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## ENVIRONMENTAL SITE ASSESSMENT Phase I

#### SWINOMISH WASTE OIL RECYCLING FACILITY

11454 MOORAGE WAY & LaCONNER, WA 98257

**Prepared For** 

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# ENVIRONMENTAL SITE ASSESSMENT PHASE I FOR THE SWINOMISH TRIBE: WASTE OIL RECYCLING FACILITY 11454 MOORAGE WAY LaCONNER, WA 98257

#### **Prepared For**

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#### **EXECUTIVE SUMMARY**

The following key points were abstracted from the Phase I report which follows:

- We have performed this Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 and AAI Rules for the subject site.
- The investigation performed for this ESA I was conducted in general accordance with the current American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments ASTM E 1527-13 and EPA's AAI (All Appropriate Inquiry) standards and regulations which first became effective November 2006. These are the same rules under the Code of Federal Regulations Title 40 Part 312 Innocent Landowners, Standards for conducting All Appropriate Inquiry which governs the tribes of the Northwest Region. This issue was addressed in 1993 by the Assistant Secretary of Indian Affairs.
- Northwest HydroGeo Consultants (NWHGC) was engaged by Mr. Kevin Anderson, Environmental Specialist, Swinomish Indian Tribal Community, located at 11430 Moorage Way; La Conner, WA 98257, to conduct this Environmental Site Assessment, Phase I on the Swinomish Waste Oil Facility Site.
- The purpose of this ESA Phase I was to identify, to the fullest extent feasible, recognized environmental concerns such as hazardous materials and/or hazardous wastes on the subject property under the due diligence requirements for financial transactions. This Site Assessment included a site reconnaissance of the subject site on July 10, 2017.
- NWHGC was guided in our tour of the site and surrounding areas by Mr. Anderson who provided valuable documents which greatly assisted us in our investigation of the property. We were given full access to the site and Mr. Anderson answered all of our questions.
- The subject site lies approximately 50 feet west of the Swinomish Channel on the Swinomish Reservation site. The building is rectangular shaped with the long axis lying in a northeast-southwest direction. The building has an outside width of approximately 10 feet and a total length with the three separate bays and northern concrete extension for a total of approximately 63 feet. The building site is located



approximately 50 feet west of the Swinomish Channel. The Waste Oil Recycling Facility Building lies southeast of the Fisherman's Pier at Moorage Way.

- As part of this ESA I investigation, NWHGC queried Environmental Data Resources (EDR) as required for a search of up to one mile radius around the subject site of facilities listed on State, Federal and Tribal data bases of sites that might have an effect on the subject site. EDR produced a 166-page report and a Summary Radius Report with 48 pages. The subject site was listed on the SPILLS data base.
- There are no Underground Shortage Tanks (USTs) on the subject site. The nearest site of concern is the Chevron Service Station in front of the Village Store located at 17599 Front St. This service station is located only 0.085 mi WNW of the subject site has never had a reported leak or spill of hydrocarbons.
- Vapor intrusion occurs when vapor-forming chemicals migrate from any subsurface source into an overlying structure. The three-bay building is slab-on-grade construction but there may be some risk of vapor intrusion from outside the building in the form of petroleum hydrocarbons due to spills in the gravel on the west side of the building structure. This may produce a fire risk, but the greater risk may be to the shallow ground water under the site and as it's moving toward the Swinomish Channel it will discharge hydrocarbons into the body of water.
- There is a source of petroleum hydrocarbons on the interior of the three bay building. We observed dark stains on the floor areas and especially around the timbers supporting the 500-gallon waste oil tank in the North Bay and around the plastic pallets in the Center Bay area.
- An Environmental Site Assessment User Questionnaire (ASTM E 1527-13) has been executed by Mr. Anderson, representing the Swinomish Tribal Community. This is included in the Appendix of this report.
- The Chain-Of-Title documents show continuous ownership, and no environmental liens have been placed on the subject site.
- There were no data gaps that significantly affected our ability to identify recognized environmental conditions associated with these properties.
- Based on our evaluation of the site, documents and onsite observations, we have made the following recommendations:



- We conclude that there is a fire danger due to the waste oil observed on the concrete floor in the North Bay and under the pallets observed in the Center Bay. For an out of control fire to begin only an ignition source is needed.
- We observed staining on the sandy gravels in front of the North Bay. How much and how long spills have occurred in this area is unknown. It represents a fire risk and a risk of contamination to the Swinomish Channel if shallow ground water moving in that direction should become contaminated. We recommend that a backhoe or similar device scoop up all contaminated gravels and soils and remove them from the site for proper disposal. Replace with clean soils and consider paving the area in front of the three bays sometime in the future.
- I observed some of the drums containing waste product are showing signs of corrosion around the base and should be removed and disposed of before they present a greater problem.
- We recommend that measures should be taken to aggressively treat the oil stained areas in the North and Center Bays using the Throw & Go absorbent material or other commercially available materials like bentonite. Consider investing in a shop-vac to remove absorbent material after it has done its job and is no longer absorbing the waste oil.
- In conclusion, we found the presence of hazardous materials and hazardous wastes on the subject site which will need to be addressed
- We have performed this Phase I Environmental Site Assessment Update in conformance with the scope and limitations of ASTM Practice E1527-13 and AAI Rules for the subject site.



# ENVIRONMENTAL SITE ASSESSMENT, PHASE I SWINOMISH TRIBE: WASTE OIL RECYCLING FACILITY 11430 MOORAGE WAY LaCONNER, WA 98257

#### INTRODUCTION AND BACKGROUND

**Northwest HydroGeo Consultants (NWHGC)** was engaged by Mr. Kevin Anderson, Environmental Specialist, Swinomish Indian Tribal Community, located at 11430 Moorage Way, La Conner, WA 98257, to conduct this Environmental Site Assessment, Phase I for the Waste Oil Recycling Facility. The subject site is located near the Swinomish Tribal Offices on the Reservation at 11454 Moorage Way (See Figures No. 2 and 3).

A physical survey was made of the subject site on Monday, July 10, 2017. For this ESA I the **NWHGC** geologist was given total access to the Waste Oil Recycling Facility. As part of this ESA I we observed the subject site and the surrounding areas. The details of the site visit will be discussed under the heading **SITE VISIT OBSERVATIONS** beginning on Page No. 22 of this report.

This **Environmental Site Assessment Phase I (ESA I)** was prepared in general accordance with the revised commercial property transactions standards, effective November 2006 and revised in 2013, prepared by the American Society of Testing and Materials (**ASTM**) and detailing the Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Designation: **E1527-13**) and **EPA's All Appropriate Inquiry (AAI)** Rules and Code of Federal Regulations - Title 40 - Part 312.

#### **Purpose of Current ESA I**

The purpose of this ESA Phase I is to identify, to the extent feasible, recognized environmental concerns in connection with the subject property. This assessment included an onsite reconnaissance as well as research and interviews with property management and regulatory agencies. The site reconnaissance was accomplished on Monday, July 10, 2017, with an inspection of the subject site building and the surrounding area which will be discussed later in this report.

#### Scope of Work

The scope of work for this **ESA I** is generally in accordance with the American Society of Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (**ASTM Designation: E1527-05/13**) and **EPA's All Appropriate Inquires (AAI)** Rules, and the **Code of Federal Regulations - Title 40 - Part 312**. These methodologies are described as representing good commercial and customary due diligence practice in conducting an ESA I for a property for the purpose of identifying recognized environmental conditions. In summary, the regulations require

the ESA Professional to provide the following information for AAI's Phase I Environmental Site Assessment Reports:

- Historical Building Permits Review •
- Historical Aerial Photograph Review •
- Historical Sanborn Fire Insurance Map Review •
- Historical City Directory Review •
- Historical Topographic Map Review
- Government Environmental Database Review
- Title History
- Local Environmental Oversight Agency Interviews
- Analysis of Local Hydrogeologic Conditions
- Inspection of Subject Property and Surrounding Areas by the Project Geologist, Record Observations of the Subject Site
- Vapor Intrusion Evaluation
- Interviews with Owners and Employees and Knowledgeable parties
- Completed Environmental Site Assessment User Questionnaire Form
- A Detailed Professional Site Plan if available
- Digital Photographs with Descriptions
- Inclusion of the Statement of Qualifications of Assessors
- Conclusions Regarding Potential Environmental Liabilities Using Risk-based Analysis
- Recommendations for Further Work if Necessary
  - Information abstracted from the **EDR Report** found in the Appendix of this report.

All of these topics will be discussed in the following pages of this report.

#### **Significant Assumptions**

While this report provides an overview of potential environmental concerns, both past and present, the environmental assessment is limited by the availability of information at the time of the assessment. It is possible that unreported disposal of waste or other activities impairing the environmental status of the property may have occurred in the past which could not be identified by our investigation. The conclusions and recommendations regarding environmental conditions that are presented in this report are based on a scope of work authorized by the Client. Note, however, that virtually no scope of work, no matter how exhaustive, can discover all contaminants or all conditions above and/or below ground. Even a subsurface investigation may not be able to detect or identify all existing contamination. It is also possible that contamination sources may lie outside of the prescribed one-mile search area.



#### **Limitation and Exceptions**

Effective November 1, 2006, a property purchaser must comply with either the federal rule entitled "Standards and Practices for All Appropriate Inquiries" (40 CFR Part 312) or ASTM's revised Phase I Environmental Site Assessment standard (ASTM E 1527-13) to qualify as an innocent landowner, contiguous property owner or bona fide prospective purchaser under CERCLA regulations. This report has been prepared in accordance with generally accepted environmental methodologies set forth in ASTM E 1527-13 and EPA's All Appropriate Inquires (AAI) Rules, and the Code of Federal Regulations - Title 40 - Part 312, and contains all of the limitations inherent in these methodologies. No other warranties, expressed or implied, are made as to the professional services provided under the terms of our contract and included in this report.

The professional services performed and outlined in this report were based, in part, upon visual observations of the site. Our opinion cannot be extended to portions of the site that were unavailable for direct observation, or reasonably beyond the control of **NWHGC**. The objective of this report was to assess environmental conditions at the site, within the context of our contract and existing environmental regulations within the applicable jurisdiction. Evaluating compliance of past or future owners with applicable local, state and federal government laws and regulations was not included in our contract for services.

Our observations relating to the condition of environmental media at the site are described in this report. It should be noted that compounds or materials other than those described could be present in the site environment and remain undiscovered.

The conclusions of this report are based, in part, on the information provided by others. The possibility remains that unsuspected or undisclosed environmental conditions may be encountered at the site in locations not specifically investigated. Should such an event occur, **NWHGC** must be notified in order that we may determine if modifications to our conclusions are necessary.

#### **Special Terms and Conditions**

A contract with the Swinomish Indian Tribal Community, Washington for Consultant Services was reviewed and signed by **NWHGC** for this Environmental Site Assessment. A copy of that agreement is on file with our Client, the Swinomish Indian Tribal Community.

#### **User Reliance**

The report may be distributed and relied upon by the Client, its successors and assignees. Reliance on the information and conclusions in this report by any other person or entity is not authorized without the written consent of **NWHGC**. This report and its contents are



valid for one year from date of acquisition by the Client, per the **ASTM E1527-13** Guidelines and **EPA's AAI** Rules.

#### SITE DESCRIPTION

#### **Location of Subject Site**

The Waste Oil Recycling Facility is located on the Swinomish Tribe Reservation adjacent to the Swinomish Channel on the west side of the channel. The subject site is located in the East Half of the Southwest quarter of Section 36 of Township 34 North, Range 02 East, W.M. (see Location Map, Figure No. 1). The site is located at 11454 Moorage Way, LaConner, WA 98257. The current condition of the site will be discussed in detail later in this report under the heading of **SITE VISIT OBSERVATIONS** beginning on Page No. 22.

Four onsite GPS reading were taken at the subject property during our site visit on Monday, July 10, 2017. The locations and GPS readings are listed as follows.

NW End of Trash Dumpster	48° 23.390' North Latitude 122° 30.018' West Longitude Elevation Approximately 13 feet
East Side of the Swinomish Channel	48° 23.383' North Latitude 122° 29.998' West Longitude Elevation Approximately 0 feet
NE End of the Subject Building	48° 23.385' North Latitude 122° 30.012' West Longitude Elevation Approximately 13 feet
SW End of the Subject Building	48° 23.378' North Latitude 122° 30.017' West Longitude Elevation Approximately 13 feet

These coordinates and elevations were read using a hand-held *Garmin Etrex*® GPS meter. Elevations should be considered approximate.

#### **Site and Vicinity General Characteristics**

The subject site contains a rectangular shaped building with a width of approximately 10 feet and a length of the building divided into three equal bays for a total length of



approximately 63 feet, including the concrete slab extension. The building site is located approximately 50 feet from the Swinomish Channel. The Waste Oil Recycling Facility Building lies southeast of the of the Fisherman's Pier at Moorage Way. There is a dumpster at the northeast corner of a concrete enclosed area attached to the Waste Oil Recycling Facility Building. At the time of our site visit fishermen was storing some crab pots on wooden pallets in this area. Anchored in the Swinomish Channel are two parallel docking facilities which at the time of our site assessment had mostly small fishing boats tied up at the two docks. On the north side of Moorage Way is the large Fish Plant building and in front of that is the Village Store and Chevron Oil Station. Scattered around this general area are the buildings that make up the Swinomish Tribal government and associated parking areas. On the opposite side of the Swinomish Channel is the busy commercial district of LaConner, WA (see Figure No. 1).

#### **Current Use(s) of the Subject Property**

The subject site is referred to as the Swinomish Tribe's Waste Oil Recycling Facility. The building is a single story, rectangular structure constructed on a concrete slab-on-grade divided into three bays or sections. The building is located at 11454 Moorage Way, away from other buildings in the Swinomish Tribal Complex and adjacent to a boat pier located on the Swinomish Channel. The use of the property is limited to the temporary storage of waste oils and other hazardous liquids, and collection of trash and garbage prior to scheduled collection. The site is accessed via a paved road which leads off of Moorage Way onto a gravel parking area located directly northwest of the subject site. The subject site will be discussed under the heading: **SITE VISIT OBSERVATIONS** beginning on page 22 of this report.

#### Structures, Roads, Other Improvements on the Site

As stated before, the subject site is located southeast of Moorage Way, the main road leading down to the two parallel piers anchored in the Swinomish Channel. The channel connects with Skagit Bay to the south and Padilla Bay to the north. Throughout the Swinomish Tribal complex the roads are paved, with the exception of some of the parking areas which are graveled. The details of the Waste Oil Recycling Facility will be discussed later in this report.

#### **Current Uses of Adjoining Properties**

As mentioned before the adjoining properties belong to the Swinomish Tribe on the west side of the Swinomish Channel and on the east side of the channel to the people living in the LaConner area. The specifics of these areas will be discussed later in this report. In general terms the current uses of adjoining properties are as follows.

**North:** Directly north of the subject site is the large complex containing the Fish Plant plus retail shops. In front and west of this complex is a mini-mart



associated with the Chevron Gas Station. Further north is open space adjacent to the Swinomish Channel.

**South:** South of the subject site the area is occupied by buildings associated with

the Swinomish Tribal Government and a wooded area. Further south is the

Rainbow Bridge over the Swinomish Channel.

**East:** Bordering on the east side of the Swinomish Tribe Land is the Swinomish

Channel and immediately offshore are two floating docks lying parallel to the channel. Across the channel is the community of LaConner. This small and compact community occupies an area of only 0.41 square miles with a population in 2016 of 1,173. East of the city limits are large areas devoted

to farming.

West: West of the Waste Oil Recycling Facility is an area of individual homes and

beyond that is a densely wooded area.

### INTERVIEWS, CONTACTS, USER PROVIDED INFORMATION AND OTHER RESOURCES

#### Interviews, Contacts and User Provided Information

**NWHGC** conducted a number of interviews for this ESA I. All persons were forthcoming and were very helpful in aiding **NWHGC** in carrying out our work.

- The main source of information was the Swinomish Tribe Representative, Mr. Kevin Anderson, Environmental Specialist at the Swinomish Indian Tribal Community, 11430 Moorage Way; La Conner, WA 98257. Mr. Anderson not only answered all our questions but provided **NWHGC** with documents helpful in our understanding of the Waste Oil Recycling Facility. Mr. Anderson met us onsite and gave us a tour of the site, answering all questions and pointing out important aspects of the site. We gave Mr. Anderson an Environmental Site Assessment User Questionnaire form to fill out in compliance with **ASTM E 1527-13** Regulations. This document is found in the Appendix of this report.
- 2) Chain-of-title documents were supplied by Mr. Anderson in the form of a spreadsheet and PDF attachments. The Chain-of-title documents are on file with the Swinomish Indian Tribal Community office and appear in the Appendix of this report.
- 3) Ms. Gayle Garbush, UST Database Coordinator with the Washington Department of Ecology (425-649-4426), was contacted for information about any Underground



Storage Tanks at the Waste Oil Recycling Facility and she said there were none. The nearest site with underground storage tanks is the Chevron Oil Station located northwest of the Waste Oil Recycling Facility. The underground storage tanks are found together below grade approximately 378 feet away. The Chevron Station will be discussed in this report under the heading: **Records Review** beginning on Page **12**.

**NWHGC** gratefully acknowledges the help and assistance of Ms. Elissa Kalla, Director, Land Management Department, Swinomish Indian Tribal Community, 11430 Moorage Way, LaConner, WA 98257.

#### **Additional Information Provided by Client**

Mr. Anderson provided us with documents which proved very helpful during our investigation. These will be discussed later in this report.

#### **Other Resources**

- The subject site and surrounding areas up to a radius of one mile were extensively researched by Environmental Data Resources, Inc. (EDR), who produced a 166-page EDR Radius Map Report with GeoCheck. This report shows all sites within a one-mile radius of the subject site on the state, federal and tribal data bases. As part of this report a more manageable EDR Summary Radius Map Report consisting of 48 pages was produced. The 48-page Summary Radius Map Report is included in the Appendix of this report. Sites within one mile of the subject site will be fully discussed in detail later in this report document. If desired, the complete EDR report of 166 pages can be emailed as a pdf file to authorized persons upon request and with Client approval.
- 2) At the request of **NWHGC**, **Environmental Data Resources**, **Inc.** (**EDR**) also produced a set of 12 historical aerial photographs flown over the subject site parcel and one Google Satellite Image from 5/02/2015. No Sanborn® street maps are available for this local area. All of these documents are presented in the Appendix and will be discussed in more detail later in this report. The aerial photographs will be discussed under the heading: Interpretation of Historic Aerial Photographs of the Local Area beginning on Page No. 9.

#### **Previous Work at the Site**

To the best of our knowledge here has been no previous work at the subject site.



#### **Chain of Title Documents**

The Chain of Title document was provided by via email from Ms. Elissa Kalla, Director; Land Management Department, Swinomish Indian Tribal Community, in the form of a spreadsheet. The one-page document for Swinomish Tract T1003 covers the period from 1855 to the present. The document submitted to us shows continuous record of ownership by the Swinomish Tribe and further shows there have been **no Environmental Liens** placed on the subject site. This one page document is found in the Appendix of this report.

#### GEOLOGIC AND HYDROLOGIC CONDITIONS OF THE SITE

#### Geologic:

The local geology has been mapped by Joe D. Dragovich *et al.* in the map titled: **Geologic Map of Washington - Northwest Quadrant, 2002.** The map shows the subject site is in an area mapped as **Till (Qgt)**. Till includes part of the Vashon Drift undivided. Based on radiocarbon dates, it is inferred to be older than about 13ka (Blunt and other, 1987) and younger than about 16 ka (Porter and Swanson, 1998). Unit Qgt has a wider age span in the northern than in the southern Puget Lowland. Till is generally a hard material and can be built on without driving piles as in typical alluvial deposits seen in some areas.

#### Well Logs:

A search of files of the **Washington Department of Ecology (WDOE)** for well logs in the Southwest Quarter of Section 36, T34N, R02E, produced 12 well logs. Of the 12 logs one well was drilled to a shallow depth of 15 feet but this well was misfiled and does not belong in the southwest quarter. One well was a Resource Protection well drilled for the collection of engineering data. The rest of the ten wells were all decommissioned, probably because potable water is being supplied via a local PUD to this part of the reservation. This is probably due to their having been drilled before a water line was laid and potable water was delivered to the various home sites. As a result no usable information was gained, so no well logs are presented in the Appendix of this report.

#### **Ground Water Direction of Movement:**

Because there is a lack of hydrogeologic information available in the form of well logs its is assumed the ground water at the site is shallow and the direction of ground water movement is in the general direction of the Swinomish Channel or in an easterly direction. Ground water in deeper confined aquifer(s) is probably moving in a southwesterly or southerly direction where it probably discharges into Skagit Bay.



Hydrologic: The two EDR detail maps show the subject site and surrounding areas. North of the subject site the land elevation drops, creating an area subject to flooding and in the lowest areas, tidal fluctuations. The areas most prone to flooding are areas of low elevation where the 100-year flood events can take place. Other areas lie within the 500-year flood event zone. These areas are for the most part confined to the east side of the Swinomish Channel and where the land is most suitable to agriculture (see the EDR Summary Radius Map Report in the Appendix).

#### Wetlands

Wetlands are seen in small areas on both sides of the Swinomish Channel. There is a large wetland area on the east side of the Swinomish Channel southeast of LaConner. This wetlands area lies on either side of a broad drainage that empties into Skagit Bay.

#### ADDITIONAL INFORMATION GATHERED FOR THIS REPORT

#### Interpretation of Historic Aerial Photographs of the Local Area

Twelve aerial photographs of the subject site and the surrounding areas were obtained from EDR as part of their records search. These twelve photographs were flown from oldest to newest in 1941, 1954, 1956, 1968, 1972, 1981, 1990, 1998, 2005, 2006, 2009 and 2011. These photographs cover a period of change in the area over a 70-year period. In addition a Google satellite Image from 5/2/2015 is included for this study, which shows very fine detail compared to any of the aerial photographs. All of the photographs and Google Image are presented in the Appendix of this report. The individual aerial photographs at the scales flown will be discussed individually as follows:

#### 1941

Scale 1" = 500'

This first aerial photograph flown in 1941 shows just how rural the Reservation was. This aerial photograph was taken in June 27, 1941 or five months before the start of World War II. This also explains the hiatus of no new aerial photographs until 1954. What stands out is the rural nature west of the Swinomish Channel. Access was limited by the narrow bridge that crosses the channel at about Snee-Oosh Road on the Reservation with Morris Street on the east side. Most of the houses in the area occur on the east side.

#### 1954

Scale 1'' = 500'

Thirteen years have passed since the first aerial photograph was flown. The war years 1941 until 1945 have passed. This is an excellent photograph and many changes and details are seen. On the west side of the channel we can see that more houses have been



constructed along Pioneer Parkway Road. In LaConner the business center is beginning to stand out and development of all kinds has occurred since the war. The bridge over the channel appears to be quite narrow and has a center island as the bridge was unable to span the distance with a single engineered structure.

1956

Scale 1" = 500'

Two years have passed and very few changes have occurred on either side of the channel.

1968

Scale 1'' = 500'

Twelve years have passed since the last aerial photograph was flown. The narrow bridge connecting Snee-Oosh Road on the Reservation side of the channel and Morris Street on the east side has been torn down, including the mid-span island in the center of the channel. This has now been replaced with the Rainbow Bridge, a single high-arch bridge for north-south traffic on the Swinomish channel, allowing boats with tall masts to travel the full length of the channel.

1972

Scale 1" = 500'

Four years have passed since the last aerial photo was taken. Changes on both sides of the channel appear to be minor. This is the firrst appearance of the building which will expand to become the Village Store complex of shops and the LaConner Shell Station at 17599 Front Street.

1981

Scale 1" = 500'

Nine years have passed since the previous aerial photograph was flown. This is the first color aerial photograph in the series. Vegetation is shown in red. There has been considerable amount of building of private homes on the Reservation.

1990

Scale 1'' = 500'

Nine years have passed since the previous aerial photograph was flown. This aerial photograph is of very poor quality and it's difficult to see any detail. The new dock area east of Moorage way can be made out but poorly.

1998

Scale 1'' = 500'

Eight years have passed since the previous aerial photograph was flown. This black & white aerial photograph shows the area is changing with the addition of many more homes. The Village Store area has expanded. At the east end of Moorage Way on the Swinomish Channel we can now see clearly the docks where many fishing boats can be tied up.

2005

Scale 1" = 500'

Seven years have passed from the previous photograph. The thing that stands out is the Village Store area where the building footprint looks about as it does today, minus the Shell Gas Station which is still



	Recycling / Garbage Collection Facility was in place since 2000 but the building housing the facility cannot be determined by viewing the aerial photograph.
2006	
Scale 1" = 500'	One year has passed since the previous aerial photograph was flown and there is no major change in the area. In this aerial photograph the rectangular building housing the Swinomish Waste Oil Recycling Facility can be seen but no details can be determined.
2009	
Scale 1" = 500'	Three years have passed and again there have been no major changes in the area and no big additions either. The future site of the
2011	
Scale 1" = 500'	Two years have passed since the previous aerial photograph was flown. Among the changes in the area is the addition of a gas station in front of the Village Store complex. This is a pretty good aerial

an empty place. On the subject site the Swinomish Waste Oil

All twelve aerial photographs of the local and regional areas are found in the Appendix of this report, along with the Google® image taken in 2015.

viewer to see even small areas in great detail.

photograph with many of the details of the area visible.

This Google® satellite image taken in 5/02/2015 shows the area in great detail. The zoom feature on the computer screen allows the

#### Certified Sanborn® Maps of the Area

2015

Scale Variable

There are no Certified Sanborn® Maps available for this area of Skagit County, Washington.



#### **RECORDS REVIEW**

#### **Background Information**

This records review of the subject property and immediate search radius consisted of two parts. **Northwest HydroGeo Consults (NWHGC)** contacted Ms. Gayle Garbush, UST Database Coordinator with the Washington Department of Ecology (WDOE) in Bellevue, Washington, for pertinent information in their files relating to the subject site and nearby surrounding area. We also acquired from **Environmental Data Resources, Inc. (EDR),** headquartered in Shelton, CT 06484), a newly compiled environmental database report covering the local area up to one mile in radius around the subject site. The Waste Oil Recycling Facility is located at 11454 Moorage Way on the Swinomish Indian Reservation in LaConner, WA 98257. This EDR investigation produced a report document consisting of 166 pages. A shorter 48-page summary report was also produced and it is this report that is included in the Appendix of this ESA I report. The full 166-page EDR report is available as a *pdf* file and, if requested, can be sent via email on the approval of the Client.

What follows is an abstract of the EDR Summary Radius Map Report, which is presented in the Appendix.

#### **Purpose and Scope**

The purpose of the records review is to help identify any recognized environmental threats or concerns in connection with the property. Some records reviewed pertain not only to the subject property, but also to properties within an additional approximate minimum search distance in order to help assess the likelihood of potential problems from migrating hazardous substances or petroleum products. Unless stated otherwise, the approximate minimum search distances used were as specified in the **ASTM Standard E 1527-13 and AAI** (All Appropriate Inquiry) Rules.

#### Standard Environmental Records from State and Federal Databases

A search of state and federal environmental records for up to a one-mile radius around the subject site was obtained for this project (**Inquiry Number: 4988175.2s**) from Environmental Data Resources Inc. (EDR) on August 13, 2018. The EDR database is constantly updated. This inquiry generated a 184-page report and a shorter 54-page Summary Radius Map Report highlighting State, Tribal and Federal sites located within the maximum required radius of one mile of the subject site. The shorter 54-page Summary Report is included in the Appendix of this final report.

The EDR report also contains two location maps centered on the subject site, in quartermile, half-mile and one-mile concentric areas. The information was gathered from state and local agencies, plus Federal and EPA databases, including Tribal databases. This



search information provided data on potential risks of record to the subject site from on-site and off-site sources of hazardous materials and hazardous wastes up to a maximum distance of one mile from the subject site.

#### STANDARD ENVIRONMENTAL RECORDS SEARCHED

An exhaustive search was made of 46 state and federal databases on file with the State of Washington, Tribal and Federal sources, including the EPA. The individual databases are listed below and on the following pages. The 46 separate sources include the following databases:

#### **Standard Environmental Records**

Federal NPL site List		Search Distance
1) 2) 3)	National Priority List (NPL) Proposed National Priority List sites (Proposed NPL) NPL Liens	1.0 mile 1.0 mile Target Property (TP)
Feder	al Delisted NPL Site List	
4)	National Priority List Deletions (Delisted NPL)	1.0 mile
Federa	al CERCLIS List	
5) 6)	Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Federal Facility Site Information Listing (Federal Facility)	0.5 mile 1.0 mile
Federal CERCLIS NFRAP Site List		
7) 8)	CERCLIS No Further Remedial Action Planned (CERC-NFRAP) Corrective Action Report (CORRACTS)	0.5 mile 1.0 mile
Federal RCRA non-CORRACTS TSD Facilities List		
9)	RCRA-Treatment, Storage and Disposal (RCRA-TSDF)	0.5 mile
Federal RCRA Generators List		
10) 11) 12)	RCRA-Larger Quantity Generators (RCRA-LQG) RCRA-Small Quantity Generators (RCRA-SQG) RCRA-Conditionally Exempt	0.25 mile 0.25 mile
12)	Small Quantity Generator (RCRA-CESQG)	0.25 mile
Federal Institutional Controls / Engineering Controls Sites List		
13) 14)	Engineering Controls Sites List (US ENG CONTROLS) Sites with Institutional Controls (US INST CONTROL)	0.5 mile 0.5 mile



Federal ERNS List			
15)	Emergency Response Notification System (ERNS)	TP	
State-	and Tribal- Equivalent NPL		
16)	Hazardous Sites List (HSL)	1.0 mile	
State-	and Tribal- Equivalent CERCLIS		
17)	Confirmed and Suspected Contaminated Sites List (CSCSL)	1.0 mile	
State	and Tribal Landfill and/or Solid Waste Disposal Site Lists		
18)	Solid Waste Facility Database (SWF/LF)	0.5 mile	
State	and Tribal Leaking Storage Tank Lists		
19) 20)	Leaking Underground Storage Tanks site List (LUST) Leaking Underground Storage Tanks on Indian Land (Indian LUST)	0.5 mile 0.5 mile	
State	and Tribal Registered Storage Tank Lists		
21) 22) 23) 24)	Underground Storage Tank Database (UST) Aboveground Storage Tank Locations (AST) Underground Storage Tanks on Indian Land (Indian UST) Underground Storage Tank Listing (FEMA UST)	0.25 mile 0.25 mile 0.25 mile 0.25 mile	
State	and Tribal Institutional Control / Engineering Control Registries		
25)	Institutional Control Site List (INST CONTROL)	0.5 mile	
State	and Tribal Voluntary Cleanup Sites		
26) 27) 28)	Voluntary Cleanup Priority Listing (Indian VCP) Voluntary Cleanup Program Sites (VCP) Independent Cleanup Reports (ICR)	0.5 mile 0.5 mile 0.5 mile	
State and Tribal Brownfields Sites			
29)	Brownfields Sites Listing (BROWNFIELDS)	0.5 mile	
<u>Additi</u>	onal Environmental Records		
Local Brownfield Lists			
30)	A Listing of Brownfields Sites (US BROWNFIELDS)	0.5 mile	
Local Lists of Landfill / Solid Waste Disposal Sites			
31) 32)	Open Dump Inventory (ODI) Debris Region 9	0.5 mile 0.5 mile	



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33) 34) 35)	Solid Waste Recycling Facility List (SWRCY) Solid Waste Tire Facilities (SWTIRE) Report on the Status of Open Dumps on Indian Lands (INDIAN ODL)	0.5 mile 0.5 mile 0.5 mile	
Local	Lists of Hazardous Waste / Contaminated Sites		
36) 37) 38) 39) 40) 41)	Clandestine Drug Labs (US CDL) Facility / Identification System Listing (ALLSITES) Confirmed & Contaminated Sites - No Further Action (CSCSL NFA) Clandestine Drug Lab Contaminated Site List Clandestine Drug Lab Contaminated Site List (HIST CDL) National Clandestine Laboratory Register (US HIST CDL)	TP 0.5 mile 0.5 mile TP TP TP	
Local	Land Records		
42 43)	CERCLA Lien Information (Liens 2) Land Use Control Information System (LUCIS)	<b>TP</b> 0.5 mile	
Recor	Records of Emergency Release Reports		
44) 45)	Hazardous Materials Information Reporting System (HMIRS) Reported Spills (SPILLS)	TP TP	
Other Ascertainable Reports			
46)	RCRA-Non Generators (RCRA-NonGen)	0.25 mile	
Note: <b>TP</b> = Target Property (Subject Site)			

#### TARGET PROPERTY SEARCH RESULTS

#### **Database Search Results and Discussion**

The subject site is the Swinomish Waste Oil Recycling Facility located on the Swinomish Reservation. The Property Identification Number is: P20869. There are no Underground Storage Tanks (USTs) on this parcel. The parcel which makes up the target site does appear on one of the databases searched by **EDR**: The **SPILLS Report**. SPILLS are reported to the Spill Prevention, Preparedness and Response Division. SPILLS sites are registered with the Washington Department of Ecology.



## SUMMARY OF ALL SPECIFIC SITES WITHIN ONE MILE OF THE SUBJECT SITE

<u>Federal CERCLIS NFRAP site list:</u> SEMS-ARCHIVE: A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 02/07/2017 has revealed that there is 1 SEMS-ARCHIVE site of this type within approximately 0.5 mile of the target property.

Map ID No. Site Name and Address Distance/Direction

#### **Lower Elevation**

D16 Nasty Jack's Antiques @ 103 Morris St.

0.293 mi / NE

<u>Federal RCRA generators list:</u> RCRA-SQG: A review of the RCRA-SQG list, as provided by EDR and dated 12/12/2016, has revealed that there is one site of this type within approximately 0.25 miles of the target property.

Map ID No. Site Name and Address

**Distance/Direction** 

#### **Equal/Higher Elevation**

2 Not Reported @ 11454 Moorage Way

0.041 mi / WNW

<u>State- and tribal - equivalent NPL:</u> HSL: A review of the HSL list, as proved by EDR, as provided by EDR, and dated 02/21/2017 has revealed that there are 2 sites within approximately 1 mile of the target property.

Map ID No. Site Name and Address

Distance/Direction

#### **Lower Elevation**

C14 LaConner Landing IN @ 1<sup>st</sup> & Morris PO Box 0.263 mi / NE 32 Zimmermans Shell @ 720 E Morris 0.611 mi / ENE

<u>State- and Tribal- Equivalent CERCLIS:</u> CSCSL: A review of the CSCSL list, as provided by EDR, and dated 04/18/2017 has revealed that there are 3 sites within approximately 1 mile of the target property.



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Map ID No. Site Name and Address Distance/Direction

**Equal/Higher Elevation** 

E21 LaConner Station @ 315 Morris St 0.354 mi / ENE

**Lower Elevation** 

C14 LaConner Landing IN @ 1<sup>st</sup> & Morris (PO Box) 0.263 mi / NE 32 Zimmermans Shell @ 720 E Morris 0.611 mi / ENE

**State- and Tribal Landfill and/or Solid Waste Disposal Site Lists 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 Ecology's Solid Waste Facilities Handbook. A review of the database provided by EDR reveals there is one site of this type within approximately **0.5 mile** of the target property.

Map ID No. Site Name and Address Distance/Direction

**Equal/Higher Elevation** 

10 Shelter Bay Tribal S @ 1000 Samish Place 0.233 mi / SW

**Indian UST:** State and Tribal Registered Storage Tank Lists. The Underground Storage Tank database contains registered USTs. USTs are regulated under the RCRA Act. The data come from the Department of Ecology's Statewide UST Site/Tank Report Listing. The EDR report dated 05/16/2017 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

Map ID No. Site Name and Address Distance/Direction

**Equal/Higher Elevation** 

3 Village Store Chevron Station @ 17599 Front St. 0.085 mi / WNW

**LUST:** State and Tribal Registered Storage Tank Lists. The Underground Storage Tank database contains registered USTs, which are regulated under the RCRA Act. The data



come from the Department of Ecology's Statewide LUST Site/Tank Report Listing. The EDR report dated 05/16/2017 has revealed that there are 2 UST sites within approximately 0.5 miles of the target property.

Map ID No. Site Name and Address

Distance/Direction

#### **Equal/Higher Elevation**

E21 LaConner Station @ 315 Morris St.

0.354 mi / ENE

#### **Lower Elevation**

C14 LaConner Landing IN @ 1<sup>st</sup> & Morris

0.263 mi / NE

State- and Tribal institutional control / engineering conrol registries INST Control: Site that have institutional controls. A review of the INST CONTROL list, as provided by EDR, and dated 04/18/2017, has revealed that there is 1 INST CONTROL site within approximately 0.5 miles of the target property.

Map ID No. Site Name and Address

**Distance/Direction** 

#### Lower Elevation

D17 Not Reported @ 103 E Morris

0.293 mi / NE

<u>State and Tribal voluntary cleanup sites:</u> VCP: Sites that have entered either in Voluntary Cleanup Program or its predecessor, Independent Remedial Action Program. A review of the VCP list, as provided by EDR, and dated 12/01/2002 has revealed that there are 3 VCP site within approximately 0.5 miles of the target property.

Map ID No. Site Name and Address

Distance/Direction

#### **Lower Elevation**

A6	Moore-Clark Fish Pro @ 813 2 <sup>ND</sup> St.	0.162 mi / SSE
C13	Olson Property @ 109 1st St.	0.260 mi / NE
F27	Dunlap Towing @ 617N 1st St.	0.435 mi / NE



<u>VCP:</u> A review of the VCP list, as provided by EDR, and dated 04/18/2017 has revealed that there is 1 VCP site within approximately 0.5 miles of the target property.

Map ID No. Site Name and Address Distance/Direction

#### **Lower Elevation**

D17 Not Reported @ 103 E Morris

0.293 mi / NE

#### **Additional Environmental Records**

<u>Local Brownfield lists:</u> US Brownfields: a review of the US Brownfields list, as provided by EDR, and dated 03/02/2017 has revealed thrat there are 2 US Brownfields sites within approximately 0.5 miles of the target property.

Map ID No. Site Name and Address Distance/Direction

#### **Equal/Higher Elevation**

7	Swinomish Tribal ECO @ N48.45441, W122.51611	0.167 mi / ESE
24	Front St. Site @ Front St. Swinomish	0.429 mi / W

<u>Local Lists of Hazardous waste / Contaminated Sites ALLSITES:</u> A review of the ALLSITES database as provided by EDR and dated 05/05/2017, has revealed that there are 20 sites within approximately 0.5 miles of the target property.

Map ID No. Site Name and Address Distance/Direction

#### **Equal/Higher Elevation**

B9	Skagit Cnty Port LA @ 613 2 <sup>nd</sup> St	0.169 mi / E
10	Shelter Bay Tribal S @ 1000 Samish Place	0.233 mi / SW
11	New Bay Ltd @ 117 Sherman St.	0.247 mi / S
18	Pacific Ocean Seafood @ 1218 Conner Way	0.318 mi / SSW
19	Verizon Wireless LA @ 1200 4th St.	0.353 mi / SSE
E21	LaConner Station @ 315 Morris St.	0.354 mi / ENE
22	Schenk Seafood Sales @ 1320 Connor Way E21	0.378 mi / SSW



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G28	Peninsula Timber Log @ 397 181 W	0.454 mi / W
G29	Smith & Ardussi Inc. @ 1525 Downey Rd.	0.454 mi / W
G30	Dunlap Towing @ 2702 Federal	0.454 mi / W

#### **Lower Elevation**

A5 12 C14 15 D17 E20 23 F25 F26	Bayview Edison Indus @ 118 Caledonia St LA Les Kneeland Swinomish @ Private Dock Swinomish LaConner Landing IN @ 1 <sup>st</sup> & Morris John Fischer DDS @ 102 S. 2 <sup>nd</sup> C14 Not Reported @ 103 E Morris Not Reported @ Rainbow Brg Swinomish D17 LaConner School Dist @ Sixth St Box D Dunlap Towing @ 617 N 1 <sup>st</sup> Dunlap Towing @ 617 N 1 <sup>st</sup>	0.159 mi / SSE 0.258 mi / SSW 0.263 mi / NE 0.272 mi / ENE 0.293 mi / NE 0.354 mi / NE 0.390 mi / NE 0.435 mi / NE
31	American Cyanmid Co @ E Talbot St. Hedlin F	0.435 mi / RE 0459 mi / E

<u>CSCSL NFA:</u> 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 database provided by EDR and dated 04/18/2017, has revealed that there are 2 CSCSL NFA sites of this type within approximately 0.5 miles of the target property.

Map ID No. Site Name and Address Distance/Direction

#### **Lower Elevation**

D17	Not Reported @ 103 E Morris	0.293 mi / NE
F25	Dunlap Towing @ 617 N 1st	0.435 mi / NE

Other Ascertainable Records: RCRA NonGen /NLR: 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. 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). Non-Generators do not presently generate waste. A review of the RCRA NonGen /NLR: RCRAInfo list, as provided by EDR and dated 12/12/2016, has revealed that there are 3 RCRA NonGen /NLR site within approximately 0.25 miles of the target property.

Map ID No. Site Name and Address Distance/Direction

#### **Equal/Higher Elevation**

4	Not Reported @ 813 S 2 <sup>nd</sup> St	0.151 mi / SE
B8	Not Reported @ 613 N 2 <sup>nd</sup> St	0.169 mi / E
11	New Bay Ltd @ 1117 Sherman St	0.247 mi / S

<u>Indian Reservation:</u> A review of the Indian Reservation list, as provided by EDR and dated 12/31/2014, has revealed that there is one MANIFEST site within approximately 1 mile of the target property.

Map ID No. Site Name and Address Distance/Direction

#### **Equal/Higher Elevation**

0 Swinomish Reservation 0.000 mi

<u>Manifest:</u> A review of the Manifest list, as provided by EDR and dated 12/31/2016, has revealed that there is 1 MANIFEST site within approximately 0.25 miles of the target property.

Map ID No. Site Name and Address Distance/Direction

#### **Lower Elevation**

A5 Bayview Edison Industries @ 118 Caledonia St. LA 0.159 mi / SSE



## DISCUSSION OF THE STATE, TRIBAL AND FEDERAL DATABASES RESULTS

The subject site contains a small rectangular, single story building sitting on the west side of the Swinomish Channel. The EDR report shows the subject site and other sites in the area. The nearest site of concern was the Chevron Gas Station at 17599 Front Street which is only 0.085 miles WNW of the subject site, and it is not listed on the sites with leaking underground storage tanks (LUST's). Most of the sites are located on the east side of the Swinomish Channel in LaConner. The subject site appears on only one data base: the Department of Ecology's **FINDS** list. **FINDS** is an acronym for **Facility Index System** and is updated on a regular basis.

The EDR data base comes in two versions. There is the full database consisting of 166-pages and the more manageable EDR Summary Radius Map Report consisting of 48 pages. The 48-page Summary Radius Map Report is included in the Appendix of this report.

#### SITE VISIT OBSERVATIONS

#### **Background Information**

**NWHGC** made a visit to the subject site on Monday, July 10, 2017. The subject site is located at 11454 Moorage Way, LaConner, WA 98257. The subject site consists of one Parcel, P20869. At the time of our site visit the sky was mostly clear and it was warm, a perfect day for fieldwork. Before viewing the site I discussed the site with Mr. Kevin Anderson, Environmental Specialist with the tribe. What follows is that discussion.

**NWHGC**: When was the Waste Oil Recycling building constructed?

**Kevin:** The facility was built around 2000. I have a file about its construction and

site eligibility form from the EPA, which allows us to use EPA funding for this project. I have all those details and a memo I wrote about an *ad hoc* cleanup. There is also the tribal memo, the SEPA checklist, and the Tribal Senate report for the first year of operation with details about the facility.

**NWHGC**: How many gallons does the waste oil tank hold?

**Kevin:** I think it's 500-800 gallons. I think actually it's probably 500 gallons, and

that's still big.



**NWHGC**: Where does this waste oil come from? I was surprised that you had a waste

oil tank that large.

**Kevin:** Good question. I think it was originally designed to facilitate oil recycling from

the Tribe's fishing fleet. Since then I think the community uses the facility. I also think some people drop things off here from time to time, but since the

site is unmonitored we don't know for sure.

**NWHGC**: The big question in my mind is, does anyone drop transformer oil in there?

That may contain PCBs.

**Kevin:** I think initially somebody did, but definitely not in a long time. I recently

sampled these waste oil tanks for PCBs and had a vendor come and pump

them all out.

**NWHGC**: You're right on top of this. In Whatcom County it was a big problem because

many people just dumped transformer oils wherever they could. It made a

real mess.

**Kevin:** There is a lot to consider. There are management things we need to do,

such as change the signage. We take antifreeze but we don't take batteries, because our vendor won't take some items. This goes back to a pre-existing time where they did take multiple materials, dating back to the earlier time

when they used to actively manage the facility.

**NWHGC**: The transformer question has been discussed. What happens to the oils

once they are pumped out of here? What is the fate of these materials?

Kevin: They go to an oil re-refiner, a venture called Orrco Oil

(http://www.orrcorecycles.com/). They have a re-refining plant located here on South March Point Road, called **Venoil** (http://www.b2byellowpages.com/company-information/844979331-venoil. html). They'll take oil and fuel mix; used motor oil, used vegetable oils. They don't want anything with PCBs. The used absorbents they kiln and use them

as part of the re-refining process.

**NWHGC**: I don't know about here, but used oils are usually sent to a recycling plant in

the Seattle area that uses them in asphalt batching operations.

#### Kevin:

Oddball things get dropped off, such as a 50-gallon drum half full of polyester resin for fiberglass works. I just opened it up, added some catalyst, which solidified it and asked that it be thrown away as solid waste. Also, people drop off things like a large jug of catalyst, which is methyl ethyl ketone peroxide. (<a href="https://en.wikipedia.org/wiki/Methyl\_ethyl\_ketone\_peroxide;">https://en.wikipedia.org/wiki/Methyl\_ethyl\_ketone\_peroxide;</a> describes the item as highly explosive.) Things like that. We are listed as a **small quantity generator** so every third Wednesday we go to the Skagit County Transfer Station located on 14104 Ovenell Road in Mount Vernon (<a href="https://www.skagitcounty.net/Departments/PublicWorksSolidWaste/disposalinfo.htm">https://www.skagitcounty.net/Departments/PublicWorksSolidWaste/disposalinfo.htm</a>) as a small quantity generator and pay to dispose of these wastes. <a href="https://reisnerdistributor.com/">Meissner Distributors (<a href="https://reisnerdistributor.com/">https://reisnerdistributor.com/</a>) supplies new drums for wastes.

#### Waste Oil Recycling Facility Building and Surrounding Area

The waste oil recycling facility is located on the Swinomish Indian Reservation with an address of 11454 Moorage Way. The rectangular shaped building measures approximately 10 feet wide and a length of approximately 38 feet long plus the concrete extension to the north making the overall length of approximate 63 feet. The structure is composed of three equal sized bays with overhead garage-type doors that can be brought down to isolate the particular area. Mounted on the southwest corner of the building is a fire extinguisher. The building sits parallel to the Swinomish Channel and is set back approximately 50 feet from the Swinomish Channel. The Waste Oil Recycling Facility Building lies southeast of the Fisherman's Pier at Moorage Way. The concrete base extends further north with room for accommodating such things as crab pots which were stacked on a portion of the area at the time of this fieldwork (see Photograph No. 01). Beyond the concrete open area was a large trash dumpster where people can drop off trash and debris. At the time of the site visit people had nearly filled the dumpster with excess trash lying about such as a mattress, wood debris and plastic bags of trash. Trash is collected on a regular basis.

This Waste Oil Recycling facility came into operation in 2000, having been constructed in 1999. One of the questions I asked Kevin was whether any PCBs are involved, and he says no. They tested the waste oil to be sure that there were no PCBs in the petroleum product and testing has not turned up any evidence for the presence of PCBs, a known carcinogen. The first year that the facility was in operation things were probably relaxed and no one is exactly sure what went into the used oil tank in those days. The waste oil product mostly comes from the fishers who have motorboats which generates waste oil in their operations. The facility also accepts vegetable oils and quite a few different kinds of other waste oils.



The Waste Oil Recycling building sits on a poured concrete base with a raised containment border around the entire perimeter of the building. This keeps any spills within the building, preventing and liquid waste from escaping into the environment. I saw no evidence that any petroleum product was leaving the inside of the building. The walls are constructed of aluminum siding secured to a wooden framework. The gabled roof is constructed of asphalt shingles and rainwater is collected into gutters on the east and west sides of the building. There are downspouts at each corner of the building.

Directly in front of the three bay Waste Oil Recycling Facility building the area is covered in a fine gravel and sand mixture with weeds growing up in patches. At the time of our visit the vegetation appeared to be stressed, probably due to lack of any recent precipitation. In front of the building particularly at the North Bay were dark gray stains on the sandy fine gravels, which is due to hydrocarbons. It is unknown if these are recent stains caused by leaking containers or careless spills. I scooped up some of the stained gravel but detected no odor, possibly indicating that the stains are old. Still the presence of the stains indicates possible threats to the environment and needs to be addressed.

West of the Waste Oil Recycling Facility building are a row of large concrete blocks used to prevent cars & trucks using the parking area from running into the front of the building and causing damage. The concrete blocks should remain where they are.

#### **North Bay**

All three bays in the Waste Oil Recycling Facility building are of the same physical size, measuring approximately 10 feet wide with a length of about 12.5 feet. The most obvious feature inside the North Bay is the large horizontally mounted 500± gallon used oil tank resting on two large 6x6-inch wooden timbers. The oil-stained timbers keep the large used oil tank above the oil stained concrete floor. The tank is marked with labels stating the tank is for used oil. Resting on the floor directly in front of the tank is a large plastic platform/container designed to catch any spills when waste oil is poured into the tank. The label on the platform/container states: *Enpac, Poly-Spill Pallet*, (see Photographs No. 02, 03 and 04 at the back of this report). The concrete floor of this bay is stained in places with used oil but in other areas the concrete is relatively unstained. Kevin Anderson is aware of this and other problems and plans to attack these conditions more aggressively in the future, with oil absorbents and new barrels where needed. He has been in this environmental services position for only a few months and at this point will need time and resources to execute his plans for fixing the problems.

Outside in front of the North Bay there is evidence of previous spills on the fine gravel (see Photograph No. 05). This staining may be the result of people being careless when dropping off their used oil. I was told that in the past people would simply drop off their containers of oil in front of the bay and these could easily be knocked over, resulting in a



spill and subsequent staining. Whatever the reason for the spills on the ground they could be more serious than the staining seen on the inside of the building because the stains on the inside are controlled by the raised border around the entire Waste Oil Recycling Building. Outside the building the waste oil is free to migrate into the subsoil and could conceivably reach the Swinomish Channel if not cleaned up.

#### **Center Bay**

The Center Bay contains 55-gallon drums sitting on raised plastic containment pallets against the north and south walls and a wooden pallet against the east facing wall. The drums are labeled as to what they contain. Against the north facing wall the drums are marked; Oil Water, Contaminated Water, Antifreeze and Waste Solvent. Against the south facing wall the drums are marked; Oil Filters, Gas Filters and Absorbent Pads. The concrete is dry except for the oil staining, which in some areas is rather severe, particularly under and around the pallets against the north and south walls. On part of the oil stained floor there is an approximate one foot square area where a product known as Throw & Go, designed to absorb petroleum hydrocarbons, was applied. The bag reads "Super absorbent, all natural, fuels, oils, coolants and even paints." I have no experience with this material. It's a very fine black material and evidently absorbs oils and other materials (see Photographs No. 06, 07, 08, 09 and 10 taken from the Center Bay).

#### **South Bay**

The South Bay is primarily used for storage of materials. Resting on two wooden pallets are several new drums which according to Mr. Anderson are stockpiled and are to be used to replace drums from the Center Bay that are damaged or showing signs of excessive corrosion which could result in a leak. Against the north wall is a large stockpile of absorbent pads and other materials for cleaning up leaks and spills. According to Mr. Anderson, people occasionally drop off batteries here too. These are collected and recycled. Here in the South Bay there are two discarded batteries; one battery has been drained and the fill holes left open. The other battery has the screw tops still in place.

On the concrete floor several absorbent pads have been laid down in front of the pallets holding the unused drums. Staining is only moderate in this bay. Mounted on the southwest corner of the building is a fire extinguisher. A plastic cover labeled Alpine Fire and Safety Systems of 735 East Fairhaven; Burlington, WA 98223 is located for easy access for use in any of the three bays as needed (see Photographs 11, 12, 13 and 14). The rules for what the Waste Oil Recycling building can handle are clearly posted on the outside wall in front of the North Bay. These are on a large sign titled: Facility Operation Rules (see Photograph No. 15 and enlargement that follows).



#### Site Visit Conclusions and Recommendations

We saw issues during our site visit that will need to be rectified in the near future to avoid the risk of fire and further contamination to the soils and further risk of contaminating the waters of the Swinomish Channel, which lies only 50 feet from the east side face of the Waste Oil Recycling building.

- 1) We conclude that there is a fire danger due to the waste oil observed on the concrete floor in the North Bay and under the pallets observed in the Center Bay. For an out of control fire to begin only an ignition source is needed.
- We observed staining in front of the North Bay gravels. How much and how long these spills have occurred in this area is unknown. It represents a fire risk and a risk of contamination to the Swinomish Channel if shallow ground water moving in that direction should become contaminated. We recommend that a backhoe or similar device scoop up all contaminated gravels and soils and remove them from the site for proper disposal. Replace with clean soils and consider paving the area in front of the three bays sometime in the future.
- 3) I observed some of the steel drums containing waste product are showing signs of corrosion around the base. These steel containers should be removed and discarded before they present a greater problem.
- We recommend that measures be taken to aggressively treat the oil stained areas in the North and Center Bays using the Throw & Go absorbent material or other commercially available materials like bentonite. Consider investing in a shop-vac to remove absorbed material after it has done its job and is no longer absorbing the waste oil.

#### **Vapor Intrusion**

Vapor intrusion occurs when vapor-forming chemicals migrate from any subsurface source into an overlying structure. The three bay building is slab-on-grade construction but there may be some risk of vapor intrusion from outside the building in the form of petroleum hydrocarbons resulting from past spills in the gravel on the west side of the building structure. There is a source of petroleum hydrocarbons on the exterior of the three bay building where dark stains occur on the floor areas aare seen in the North Bay and Center Bay areas. The nearest service station is the Chevron Service Station located in front of the Village Store at 17599 Front St. This service station is situated only 0.085 miles WNW of the subject site but has never had a reported leak or spill of hydrocarbons.



#### CONCLUSIONS

The following conclusions are based on our observations, investigations and research of the available data bases:

- The Swinomish Waste Oil Recycling Facility is located at 11454 Moorage Way and is situated on the west bank of the Swinomish Channel, a waterway that connects with Skagit Bay on the south and Padilla Bay on the north. The recycling facility has a Facility ID: 543801. The facility is an elongated building with the long axis lying in a northeast-southwest direction. The building has an outside width of approximately 10 feet and a length of the three separate bays at approximately 63 feet. The building site is located approximately 50 feet from the west side of the Swinomish Channel. The Waste Oil Recycling Facility Building lies southeast of the Fisherman's Pier on Moorage Way.
- The Waste Oil Recycling Facility building is single story slab-on-grade construction with an approximate 6-inch raised concrete border around the perimeter of the building. The wooden structure of the building rests on this concrete border. The building is constructed of a wooden framework with an aluminum siding exterior. The three bays have approximately the same interior dimension of 10 feet wide and a length of 12.5 feet. Each bay has an overhead door. At the northeast end of the building is a concrete slab where items such as crab pots are temporarily stored. Beyond the concrete slab is a large community dumpster which at the time of this ESA I visit was overflowing with trash.
- There may be some potential risk of vapor intrusion from outside the building in the form of petroleum hydrocarbons resulting from past spills in the gravel on the west side of the building structure. There may be a fire hazard from the past spills but the more likely problem is to the shallow ground water and its affect on the nearby Swinomish Channel.
- There is a source of petroleum hydrocarbons on the interior of the three bay building. We observed dark stains on the floor areas and especially around the timbers supporting the 500-gallon waste oil tank in the North Bay and around the plastic pallets in the Center Bay area.
- As part of this ESA I investigation, NWHGC queried Environment Data Resources (EDR) as required for a search of up to one mile around the subject site for sites listed on State, Federal and Tribal data bases radius that might have an effect on the site. EDR produced a 166-page report and a Summary Radius Report of 48 pages. The subject site was listed on the SPILLS data base in that report.



- There are no Underground Shortage Tanks (USTs) on the subject site. The nearest site is the Chevron Service Station in front of the Village Store located at 17599 Front St. This service station is located only 0.085 mi WNW of the subject site but has never had a reported leak or spill of hydrocarbons, and its underground storage tanks are continuously monitored for leaks.
- A visit to the site was accomplished on Monday, July 10, 2017 by the NWHGC geologist. We were met on site by Mr. Kevin Anderson, Environmental Specialist with the Swinomish Tribe. Mr. Anderson was our tour guide and answered all of our questions concerning the site. In addition we were given several important documents which proved very helpful in our investigation, including an EPA Region 10 Brownfields Site Eligibility Worksheet and a Tribal Environmental Policy Act (Title 14-2), and a Memorandum dated 02/27/2017.
- The subject site consisting of the three bay building does appear on one State database for SPILLS as complied by EDR. The SPILLS database lists sites with reported Spills and are reported to the Spill Prevention, Preparedness and Response Division at the Washington Department of Ecology.
- The title search document shows continuous ownership of the subject site since 1855 and no environmental liens have been placed on the subject site.
- In conclusion, we did find a potential for the presence of hazardous materials in the form of leaks in front of the North and Center Bays on the gravel causing a discoloration. We have also seen dark staining on the interior concrete floor especially around the pallets holding drums in the Center Bay and around the horizontally mounted 500-gallon waste oil tank in the North Bay.
- We have recommended immediate cleanup of the front of the three bay building where contaminated gravel and soils underneath could lead to contamination of the shallow aquifer and eventually to the Swinomish Channel. The leaked areas observed could represent a fire hazard as well.
- We have performed this Phase I Environmental Site Assessment Update in conformance with the scope and limitations of ASTM Practice E1527-13 and AAI Rules for the subject site.



#### **RECOMMENDATIONS**

We have made a thorough inspection of the subject site according to the requirements of an ESA I as outlined in ASTM E 1527-13 and EPA AAI Regulations. Based on our evaluation of the site, documents and onsite observations, we have made the following recommendations.

- 1) We conclude that there is a fire danger due to the waste oil observed on the concrete floor in the North Bay and under the pallets observed in the Center Bay. For an out of control fire to begin only an ignition source is required.
- We observed staining in front of the North Bay gravels. How much and how long spills have occurred in this area is unknown. It represents a fire risk and a risk of contamination to the Swinomish Channel if shallow ground water moving in that direction should become contaminated. We recommend that a backhoe or similar device scoop up all contaminated gravels and soils and remove from the site for proper disposal. Replace with clean soils and consider paving the area in front of the three bays sometime in the future.
- 3) I observed some of the drums containing waste product are showing signs of corrosion around the base and should be removed and discarded before they present a greater problem.
- 4) We recommend that measures should be taken to aggressively treat the oil stained areas in the North and Center Bays using the Throw & Go absorbent material or other commercially available materials like bentonite. Consider investing in a shopvac to remove absorbed material after it has done its job and is no longer absorbing the waste oil.



Please contact us if you have any questions.

Sincerely,

Doug Dillenberger, L.G., L.HG. ▼ Principal Washington Licensed Geologist / Hydrogeologist Northwest HydroGeo Consultants

Distribution: 1 bound and 1 unbound copy to Mr. Kevin Anderson, Environmental Specialist

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#### INDEMNIFICATION AND LIMITATIONS

This report presents conditions observed during our site visit and subsequent investigation, data analysis, and reporting. Our services were provided with due diligence and observance of protocols and procedures applicable to this situation, and in accordance with the terms presented in our General Conditions. This project was conducted and this report prepared in accordance with generally accepted professional practices for the nature and conditions of the work completed in this area at the time the work was performed and the services were provided, under the ASTM E 1527-13 requirements. This report and its conclusions and recommendations are intended for the exclusive use of the Client for specific application to the referenced project site. The photographic images appear as they were taken, with no digital additions or modifications.

As is now common in the profession, our general liability insurance carriers specifically exclude coverage for claims or damages related to the release of pollutants. Therefore, as a condition of our services, it is understood that, to the fullest extent permitted by law, our Clients agree to defend, indemnify and hold harmless Northwest HydroGeo Consultants, its owners, employees, subcontractors and agents, from any past, present, or future pollution-related claims or damages at the site, including potential claims from third parties that may name Northwest HydroGeo Consultants as a claimant. Northwest HydroGeo Consultants assumes no responsibility or liability for the accuracy, storage, transmission, or delivery of database and file search information provided for this project.

Within the limitations of scope, project schedule, and budget for our services, we warrant that our services have been provided in accordance with the terms of our Proposal and under the generally accepted professional environmental assessment practices at the time the report was prepared. No other warranty, express or implied, is made.

#### **REFERENCES**

- ASTM, 2005, "ASTM Standards on Environmental Site Assessments for Commercial Real Estate", Published by the American Society for Testing and Materials, Philadelphia, PA; 57 pp.
- Dragovich, Joe D., 2002, "Geologic Map of Washington Northwest Quadrant," Published by the Washington Division of Geology and Earth Resources, Map GM-50; two maps with text.
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- NIOSH, 1990, "NIOSH Pocket Guide to Chemical Hazards," Published by the US Department of Health and Human Services, Public Health Service, Centers for Disease Control, National Institute for Occupational Safety and Health, 245 pp.
- United States Environmental Protection Agency, 2017. Various data bases for the Northwest Washington area, secured under the Freedom Of Information Act.
- Washington Department of Ecology, 2017. Various data bases for the Northwest Washington area.

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## **APPENDIX**

PROPE	ERTY INFORMATION SUMMARIES
USER 9	QUESTIONNAIRE
EDR	SUMMARY RADIUS MAP REPORT
EDR	SANBORN® MAP REPORT
E D R	AERIAL PHOTO DECADE PACKAGE
TITLE	HISTORY DOCUMENTATION
WELL	LOG SUMMARIES