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know
Industrial batteries	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know
Ordnance/explosives	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Paints	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know
Pesticides	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know
Petroleum products	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know
Tires	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know
Any other waste materials	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Don't Know

Please describe (locations and time periods of disposal):

Archaeological excavations throughout the years in and around the present location of the Vancouver Barracks have recovered architectural tile with asbestos in it, and both expended and unexploded ordnance (UXO). The asbestos based tiles have been recovered in locations where previously demolished U.S. Army structures were located, and it can be assumed that such materials are present within the footprint of other previously demolished structures.

Expended ordnance, mostly constrained to small arms ammunition, have been archaeologically recovered throughout the Vancouver National Historic Reserve. Rarely, unfired small arms ammunition has also been archaeologically recovered, but these have been determined to be inert. Of lesser note, a small quantity of UXO has been uncovered within the VNHR, although to my knowledge, not directly within the boundaries of the Vancouver Barracks. Three World War I era hand grenades were archaeologically recovered from the Hudson's Bay Company Carpenter's Shop (within the reconstructed palisade walls of Fort Vancouver) during the 1994 archaeological excavations. The hand grenades were safely exploded by an Army UXO team.

6. How were hazardous materials used at the site disposed of?  
Unknown.

7. Was mercury used or contained in any machinery parts, or electrical, pressure, vacuum instruments, sprinkler check valves, or other items?

Yes       No       Don't Know

Please describe:

8. Have there been any discharges/spills of hazardous materials or petroleum products and their derivatives on the property?

Yes       No       Don't Know

Please describe:

If yes to Question 11, continue with Question 12, if no, continue to Question 14.

9. What regulatory agencies were notified of the discharge/spill?

Please describe:

10. Was soil and/or groundwater affected as a result of the discharges/spills? Were discharges/spills remediated, and if so how?

Please describe:

11. Was any of the property used as a firing and/or bombing range (including skeet/trap and indoor ranges)?

Yes       No       Don't Know

Please describe:

Various outdoor firing ranges are recorded on historical maps of the Vancouver Barracks from the ca. 1870s period to 1944. All of these firing ranges are outside of the current boundary of the Vancouver Barracks, within National Park Service property (Fort Vancouver National Historic Site), and north of Mill Plain Boulevard in City of Vancouver owned property. Indoor shooting ranges were present in the attic of the ca. 1904 Artillery Barracks in the West Barracks (P-638), and attempts have already been made to remediate the lead contamination here. I have heard of other indoor firing ranges in the attics of barracks structures in the East Barracks, but I can neither confirm nor deny their presence.

12. Was any of the property used for fire training?

Yes       No       Don't Know

Please describe:

13. Was there a pesticide shop, storage or mixing area located on-site?

Yes       No       Don't Know

Please describe:

14. Have there been any demolition activities in this area or in relation to this facility?

Yes       No       Don't Know

Please describe:

Many previous U.S. Army structures dating from the ca. 1851-1944 period have been demolished in and around the Vancouver Barracks. Most of this demolition occurred prior to ca. 1950. There are too many to describe in this questionnaire.

15. Are there currently, or have there been previously, any pits, ponds or lagoons located on the property in connection with waste treatment or waste disposal?

Yes       No       Don't Know

Please describe:

16. If wastewater was generated at the site, where/how was it treated?

17. Does the property discharge wastewater on or adjacent to the property other than storm water or into a sanitary sewer system?

Yes       No       Don't Know

Please describe:

18. Do you have knowledge of any documented environmental violations or environmental liens associated with the site?

Yes       No       Don't Know

Please describe:

19. Do you have knowledge of any environmental issues or information regarding properties adjacent to the site?

Yes       No       Don't Know

Please describe:

20. Are you aware of any other past activities or events or have you made any observations that you feel might be useful to this study?

Yes       No       Don't Know

Please describe:

21. Do you have knowledge of any other people who may have additional knowledge of activities at the site?

Yes       No       Don't Know

Please provide names:

22. Do you have knowledge of any documents that may provide additional useful information on potential impacts to the environment at the site? Examples: Environmental assessment reports, audits, permits, AST/UST registrations, MSDSs, community right-to-know plans, hydrogeologic reports, notices or other correspondence relating to past or current violations of environmental laws, SPCCs, hazardous waste generator notices, etc.

Yes       No       Don't Know

Please provide names:

Additional Information:

# Personnel Interview Questionnaire

Vancouver Barracks, Washington

Interview Date: 24 July 06

Interviewee: William J. Schell

Affiliation: \_\_\_\_\_

Interviewer: \_\_\_\_\_

Affiliation: \_\_\_\_\_

## Interviewee Background

1. Please provide job title at or in relation to the installation, date range for each title, your responsibilities, and areas of oversight (area/building/site-wide) in chronological order.

Facility operations Specialist July 2000 - July 2000  
Maintenance Mechanic Supervisor July 1992 - July 2000  
Site Information Maintenance Mechanic July 1985 - July 1992

2. To the best of your knowledge, please describe the history of the site.

ARMY Reserve Center

3. Is the property or any adjoining property used for any of the following?

Gasoline/fueling station	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Motor repair facility	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Dry cleaners	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Photo developing laboratory	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Plating shop	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Medical or dental facility	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Junkyard or landfill	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Training area	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Waste treatment, storage, disposal, processing or recycling facility	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know

Please describe: It Does have a couple buildings that do minor motor repair. Buildings 400-402

4. Are there currently, or have there been previously any of the following stored on or used at the property or any adjoining property:

Asbestos	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Automotive batteries	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Drums, sacks, cartons, or bulk chemical containers	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Hazardous materials	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Industrial batteries	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Paints	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Pesticides (insecticides, herbicides, fungicides, avicides, rodenticides)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Petroleum products	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Radioactive materials	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know

Please describe (include site and length of time of storage/use and condition of item):

5. To the best of your knowledge, have any of the following been dumped, buried and/or burned on the property?

Asbestos	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Automotive batteries	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Hazardous substances	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Industrial batteries	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Ordnance/explosives	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Paints	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Pesticides	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Petroleum products	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Tires	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Any other waste materials	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know

Please describe (locations and time periods of disposal):

6. How were hazardous materials used at the site disposed of?

*Through our environmental office at Ft Lawton, Debra Winkerton is the coordinator*

7. Was mercury used or contained in any machinery parts, or electrical, pressure, vacuum instruments, sprinkler check valves, or other items?

Yes  No  Don't Know

Please describe:

8. Have there been any discharges/spills of hazardous materials or petroleum products and their derivatives on the property?

Yes  No  Don't Know

Please describe:

If yes to Question 11, continue with Question 12, if no, continue to Question 14.

9. What regulatory agencies were notified of the discharge/spill?

Please describe:

10. Was soil and/or groundwater affected as a result of the discharges/spills? Were discharges/spills remediated, and if so how?

Please describe:

11. Was any of the property used as a firing and/or bombing range (including skeet/trap and indoor ranges)?

Yes  No  Don't Know

Please describe:

Building Attics in buildings 987-989-993 were used as SMALL ARMS firing RANGES.  
The Attics are contaminated with lead dust.

12. Was any of the property used for fire training?

Yes

No

Don't Know

Please describe:

13. Was there a pesticide shop, storage or mixing area located on-site?

Yes

No

Don't Know

Please describe:

14. Have there been any demolition activities in this area or in relation to this facility?

Yes

No

Don't Know

Please describe:

15. Are there currently, or have there been previously, any pits, ponds or lagoons located on the property in connection with waste treatment or waste disposal?

Yes

No

Don't Know

Please describe:

16. If wastewater was generated at the site, where/how was it treated?

17. Does the property discharge wastewater on or adjacent to the property other than storm water or into a sanitary sewer system?

Yes  No  Don't Know

Please describe:

18. Do you have knowledge of any documented environmental violations or environmental liens associated with the site?

Yes  No  Don't Know

Please describe:

19. Do you have knowledge of any environmental issues or information regarding properties adjacent to the site?

Yes  No  Don't Know

Please describe:

20. Are you aware of any other past activities or events or have you made any observations that you feel might be useful to this study?

Yes  No  Don't Know

Please describe:

21. Do you have knowledge of any other people who may have additional knowledge of activities at the site?

Yes  No  Don't Know

Please provide names:

22. Do you have knowledge of any documents that may provide additional useful information on potential impacts to the environment at the site? Examples: Environmental assessment reports, audits, permits, AST/UST registrations, MSDSs, community right-to-know plans, hydrogeologic reports, notices or other correspondence relating to past or current violations of environmental laws, SPCCs, hazardous waste generator notices, etc.

Yes

No

Don't Know

Please provide names:

Additional Information:

## Personnel Interview Questionnaire

Vancouver Barracks, Washington

Interview Date: 24 July 2006

Interviewee: SFC Spencer Marks Affiliation: 70<sup>th</sup> RRC

Interviewer: \_\_\_\_\_ Affiliation: \_\_\_\_\_

### Interviewee Background

1. Please provide job title at or in relation to the installation, date range for each title, your responsibilities, and areas of oversight (area/building/site-wide) in chronological order.

Environmental Coordinator. Assigned May 2004. Provide program management and contractor oversight. Area of operations cover Oregon, Idaho and Washington.

### Site Information

2. To the best of your knowledge, please describe the history of the site.  
Vancouver Barracks. Utilized primarily as an administrative and vehicle maintenance location. Units include a maintenance group, Drill Sergeant unit, Hospital CSH unit.

3. Is the property or any adjoining property used for any of the following?

Gasoline/fueling station	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Motor repair facility	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't Know
Dry cleaners	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Photo developing laboratory	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Plating shop	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Medical or dental facility	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Junkyard or landfill	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Training area	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know
Waste treatment, storage, disposal, processing or recycling facility	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Don't Know

Please describe:

4. Are there currently, or have there been previously any of the following stored on or used at the property or any adjoining property:

- |   |   |  |  |
|---|---|--|--|
| Asbestos  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | <input type="checkbox"/> Don't Know            |
| Automotive batteries  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | <input type="checkbox"/> Don't Know            |
| Drums, sacks, cartons, or bulk chemical containers                        | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Don't Know            |
| Hazardous materials   | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | <input type="checkbox"/> Don't Know            |
| Industrial batteries  | <input type="checkbox"/> Yes            | <input type="checkbox"/> No            | <input checked="" type="checkbox"/> Don't Know |
| Paints  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | <input type="checkbox"/> Don't Know            |
| Pesticides (insecticides, herbicides, fungicides, avicides, rodenticides) | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | <input type="checkbox"/> Don't Know            |
| Petroleum products  | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | <input type="checkbox"/> Don't Know            |
| Radioactive materials   | <input type="checkbox"/> Yes            | <input type="checkbox"/> No            | <input checked="" type="checkbox"/> Don't Know |

Please describe (include site and length of time of storage/use and condition of item):

All Items listed as yes are in association with vehicle maintenance

5. To the best of your knowledge, have any of the following been dumped, buried and/or burned on the property?

- |                           |                              |  |                                     |
|---------------------------|------------------------------|--|-------------------------------------|
| Asbestos                  | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Don't Know |
| Automotive batteries      | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Don't Know |
| Hazardous substances      | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Don't Know |
| Industrial batteries      | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Don't Know |
| Ordnance/explosives       | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Don't Know |
| Paints                    | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Don't Know |
| Pesticides                | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Don't Know |
| Petroleum products        | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Don't Know |
| Tires                     | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Don't Know |
| Any other waste materials | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Don't Know |

Please describe (locations and time periods of disposal):

6. How were hazardous materials used at the site disposed of?  
DRMO IAW Army Policy

7. Was mercury used or contained in any machinery parts, or electrical, pressure, vacuum instruments, sprinkler check valves, or other items?

Yes       No       Don't Know

Please describe:

8. Have there been any discharges/spills of hazardous materials or petroleum products and their derivatives on the property?

Yes       No       Don't Know

Please describe:

If yes to Question 11, continue with Question 12, if no, continue to Question 14.

9. What regulatory agencies were notified of the discharge/spill?

Please describe:

10. Was soil and/or groundwater affected as a result of the discharges/spills? Were discharges/spills remediated, and if so how?

Please describe:

11. Was any of the property used as a firing and/or bombing range (including skeet/trap and indoor ranges)?

Yes       No       Don't Know

Please describe:

12. Was any of the property used for fire training?

Yes       No       Don't Know

Please describe:

Attics in 900 series buildings. not used by the USAR

13. Was there a pesticide shop, storage or mixing area located on-site?

Yes       No       Don't Know

Please describe:

14. Have there been any demolition activities in this area or in relation to this facility?

Yes       No       Don't Know

Please describe:

west barracks underwent mild demo and rebuild activities

15. Are there currently, or have there been previously, any pits, ponds or lagoons located on the property in connection with waste treatment or waste disposal?

Yes       No       Don't Know

Please describe:

16. If wastewater was generated at the site, where/how was it treated?

17. Does the property discharge wastewater on or adjacent to the property other than storm water or into a sanitary sewer system?

Yes       No       Don't Know

Please describe:

18. Do you have knowledge of any documented environmental violations or environmental liens associated with the site?

Yes       No       Don't Know

Please describe:

19. Do you have knowledge of any environmental issues or information regarding properties adjacent to the site?

Yes       No       Don't Know

Please describe:

West Barracks currently has revised FOST out for Public Review

20. Are you aware of any other past activities or events or have you made any observations that you feel might be useful to this study?

Yes       No       Don't Know

Please describe:

21. Do you have knowledge of any other people who may have additional knowledge of activities at the site?

Yes       No       Don't Know

Please provide names:

22. Do you have knowledge of any documents that may provide additional useful information on potential impacts to the environment at the site? Examples: Environmental assessment reports, audits, permits, AST/UST registrations, MSDSs, community right-to-know plans, hydrogeologic reports, notices or other correspondence relating to past or current violations of environmental laws, SPCCs, hazardous waste generator notices, etc.

Yes       No       Don't Know

Please provide names:

Additional Information:

Appendix E  
Hazardous Material Storage  
Vancouver Barracks Area A

ECP Section	Storage Site, Area or Building	Substances Stored (CAS)	Quantity Stored	Dates of Storage	Notice Required under CERCLA?	Release Occurred ?	Reference
	Building P402 Flammable Locker East	PAINT - high solids enamel	1 - 8.5oz can	unknown	unknown	unknown	Material Inventory
	Building P402 Flammable Locker East	CLEANER - Tech Spray Blue Shower	1 - 10.5oz can	unknown	unknown	unknown	Material Inventory
	Building P402 Flammable Locker East	POL - white lithium grease	4 - 10oz can	unknown	unknown	unknown	Material Inventory
	Building P402 Flammable Locker East	Battery Protector	1 - 11.5oz can	unknown	unknown	unknown	Material Inventory
	Building P402 Flammable Locker East	POL - Prizm gel lubricant	1 - 13oz can	unknown	unknown	unknown	Material Inventory
	Building P402 Flammable Locker East	Carb and Choke Cleaner	1 - 16oz can	unknown	unknown	unknown	Material Inventory
	Building P402 Flammable Locker East	Bonafide/Solvent Degreaser	1 - 20oz can	unknown	unknown	unknown	Material Inventory
	Building P402 Flammable Locker East	CLEANER - Lemon D watersoluble deodorant	1 - 1gal can	unknown	unknown	unknown	Material Inventory
	Building P402 Flammable Locker East	Charcoal Lighter	1 - 32oz can	unknown	unknown	unknown	Material Inventory
	Building P402 Flammable Locker Northeast	POL - Lubricant, run flat	1 -11lb tube	unknown	unknown	unknown	Material Inventory
	Building P402 Flammable Locker Northeast	Paint Thinner	1 - 16floz can	unknown	unknown	unknown	Material Inventory
	Building P402 Flammable Locker Northeast	Enamel spray paint	6 - 10.5oz can	unknown	unknown	unknown	Material Inventory
	Building P402 Flammable Locker Northeast	Exterior/interior enamel paint	6 - 1gal can	unknown	unknown	unknown	Material Inventory
	Building P402 Flammable Locker Northeast	POL - OE/HDO-10	1 - 1qt can	unknown	unknown	unknown	Material Inventory

Appendix E  
 Hazardous Material Storage  
 Vancouver Barracks Area A

Building P402 Flammable Locker Northeast	CLEANER - Calgon surgical presoak	1 - 1gal bottle	unknown	unknown	unknown	Material Inventory
Building P402 Flammable Locker Northeast	Stripping Paint Spray	2 - 18oz can	unknown	unknown	unknown	Material Inventory
Building P402 Flammable Locker Northeast	Interior/exterior spray paint	20 - 12oz can	unknown	unknown	unknown	Material Inventory
Building P402 Flammable Locker Northeast	Aluminum Cleaner	1 - 1qt bottle	unknown	unknown	unknown	Material Inventory
Building P402 Flammable Locker Northeast	Multipurpose paint	1 -12oz can	unknown	unknown	unknown	Material Inventory
Building P402 Flammable Locker Northwest	SOLVENT - bonding compound with naptha	5 - 8floz can	unknown	unknown	unknown	Material Inventory
Building P402 Flammable Locker Northwest	Windshield washer fluid	4 - 16floz bottle	unknown	unknown	unknown	Material Inventory
Building P402 Flammable Locker Northwest	Glass Cleaner	9 - 8floz bottle	unknown	unknown	unknown	Material Inventory
Building P402 Flammable Locker Northwest	Enamel spray paint	2 - 10.5oz can	unknown	unknown	unknown	Material Inventory
Building P402 Flammable Locker Northwest	POL - hydraulic fluid	1 - 1.8lb can	unknown	unknown	unknown	Material Inventory
Building P402 Flammable Locker Northwest	POL - general purpose grease	1 - 1lb can	unknown	unknown	unknown	Material Inventory
Building P402 Flammable Locker Northwest	Multipurpose cleaner	1 - 16floz bottle	unknown	unknown	unknown	Material Inventory
Building P402 Flammable Locker Northwest	Carb and Choke Cleaner	1 - 16.5oz can	unknown	unknown	unknown	Material Inventory

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Building P402 Flammable Locker Northwest	Enamel spray paint	1 - 11oz can	unknown	unknown	unknown	Material Inventory
Building P402 Flammable Locker Northwest	Antifreeze/coolant	1 - 1gal bottle	unknown	unknown	unknown	Material Inventory
Building P402 Flammable Locker Northwest	Misc Paint cans	9 - 1gal can	unknown	unknown	unknown	Material Inventory
Building P402 Flammable Locker Northwest	Semi-gloss paint	2 - 5gal can	unknown	unknown	unknown	Material Inventory
Building P402 Flammable Locker South	SOLVENT - Aliphatic Naptha	1 - 20gal drum	unknown	unknown	unknown	Material Inventory
Building P402 POL Room East	POL - Lubricant Tire and Rim	2 - 1qt can	unknown	unknown	unknown	Material Inventory
Building P402 POL Room East	Reagent Water	2 - 5gal can	unknown	unknown	unknown	Material Inventory
Building P402 POL Room East	Propane	24 - (unk size) cylinders	unknown	unknown	unknown	Material Inventory
Building P402 POL Room East	Antifreeze Ethylene Glycon	7 - 5gal can	unknown	unknown	unknown	Material Inventory
Building P402 POL Room East	"so-sure" Cleaning compound	48 - 1pt bottle	unknown	unknown	unknown	Material Inventory
Building P402 POL Room East	Engine Lubricating Oil	21 - 5gal can	unknown	unknown	unknown	Material Inventory
Building P402 POL Room East	Lubricating oil	2 - 12qt can	unknown	unknown	unknown	Material Inventory
Building P402 POL Room East	Lubricating oil	2 - 1qt can	unknown	unknown	unknown	Material Inventory
Building P402 POL Room East	Auto Hydraulic fluid	1 - 5gal can	unknown	unknown	unknown	Material Inventory
Building P402 POL Room East	Hydraulic fluid	44 - 1qt can	unknown	unknown	unknown	Material Inventory
Building P402 POL Room East	POL - "break free" cleaner, lubricant, preservative	4 - 1pt bottle	unknown	unknown	unknown	Material Inventory

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Building P402 POL Room East	brake fluid silicone	9 - 1gal can	unknown	unknown	unknown	Material Inventory
Building P402 POL Room East	brake fluid silicone	2 - 5gal can	unknown	unknown	unknown	Material Inventory
Building P402 POL Room East	Lubricating oil	50 - 1qt can	unknown	unknown	unknown	Material Inventory
Building P402 POL Room East	Royco Cleaner, Lubricant, preservative	104 - 1pt bottle	unknown	unknown	unknown	Material Inventory
Building P402 POL Room East	POL - Multigrade oil SAE 15W	1 - 55gal drum	unknown	unknown	unknown	Material Inventory
Building P402 POL Room East	POL - SAE 10W	1 - 55gal drum	unknown	unknown	unknown	Material Inventory
Building P402 POL Room East	Gear Oil SAE 80W/90	1 - 55gal drum	unknown	unknown	unknown	Material Inventory
Building P402 POL Room East	POL - Red lithium grease	1 - 55gal drum	unknown	unknown	unknown	Material Inventory
Building P402 POL Room West	Windshield cleaning compound	24 - 1pt bottle	unknown	unknown	unknown	Material Inventory
Building P402 POL Room West	Hydraulic fluid	24 - 1qt can	unknown	unknown	unknown	Material Inventory
Building P402 POL Room West	Lubricating oil	4 - 1qt can	unknown	unknown	unknown	Material Inventory
Building P402 POL Room West	Automotive artillery grease	10 - (unk size) tube	unknown	unknown	unknown	Material Inventory
Building P402 POL Room West	SOLVENT - in parts washer	30 - 1gal bucket	unknown	unknown	unknown	Material Inventory
Building 748	Blackberry and Brush Killer		unknown	unknown	unknown	MSDS List
Building 748	Captan		unknown	unknown	unknown	MSDS List
Building 748	Casoran		unknown	unknown	unknown	MSDS List
Building 748	Lawn Weed Killer		unknown	unknown	unknown	MSDS List
Building 748	Microcop Fungicide		unknown	unknown	unknown	MSDS List
Building 748	Moss-Kil Granules		unknown	unknown	unknown	MSDS List
Building 748	Noxall Granular		unknown	unknown	unknown	MSDS List
Building 748	Noxall Liquid		unknown	unknown	unknown	MSDS List
Building 748	Noxall Concentrate		unknown	unknown	unknown	MSDS List
Building 748	PolySul		unknown	unknown	unknown	MSDS List
Building 748	Summer/Dormant Spray		unknown	unknown	unknown	MSDS List
Building 748	Round-up		unknown	unknown	unknown	MSDS List
Building 748	Spurge/Oxalis Killer		unknown	unknown	unknown	MSDS List
Building 748	Tri-Mel		unknown	unknown	unknown	MSDS List

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Building 748	URED	unknown	unknown	unknown	MSDS List
Building 748	Unleaded Gasoline	unknown	unknown	unknown	MSDS List
Building 748	Gear Oil SAE 80W/90	unknown	unknown	unknown	MSDS List
Building 748	Motor Oil SAE 20W	unknown	unknown	unknown	MSDS List
Building 748	2 cycle lubricant	unknown	unknown	unknown	MSDS List
Building 748	Grease SD-824-3262	unknown	unknown	unknown	MSDS List
Building 748	Grease Mil-6-10924	unknown	unknown	unknown	MSDS List
Building 748	Break Free Liquid	unknown	unknown	unknown	MSDS List
Building 748	CLP Liquid	unknown	unknown	unknown	MSDS List
Building 748	Scouring Powder II	unknown	unknown	unknown	MSDS List
Building 748	Scouring Powder F-154	unknown	unknown	unknown	MSDS List
Building 748	Scouring Powder [w/o bleach]	unknown	unknown	unknown	MSDS List
Building 748	Scouring Powder with chlorine bleach	unknown	unknown	unknown	MSDS List
Building 748	Scouring Powder with bleach	unknown	unknown	unknown	MSDS List
Building 748	Pine Oil Soap Concentrate	unknown	unknown	unknown	MSDS List
Building 748	Pine-Sol broad spectrum formula	unknown	unknown	unknown	MSDS List
Building 748	disinfectant detergent	unknown	unknown	unknown	MSDS List
Building 748	glass cleaner liquid	unknown	unknown	unknown	MSDS List

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Notes: