

**ENVIRONMENTAL SITE ASSESSMENT PHASE I FOR THE SWINOMISH TRIBE:  
SWINOMISH TRIBAL FISH PROCESSING PLANT AND VICINITY  
11545 MOORAGE WAY  
La CONNER, WA 98257**

**Prepared For**

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**Project Number 2K1807**

## TABLE OF CONTENTS

EXECUTIVE SUMMARY. . . . .	iii
INTRODUCTION AND BACKGROUND. . . . .	1
Purpose of Current ESA I. . . . .	1
Scope of Work. . . . .	2
Significant Assumptions. . . . .	3
Limitation and Exceptions. . . . .	3
Special Terms and Conditions. . . . .	4
User Reliance. . . . .	4
SITE DESCRIPTION. . . . .	4
Location of Subject Site. . . . .	4
Site and Vicinity General Characteristics. . . . .	5
Current User(s) of the Property. . . . .	6
SITE VISIT OBSERVATIONS. . . . .	6
Structures, Roads, Other Improvements on the Site. . . . .	6
Current Uses of Adjoining Properties. . . . .	7
INTERVIEWS, CONTACTS, USER PROVIDED INFORMATION AND OTHER RESOURCES. . . . .	8
Interviews, Contacts and User Provided Information. . . . .	8
Additional Information Provided by the Client. . . . .	9
Other Resources. . . . .	9
Previous Work at the Site. . . . .	9
Chain of Title documents. . . . .	10
GEOLOGIC AND HYDROGEOLOGIC CONDITIONS OF THE SITE. . . . .	10
ADDITIONAL INFORMATION GATHERED FOR THIS REPORT. . . . .	11
Interpretation of Historic Aerial Photographs of the Local Area. . . . .	11
Certified Sanborn Maps of the Area. . . . .	15
RECORDS REVIEW. . . . .	15
Background Information. . . . .	15
Purpose and Scope. . . . .	16
Standard Environmental Records from State and Federal Data Bases. . . . .	16
STANDARD ENVIRONMENTAL RECORDS SEARCHED. . . . .	16
TARGET PROPERTY SEARCH RESULTS. . . . .	20
Database Search Results and Discussion. . . . .	20
SUMMARY OF ALL SPECIFIC SITES WITHIN ONE MILE OF THE SUBJECT SITE AS THEY APPEAR ON THE EDR DATA BASE. . . . .	20
DISCUSSION OF STATE, TRIBAL AND FEDERAL DATA BASES RESULTS. . . . .	29
Underground Storage Tanks at the Chevron Station. . . . .	30
UST Decommissioning. . . . .	31

Missing 4,000 Gallon UST..... 31

Swinomish Fish Processing Plant and Background Information..... 31

SITE VISIT OBSERVATIONS. .... 33

    Background Information. .... 33

    Highlights of Fish Processing Plant Interior..... 34

    NWHGC Comment on Completion of Our Tour of the Fish Plant..... 43

    Vapor Intrusion. .... 43

CONCLUSIONS..... 44

RECOMMENDATIONS. .... 46

INDEMNIFICATION AND LIMITATIONS..... 48

REFERENCES..... 48

APPENDICES

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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 as 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 Fish Processing Plant 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 August 27, 2018.
- **NWHGC** was guided in our tour of the Fish Processing Plant Building by Mr. Anderson, who provided us with valuable documents related to our investigation and our assessment of the property. We were given full access to the site and Mr. Anderson was with us throughout our investigation of the site. Mr. Henderson, Facilities Manager, Swinomish Enterprises, is highly knowledgeable in all phases

of the work that took place at the plant in the past and has extensive current knowledge of the site. He answered all of our questions in great detail.

- The subject site lies approximately 100 feet northwest of the Swinomish Channel on the Swinomish Indian Reservation site. The building is slightly rectangular in shape, having its long axis in a northeast-southwest direction, measuring approximately 250 feet in length. The building has an outside width of approximately 180 feet in a northwest-to-southeast direction. The total area of the plant and property it sits on is about 2.3 acres.
- As part of this ESA I investigation, **NWHGC** queried **Environmental Data Resources (EDR)** as required for a records search of up to one mile radius around the subject site for facilities listed on State, Federal and Tribal data bases of sites that might have an effect on the subject site. **EDR** produced a 184-page report and a Summary Radius Report with 54 pages. The subject site was listed on four of the data bases, including: **1) Indian Reservation: 2) FINDS: 3) ECHO: 4) ASBESTOS:**
- Based on our current knowledge, there are no Underground Storage Tanks (USTs) on the subject site. Two 8,000 gallon USTs were removed on May 31, 1995. There is still a question about a 4,000 gallon tank that is unaccounted for. The nearest potential active site where USTs are present is the Chevron Service Station in front of the Village Store located at 17599 Front St. This service station is located only about 110 feet northwest of the subject site and has never had a reported leak or spill of hydrocarbons. None is expected, as the USTs have early leak detection devices installed on each UST and distribution line.
- Vapor intrusion occurs when vapor-forming chemicals migrate from any subsurface source into an overlying structure. The Fish Plant building is slab-on-grade construction built over a geologic unit called Till. Till is a very hard glacial material which is resistant to vapor intrusion. We believe the risk of vapor intrusion at the site is very small.

- 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 from 1855 to the present. The land is now and has always been under the direct control of the Swinomish Indian Tribe, based on a Treaty with the United States of America.
- There were no data gaps that significantly affected our ability to identify recognized environmental conditions associated with these properties, with the one exception being the status of the 4,000 gallon tank.
- Based on our evaluation of the site, documents and onsite observations, we have made the following recommendations:
  - ◆ We believe the status of the missing 4,000 gallon tank should be pursued. The status of the tank could be determined if present underground using ground penetrating radar technology. If the tank was actually above ground a record search in the Swinomish Indian files may show that the tank was actually an above ground tank and was previously removed from the site. An Addendum Letter will follow this report once results are received.
- In conclusion, we observed no hazardous materials or hazardous wastes on the subject site which will need to be addressed. Asbestos was not observed during our onsite visit but may exist in areas not observed such as where hot water is produced and piping that may be wrapped in asbestos. As long as these wrappings remain undisturbed and in good condition they should be of no risk to the site and can be left as they are.
- 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.

**ENVIRONMENTAL SITE ASSESSMENT, PHASE I  
SWINOMISH TRIBE: FISH PROCESSING PLANT  
AND VICINITY  
11545 MOORAGE WAY  
LaCONNER, WA 98257**

**INTRODUCTION AND BACKGROUND**

**Northwest HydroGeo Consultants (NWHGC)** was engaged by Mr. Kevin Anderson, Environmental Specialist with the Swinomish Indian Tribal Community, located at 11430 Moorage Way, La Conner, WA 98257, to conduct this Environmental Site Assessment, Phase I for the Swinomish Fish Processing Plant and Vicinity. The subject site is located near the Swinomish Tribal Offices on the Reservation at 11545 Moorage Way (see Figures No. 2 and 3).

A physical survey was made of the subject site on Monday, August 27, 2018. For this ESA I the **NWHGC** geologist was given total access to the Fish Processing Plant Facility. As part of this ESA I we observed the subject site and the surrounding areas up to a one mile radius from the subject site. The details of the site visit will be discussed under the heading **SITE VISIT OBSERVATIONS** 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 and to make recommendations for further followup work in the form of an ESA Phase II if conditions warrant. 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, August 27, 2018, 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: E 1527-13**) and **EPA's All Appropriate Inquiries (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 ①
- Historical Aerial Photograph Review ①
- Historical Sanborn Fire Insurance Map Review ①
- Historical City Directory Review ①
- Historical Topographic Map Review①
- Government Environmental Database Review①
- 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

- ① *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** on August 09, 2018 for this Environmental Site Assessment. A copy of that agreement is on file with our Client, the Swinomish Indian Tribal Community. The tribal representative is Mr. Kevin Anderson, Environmental Management Specialist, Department of Environmental Protection; Swinomish Indian Tribal Community; 11430 Moorage Way; LaConner, WA 98257.

### **User Reliance**

This 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**

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The Swinomish Fish Plant and Vicinity 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 Southeast Quarter of the Northwest Quarter of Section 36 of Township 34 North, Range 02 East, W.M. (see Location Map, Figure No. 1). The site is located at 11545 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**. Four onsite GPS readings were taken at the subject property during our site visit on Monday, August 27, 2018. The locations and GPS readings are listed as follows.

Northwest Corner of Subject Site	<b>48° 23.452' North Latitude</b> <b>122° 30.032' West Longitude</b> <b>Elevation Approximately 14 feet</b>
Southeast Corner of Subject Site	<b>48° 23.392' North Latitude</b> <b>122° 29.997' West Longitude</b> <b>Elevation Approximately 12 feet</b>
Northeast Corner of Subject Site	<b>48° 23.434' North Latitude</b> <b>122° 29.965' West Longitude</b> <b>Elevation Approximately 12 feet</b>
Southwest corner of Subject Site	<b>48° 23.410' North Latitude</b> <b>122° 30.058' West Longitude</b> <b>Elevation Approximately 15 feet</b>

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 series of buildings constructed over the years from the early 1970's to the present time. These joined buildings measure approximately 180 feet in an east-west direction and about 250 feet in a north-south direction. The building site is located approximately 100 feet west from the Swinomish Channel. The building as we

understand it is partially built on fill material dredged up from the Swinomish Channel when it was widened; it was previously known as the Swinomish Slough. Extending into the Swinomish Channel is a pier and an even larger pier south extending from Moorage Way. At the time of our site visit fishermen had been storing crab pots along the Swinomish Channel and on the parallel docking facilities, and next to the Swinomish Waste Oil Recycling Facility. Before meeting with Mr. Anderson and Mr. Henderson, Facilities Manager, Swinomish Enterprises, I drove completely around the Fish Plant, observing the site which is quite large. At the northeast corner a man was cleaning out large blue plastic containers with a high-pressure hose. Opposite the fish plant is a large wood-frame building used for fish net storage. A man was repairing a large net as we drove by. At the northwest corner is a fenced-in area where a backup generator is located for use in case of a power failure. The generator is to keep the freezer temperature constant. There is a dirt road between the Fish Plant and the Chevron gas station on the west side. The dirt road empties out onto Moorage Way, completing the drive around the Fish Plant. Note: An ESA I report was made for the **Swinomish Waste Oil Recycling Facility** by NWHGC and dated July 27, 2017, Project Number 2K1706

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

The subject site is referred to as the Swinomish Fish Processing Plant and has had a complex history processing fish, fish eggs and a large kosher canning operation. Over the years various companies have operated the fish plant, at which time numerous additions have been added to the building complex.

The building as a whole is a large single story warehouse-type structure with upper level office and storage within the structure. The Fish Plant ceased operations about two years ago. However, many of the machines, conveyors and other materials are still on site. I discussed with Mr. Henderson the reason for the shutdown and he said the lack of a market in today's buying habits: People by and large today buy their fish frozen from the stores. About the only canned fish products readily available today are canned tuna and sardines.

Mr. Henderson did say small amounts of fish are processed for tribal members and that is about it. The subject site will be discussed in more detail beginning under the heading:

## **SITE VISIT OBSERVATIONS**

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

As stated before, the subject site is located on the north side of Moorage Way where it dead-ends next to the Swinomish Channel. On the east side there is a paved roadway between the building and parallel to the Swinomish Channel. On the north side is a smaller wood-frame building called the fish net storage building. On the west side between the subject site and the Chevron Gas Station is a dirt roadway which ends at Moorage Way, a paved roadway. As mentioned before, the Fish Plant structure has undergone improvements, upgrades and add-ons over the years.

## **Current Uses of Adjoining Properties**

As mentioned before, the subject site and adjoining properties belong to the Swinomish Tribe. On the west side of the Swinomish Channel is the community of LaConner, Washington. The specifics of the subject site will be discussed later in this report. In general terms the current uses of adjoining properties are as follows.

**Northeast:** Directly northeast of the subject site is the wood-frame building with large doors facing the subject site known as the fish net storage building. Beyond that building the area consists of undeveloped land adjacent to the Swinomish Channel and Front Street.

**Southwest:** The area southwest of the subject site contains several buildings with parking occupied by the Swinomish Tribal Governmental offices. Further southwest there is a large wooded area that extends to Pioneer Parkway Road which crosses the Swinomish Channel via the Rainbow Bridge. Directly across Moorage Way and adjacent to the Swinomish Channel is the Swinomish Waste Oil Facility, which was investigated and a report prepared for the Swinomish Tribe by **NWHGC** and dated July 27, 2017.

**East:** Bordering on the east side of the Swinomish Tribal Land is the Swinomish Channel and immediately east of the channel is the community of La Conner, Washington. This small and compact community occupies an area of only 0.41 square miles, with a population estimated to be around 1,200±. Beyond the city limits are large areas devoted to farming. Along the

Swinomish Channel are several large marinas where boats, some of which are commercial, are docked.

**West:** Directly west of the subject site is the Chevron Oil Station dispensing gasoline in three grades from two pump islands. All gasoline product is unleaded, and all pumps and distribution piping from the underground storage tanks (USTs) located northeast of the pump island have early leak detection devices installed on them. We believe, therefore, that the risk of leakage from the USTs or distribution lines from the tanks to the pumps is very low. Further west are individual homes.

## 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.

- 1) Our main source of information was from the Swinomish Tribe personnel. Our key contact with the Tribe is Mr. Kevin Anderson, Environmental Specialist at the Swinomish Indian Tribal Community. Mr. Anderson not only answered all our questions but provided us with all of the documents utilized in our investigation. Ms. Theresa Trebon, Tribal Archivist, along with Mr. Anderson provided us with a history of the site going back to 1936. Mr. Ken Henderson, Facilities Manager, Swinomish Enterprises, acted as our guide through the Fish Processing Plant Building and provided us with many details as to the running of the plant and answered all of our questions.
- 2) We provided 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.

- 3) The Washington Department of Ecology (425-649-4426) was contacted for information about any Underground Storage Tanks (USTs). The nearest site with underground storage tanks, as already discussed, is the Chevron Oil Station located directly west of the Fish Processing Plant Facility. The underground storage tanks are found together below grade approximately 115 feet away from the Fish Processing Plant. The Chevron Station will be discussed in this report under the heading **Records Review**.
  
- 4) Two former 8,000 gallon USTs were removed by Advanced Soil Mechanics of Mount Vernon, WA from a location approximately 80 feet southwest of the subject site on May 31, 1995. One UST contained gasoline and the other diesel. Both were described as not leaking and soil samples taken from the former USTs pits proved negative for the presence of gasoline BTEX and Diesel. There was no mention of a third 4,000 gallon UST at the site.

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

Mr. Anderson provided us with many documents and site plans, all of which proved very helpful with our investigation. These will be discussed later in this report.

### **Other Resources**

- 1) 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 184-page **EDR Radius Map Report with GeoCheck**. This report shows all sites within a one-mile radius of the subject site present on the state, federal and tribal data bases. As part of this investigation a more manageable **EDR Summary Radius Map Report** consisting of 54 pages was produced. The 54-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 184 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 starting in 1941 and last flown in 2017. There is also a Google Satellite Image from

7/24/2017. There are no Sanborn® street maps 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.**

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

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

### **Chain of Title Documents**

Chain of Title Documents, consisting of one page with only four entries, was supplied by Mr. Anderson. The Chain of Title document goes back as far 1855 up to 1958. The property is under the sole and continuous ownership of the Swinomish Indian Tribal Community, which accounts for the simple Chain of Title Document. The one-page Document appears in the Appendix of this report. 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.

## **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 13 ka (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. It should be noted that overlying these deposits is dredge material obtained from when the Swinomish Channel was deepened and widened in 1937 to allow larger vessels to use the channel.

**Well Logs:** A search of files of the **Washington Department of Ecology (WDOE)** for drillers' well logs in the Northwest Quarter of Section 36, T34N, R02E, produced 6 well logs. All of the 6 logs were drilled to a shallow depth of 15 feet and were drilled for the purpose of gaining engineering data on the subsurface soils. No usable information was gained for our purposes, but the summary sheets for the 6 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 it is inferred that the ground water at the site is shallow and is moving in the general direction toward the Swinomish Channel or in an easterly direction. Deeper ground water is found in confined aquifer(s) and is probably moving in a more 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). The area west of the Swinomish Channel is on Bureau of Indian Affairs Land and does not indicate if the land area fits in any of the flood event zones.

**Wetlands** Wetlands are seen in small areas along the west side of the Swinomish Channel. There is a large wetland area on the east side of the Swinomish Channel southeast of LaConner.

## 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, 2006, 2009, 2013 and 2017. These photographs cover a period of change in the area over a 76-year period. In addition a Google satellite Image from 7/24/2017 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 Tribal Archivist Ms. Theresa Trebon has submitted to **NWHGC** a time line of events which have occurred at the site beginning in 1936. Where possible we have tried to locate the various activities at the site mentioned in her time line. The success of this happening is due in part to the quality of the aerial photographs which at times were less than good. The individual aerial photographs were flown at the scale of 1 inch = 500 feet. Each year will be discussed individually as follows:

**1941** This first aerial photograph flown in 1941 shows just how rural the Reservation was at that time. This aerial photograph was taken in June 27, 1941 or about six months before the start of World War II and before the wartime activities at the site. Note: there was a hiatus of 13 years when no aerial photographs were made during the 4 years of WW II and the 9 years after the war before flights were resumed in 1954. Please refer to the time line prepared by Ms. Trebon found in the Appendix of this report.

An examination of the aerial photograph shows how rural the area appears west of the Swinomish Channel. Access was limited by the narrow bridge that crosses the channel at about Snee-oosh Road on the Reservation and Morris Street on the east side. Most of the houses in the area occur on the east side. On the west side is a red outline showing the approximate location of where the Fish Processing Plant will be located. The only housing units in the area lie along Pioneer Parkway, which becomes Reservation Road beyond Snee-oosh Road.

Also it should be noted that the Swinomish Channel was known as the Swinomish Slough when it was a narrow waterway and hazardous to boating. In 1937 the Army Corps of Engineers dredged the channel, making it navigable. The Corps continued dredging every three years until 1990 when Congress withdrew funds. A study in 2004–2008 determined that sedimentation would render the channel's north end impassable for virtually all vessels by 2015, and its south end by 2019. As a result the channel was dredged in 2008. Funding for additional dredging remains uncertain. In 2012 the Army Corps of Engineers received funding from Congress for another dredging project, which was finished in January 2013.

- 1954** Thirteen years have passed since the first aerial photograph was flown. Again, the war years from the end of 1941 until 1945 have passed. This is an excellent photograph and some changes have occurred, mainly north of Snee-oosh Road and mainly the addition of some buildings. On the subject site no building details are observed.
- 1956** Two years have passed and very few changes have occurred on either side of the channel. The red outline provided for the Fish Processing Plant is in the wrong position. The photo is a bit out of focus but there appears to be a small building where the present day Village Store Chevron Station is located at 17599 Front Street.
- 1968** 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 man-made island in the center of the channel where a pier once stood. Reservation Road now extends southward and connects with the Rainbow Bridge, a single high-arch bridge for traffic over the Swinomish channel, allowing boats with tall masts to travel the full length of the channel north and south. There has also been some new housing along First Street. There is now a dock lying parallel with the Swinomish Channel with access from Moorage Way. At the subject site near the fuel dock two 8,000-gallon Underground Storage Tanks and one 4,000-gallon UST were installed by Union Oil Company. The two 8,000-gallon USTs were decommissioned by removal in May 31, 1995 by Advanced Soil Mechanics of Mount Vernon, WA.

- 1972** 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 first appearance of a building that will make up the Fish Processing Plant Complex. It is unknown if this structure was incorporated into the final Fish Processing Plant complex or was torn down to make room for the larger structure.
- 1981** Nine years have passed since the previous aerial photograph was flown. This is the first two-color aerial photograph in the series. Vegetation is shown in red. There has been considerable amount of building of private homes on the Reservation and more building along the Swinomish Channel on the east side. At the subject site the small structure seen in the 1972 aerial photograph has been replaced by a much larger square building. Directly north is the warehouse-type building which still stands today.
- 1990** 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 details. There appears to be more building within the subject area but, again, no details can be seen. On the Swinomish Channel in front of the building there appear to be two docks parallel to each other. This area becomes more clearly seen in the following years.
- 1998** 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. There appears to be an extension to the Fish Processing Plant on the southwest portion. The Fish Processing Plant area occupies approximately half the area of what it now occupies.
- 2006** Eight years have passed from the previous photograph. From here on out all of the aerial photographs shown will be in the standard 3-color process. At the Fish Processing Plant another addition can be clearly seen at the southwest end of the building, giving it nearly the configuration as we see it today.
- 2009** Three years have passed and, again, there have been no major changes in the surrounding area. At the subject site the building appears to be larger and more complex, but there are no obvious additions to the building. To the west where the future Chevron Oil Station will be located, the lot is still vacant.

**2013** Four years have passed since the previous aerial photograph was flown. Among the changes in the area is the addition of the Chevron Oil station in front of the Village Store complex. On the subject site there has been an addition on the northwest area of the building. Whether this is a new building addition or an awning, we can't tell from this photograph. The same holds true for a small area in the southeast corner of the building. Comparing the 2009 image with the 2013 photo, it appears to be an actual extension to the building.

**2017** This last aerial photograph was flown four years later and is probably the best of the lot. The sharpness of detail is rivaled only by the Google® satellite image taken in 07/24/2017 and shows the area in great detail. The zoom feature on the computer screen allows the viewer to see even small areas in great detail. According to Ms. Trebon, the Tribal Archivist, the Swinomish Fish Processing Plant closes and ceases operations in 2016.

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

### **Certified Sanborn® Maps of the Area**

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 the 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. This information is no longer available without going to Lacey, Washington. We contacted Mr. Kevin Anderson about the presence of USTs at the site and he provided us with a report from Advanced Soil Mechanics which describes the decommissioning of two Underground Storage Tanks (USTs) in 1995. This will be

discussed later in this report. 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 Fish Processing Plant Facility is located at 11545 Moorage Way on the Swinomish Indian Reservation in LaConner, WA 98257. This EDR investigation produced a report document consisting of 184 pages. A shorter 54-page summary report was also produced and it is this report that is presented in the Appendix of this ESA I report. The full 184-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: 5390702.2**) from Environmental Data Resources Inc. (EDR) on August 13, 2018.

The EDR report, besides containing the names and addresses of sites on the data base, also contains two location maps centered on the subject site, in quarter-mile, 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, numbered to correspond to the listing:

### Standard Environmental Records

#### **Federal NPL site List**

#### **Search Distance**

- |    |  |                             |
|----|--|-----------------------------|
| 1) | National Priority List (NPL)                         | 1.0 mile                    |
| 2) | Proposed National Priority List sites (Proposed NPL) | 1.0 mile                    |
| 3) | NPL Liens  | <b>Target Property (TP)</b> |

#### **Federal Delisted NPL Site List**

- |    |   |          |
|----|---|----------|
| 4) | National Priority List Deletions (Delisted NPL) | 1.0 mile |
|----|---|----------|

#### **Federal CERCLIS List**

- |    |  |          |
|----|--|----------|
| 5) | Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) | 0.5 mile |
| 6) | Federal Facility Site Information Listing (Federal Facility)                                   | 1.0 mile |

#### **Federal CERCLIS NFRAP Site List**

- |    |   |          |
|----|---|----------|
| 7) | Comprehensive Environmental Response, Compensation, and Liability Information System, No Further Remedial Action Planned (CERC-NFRAP) | 0.5 mile |
| 8) | Corrective Action Report (CORRACTS)   | 1.0 mile |

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**Federal RCRA non-CORRACTS TSD Facilities List**

9) RCRA-Treatment, Storage and Disposal (RCRA-TSDF) 0.5 mile

**Federal RCRA Generators List**

10) RCRA-Larger Quantity Generators (RCRA-LQG) 0.25 mile

11) RCRA-Small Quantity Generators (RCRA-SQG) 0.25 mile

12) RCRA-Conditionally Exempt Small Quantity Generator (RCRA-CESQG) 0.25 mile

**Federal Institutional Controls / Engineering Controls Sites List**

13) Engineering Controls Sites List (US ENG CONTROLS) 0.5 mile

14) Sites with Institutional Controls (US INST CONTROL) 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) Leaking Underground Storage Tanks site List (LUST) 0.5 mile

20) Leaking Underground Storage Tanks on Indian Land (Indian LUST) 0.5 mile

**State and Tribal Registered Storage Tank Lists**

21)	Underground Storage Tank Database (UST)	0.25 mile
22)	Aboveground Storage Tank Locations (AST)	0.25 mile
23)	Underground Storage Tanks on Indian Land (Indian UST)	0.25 mile
24)	Underground Storage Tank Listing (FEMA UST)	0.25 mile

**State and Tribal Institutional Control / Engineering Control Registries**

25)	Institutional Control Site List (INST CONTROL)	0.5 mile
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**State and Tribal Voluntary Cleanup Sites**

26)	Voluntary Cleanup Priority Listing (Indian VCP)	0.5 mile
27)	Voluntary Cleanup Program Sites (VCP)	0.5 mile
28)	Independent Cleanup Reports (ICR)	0.5 mile

**State and Tribal Brownfields Sites**

29)	Brownfields Sites Listing (BROWNFIELDS)	0.5 mile
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**Additional Environmental Records**

**Local Brownfield Lists**

30)	A Listing of Brownfields Sites (US BROWNFIELDS)	0.5 mile
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**Local Lists of Landfill / Solid Waste Disposal Sites**

31)	Open Dump Inventory (ODI)	0.5 mile
32)	Debris Region 9	0.5 mile
33)	Solid Waste Recycling Facility List (SWRCY)	0.5 mile
34)	Solid Waste Tire Facilities (SWTIRE)	0.5 mile
35)	Report on the Status of Open Dumps on Indian Lands (INDIAN ODL)	0.5 mile

**Local Lists of Hazardous Waste / Contaminated Sites**

36)	Clandestine Drug Labs (US CDL)	TP
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37)	Facility / Identification System Listing (ALLSITES)	0.5 mile
38)	Confirmed & Contaminated Sites - No Further Action (CSCSL NFA)	0.5 mile
39)	Clandestine Drug Lab Contaminated Site List	TP
40)	Clandestine Drug Lab Contaminated Site List (HIST CDL)	TP
41)	National Clandestine Laboratory Register (US HIST CDL)	TP

#### Local Land Records

42)	CERCLA Lien Information (Liens 2)	TP
43)	Land Use Control Information System (LUCIS)	0.5 mile

#### Records of Emergency Release Reports

44)	Hazardous Materials Information Reporting System (HMIRS)	TP
45)	Reported Spills (SPILLS)	TP

#### Other Ascertainable Reports

46)	RCRA-Non Generators (RCRA-NonGen)	0.25 mile
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Note: TP = Target Property (Subject Site)

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## TARGET PROPERTY SEARCH RESULTS

### Database Search Results and Discussion

The subject site is the Fish Processing Plant located on the Swinomish Reservation on the west side of the Swinomish Channel. The Property Identification Number is: P20869. The subject site appears on four of the databases and they will be shown in the following lists abstracted from the **EDR Database**. There are currently no Underground Storage Tanks (USTs) on the subject site but there have been in the past nearby to the southwest in what is now a parking lot. The decommissioning of the USTs will be discussed following a discussion of the EDR Data Bases. The subject site was listed on four of the databases.

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## SUMMARY OF ALL SPECIFIC SITES WITHIN ONE MILE OF THE SUBJECT SITE AS THEY APPEAR ON THE EDR DATA BASE

**Federal CERCLIS NFRAP site list:** SEMS-ARCHIVE: A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 05/198/2018, has revealed that there is one SEMS-ARCHIVE site of this type within approximately 0.5 mile of the target property.

Map ID No.	Site Name and Address	Distance/Direction
<b>Lower Elevation</b>		
D21	Nasty Jack's Antiques @ 103 Morris St.	0.240 mi / NE

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**Federal RCRA generators list:** RCRA-SQG: A review of the RCRA-SQG list, as provided by EDR and dated 03/01/2018, 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
<b>Equal/Higher Elevation</b>		
A5	Swinomish Fisherman @ 11454 Moorage Way	0.007 mi / WSW

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**RCRA-CESQG:** RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA of 1976). A review of the RCRA-CESQG list as provided by EDR, and dated 03/01/2018 has revealed that there is 1 site within approximately 0.25 miles of the target property.

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Map ID No.	Site Name and Address	Distance/Direction
<b>Lower Elevation</b>		
D20	Nasty Jack's Antiques @ 103 Morris St.	0.240 mi / NE

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**State- and tribal - equivalent NPL:** HSL is a review of the HSL list is a subset of the CSCSL Report, as provided by EDR, and dated 02/21/2018 has revealed that there are 2 sites within approximately 1 mile of the target property.

Map ID No.	Site Name and Address	Distance/Direction
<b>Lower Elevation</b>		
D16	LaConner Landing IN @ 1 <sup>st</sup> & Morris	0.210 mi / NE
42	Zimmermans Shell @ 720 E Morris	0.563 mi / ENE

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**State- and Tribal- Equivalent CERCLIS:** A review of the CSCSL list, as provided by EDR, and dated 04/16/2018 has revealed that there are 3 sites within approximately 1 mile of the target property.

Map ID No.	Site Name and Address	Distance/Direction
<b>Equal/Higher Elevation</b>		
E26	LaConner Station @ 315 Morris St	0.304 mi / ENE
<b>Lower Elevation</b>		
D16	LaConner Landing IN @ 1 <sup>st</sup> & Morris	0.210 mi / NE
42	Zimmermans Shell @ 720 E Morris	0.563 mi / ENE

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**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
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**Equal/Higher Elevation**

34	Moore-Clark @ 813 2 <sup>nd</sup> Street	0.158 mi / SSE
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**Lower Elevation**

D16	LaConner Landing IN @ 1 <sup>st</sup> & Morris	0.210 mi / NE
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**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 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
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**Equal/Higher Elevation**

3	Village Store @ 17599 Front St.	0.034 mi / WNW
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**State and tribal registered storage tank lists:** The Underground Storage Tank database contains registered USTs. A review of the UST list as dated 05/01/2018 has revealed that there are 2 UST sites within approximately 0.25 miles of the target property.

**Equal/Higher Elevation**

19	Shelter Bay Tribal S @ 1000 Samish Place	0.224 mi / SW
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**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 05/10/2018 has revealed that there is 1 UST sites within approximately 0.25 miles of the target property.

Map ID No.	Site Name and Address	Distance/Direction
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**Equal/Higher Elevation**

3	Village Store Chevron Station @ 17599 Front St.	0.085 mi / WNW
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**State- and Tribal institutional control / engineering control registries INST Control:** Site that have institutional controls. A review of the INST CONTROL list, as provided by EDR, and dated 04/16/2018, 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
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**Lower Elevation**

D20	Nasty Jacks Antiques @ 103 E Morris	0.240 mi / NE
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**State and Tribal voluntary cleanup sites:** 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 04/16/2018 has revealed that there are 1 VCP site within approximately 0.5 miles of the target property.

<b>Map ID No.</b>	<b>Site Name and Address</b>	<b>Distance/Direction</b>
<b>Lower Elevation</b>		
D20	Nasty Jacks Antiques @ 103 E Morris	0.240 mi / NE

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**Independent Cleanup Reports:** A review of the ICR list dated 12/01/2002 has revealed that there are 2 ICR sites within approximately 0.5 miles of the target property.

D15	Olson Property @ 109 N 1 <sup>st</sup> Street	0.207 mi / NE
G31	Dunlap Towing @ 617 N 1 <sup>st</sup> Street	0.375 mi / NE

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### **Additional Environmental Records**

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

<b>Map ID No.</b>	<b>Site Name and Address</b>	<b>Distance/Direction</b>
<b><u>Equal/Higher Elevation</u></b>		
12	Swinomish Tribal ECO @ N48.45441, W122.51611	0.134 mi / ESE

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8	Front St. Site @ Front St. Swinomish	0.046 mi / N
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**Local Lists of Landfill / Solid Waste Disposal Sites:** IHS OPEN DUMPS is a listing of all open dumps dated 04/01/2014, which revealed that there are 3 IHS OPEN DUMPS sites within approximately 0.5 miles of the target property.

Map ID No.	Site Name and Address	Distance/Direction
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**Equal/Higher Elevation**

6	Swinomish - Front Street	0.033 mi / NW
23	Swinomish - Ball Fie	0.266 mi / NNW

**Lower Elevation**

2	Swinomish - Swinomish	0.000 mi
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**Local Lists of Hazardous waste / Contaminated Sites:** A review of the ALLSITES database as provided by EDR and dated 05/09/2018, has revealed that there are 26 sites within approximately 0.5 miles of the target property.

Map ID No.	Site Name and Address	Distance/Direction
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**Equal/Higher Elevation**

B10	Skagit Cnty Port LA @ 613 2 <sup>nd</sup> St	0.123 mi / E
C13	Moore-Clark @ 813 2 <sup>nd</sup> Street	0.158 mi / SSE
14	Verizon Wireless LA @ 1200 4 <sup>th</sup> St.	0.186 mi / E
19	Shelter Bay Tribal S @ 1000 Samish Place	0.224 mi / SW
22	New Bay Ltd @ 1117 Sherman St.	0.253 mi / S

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E25	Skagit County Public @ Rainbow Brg Swinomish	0.302 mi / ENE
E26	LaConner Station @ 315 Morris St.	0.304 mi / ENE
27	Pacific Ocean Seafood @ 1218 Conner Way	0.328 mi / SSW
33	Schenk Seafood Sales @ 1320 Connor Way	0.387 mi / SSW
H34	Peninsula Timber Log @ 397 181 W	0.413 mi / W
H35	Dunlap Towing @ 2702 Federal	0.413 mi / W
H36	Smith & Ardussi Inc. @ 1525 Downey Rd.	0.413 mi / W

### Lower Elevation

D16	LaConner Landing IN @ 1 <sup>st</sup> & Morris	0.210 mi / NE
17	Bayview Edison Indus @ 118 Caledonia St LA	0.216 mi / SSE
18	John Fischer DDS @ 102 S. 2nd	0.220 mi / ENE
D20	Nasty Jacks Antiques @ 103 E Morris	0.240 mi / NE
24	Les Kneeland Swinomish @ Private Dock Swinomish	0.266 mi / SSW
F28	LaConner School Dist @ Sixth St Box D	0.332 mi / NE
F29	No Name @ N 3rd Street	0.338 mi / NE
G30	Dunlap Towing @ 617 N 1 <sup>st</sup>	0.375 mi / NE
G32	Dunlap Towing @ 617 N 1 <sup>st</sup>	0.375 mi / NE
37	American Cyanmid Co @ E Talbot St. Hedlin F	0.416 mi / E
38	Skagit County Port of @ 539 N 3 <sup>rd</sup>	0.446 mi / NNE
I39	Temporary Carbbage Pr @	0.485 mi / NNE
I40	Action Marine Service @ N 3 <sup>rd</sup> Street	0.492 mi / NNE
I41	Dunlap Towing UST 51 @ 3 <sup>rd</sup> Street	0.496 mi / NNE

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**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 database provided by EDR and

dated 04/16/2018, has revealed that there are 3 CSCSL NFA sites of this type within approximately 0.5 miles of the target property.

Map ID No.	Site Name and Address	Distance/Direction
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**Equal/Higher Elevation**

34	Moore-Clark @ 813 2 <sup>nd</sup> Street	0.158 mi / SSE
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**Lower Elevation**

D20	Nasty Jacks Antiques @ 103 E Morris	0.240 mi / NE
G32	Dunlap Towing Co LA @ 617 N 1 <sup>st</sup>	0.375 mi / NE

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**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 03/01/2018, has revealed that there are 2 RCRA NonGen/NLR site within approximately 0.25 miles of the target property.

Map ID No.	Site Name and Address	Distance/Direction
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**Equal/Higher Elevation**

B9	Skagit County Port LA @ 613 N 2 <sup>nd</sup> St LA Conn	0.123 mi / E
C11	Moore-Clark @ 813 2 <sup>nd</sup> Street	0.124 mi / SE

**Indian Reservation:** A review of the Indian Reservation list, as provided by EDR and dated 12/31/2014, has revealed that there is one Indian Reservation site within approximately 0.000 miles of the target property.

Map ID No.	Site Name and Address	Distance/Direction
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**Equal/Higher Elevation**

0	Swinomish Reservation	0.000 mi
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**FINDS:** A review of the FINDS list dated 02/21/2018 has revealed that there are 2 FINDS site within approximately 0.000 miles of the target property.

Map ID No.	Site Name and Address	Distance/Direction
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**Equal/Higher Elevation**

A1	Swinomish Fish Company @ 11455 Moorage Way	0.000 mi
A3	Lone Tree Point Seafood @ 11455 Moorage Way	0.000 mi

**ECHO:** This database provides integrated compliance and enforcement information of about 800,000 regulated facilities nationwide. A review of the ECHO list dated 02/25/2018 has revealed there are 2 sites within 0.000 miles of the target property.

Map ID No.	Site Name and Address	Distance/Direction
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**Equal/Higher Elevation**

A1	Swinomish Fish Company @ 11455 Moorage Way	0.000 mi
A3	Lone Tree Point Seafood @ 11455 Moorage Way	0.000 mi

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**ASBESTOS:** A review of the Asbestos list and dated 03/13/2018 has revealed there is 1 site within 0.000 miles of the target property.

Map ID No.	Site Name and Address	Distance/Direction
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**Equal/Higher Elevation**

A4	Not Reported @ 11455 Moorage Way	0.000 mi
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**Manifest:** A review of the Manifest list, as provided by EDR and dated 12/31/2017, has revealed that there are 2 MANIFEST sites within approximately 0.25 miles of the target property.

Map ID No.	Site Name and Address	Distance/Direction
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**Lower Elevation**

17	Bayview Edison Industries @ 118 Caledonia St. LA	0.159 mi / SSE
D20	Nasty Jacks Antiques @ 103 E Morris	0.240 mi / NE

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

The subject site appears on the Federal, State and Tribal databases. Each will be discussed as follows:

- 1) **RCRA-SQG:** This stands for the **Resource Conservation and Recovery Act (RCRA)** of 1976 and the Hazardous and **Solid Waste Amendments (HSWA)** of

1984. The SQG stands for Small Quantity Generator meaning the site generates between 100 kg to 1,000 kg of hazardous waste per month.

- 2) **FINDS & ECHO:** The FINDS database stands for **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).

The ECHO database stands for **Enforcement & Compliance History Information**. ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

- 3) **ASBESTOS:** Indicates there is Asbestos on the site. Asbestos is associated with a boiler located outside and a containment building has already been built to contain it and the associated piping. The asbestos onsite is encapsulated and as long as it remains undisturbed is not considered an immediate threat to the environment.

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### Underground Storage Tanks at the Chevron Station

The Village Store located at 17599 Front Street, directly west of the subject site, is currently a Chevron Station dispensing gasoline and diesel from two separate pump Islands under a canopy. The petroleum product is contained in three underground storage tanks (USTs) at this site location. All three USTs were installed in May 2011. One UST contains regular gasoline, another premium gasoline and a third diesel fuel. All three tanks are monitored for leaks, and none have been reported. Even though the Chevron Station and USTs are only about 100 feet northwest of the Fish Processing Plant, we feel the risk of contamination to the soils and shallow ground water at the site is very low due to the Federal and State regulations on USTs.

## UST Decommissioning

On May 31, 1995 Advanced Soil Mechanics at 1392 McLean Road, Mount Vernon, Washington reported decommissioning two 8,000 gallon underground storage tanks (USTs) by removing the USTs from the area east of the Administrative Offices of the Swinomish Indian Tribal Community in LaConner, Washington and west of the present day **Waste Oil Recycling Facility**. The USTs contained diesel and gasoline and were probably installed in the 1960's. The decommissioning on May 31, 1995 is documented in a report by Advanced Soil Mechanics, formerly at 1392 McLean Road, Mount Vernon, Washington. According to their report a small amount of diesel fuel was discovered in one tank while the other containing gasoline was empty. There was no mention in their report of the third UST, a 4,000 gallon tank. Both decommissioned tanks were reported to be in good condition at the time of removal and soil samples were collected and delivered to Materials Testing and Consulting (MTC) for testing. The results tested for BTEX, TPH for Gasoline and diesel and were reported **Not Detected**. The entire report is found in the Appendix.

## Missing 4,000 Gallon UST

The current status of the 4,000 gallon UST is presently unknown. If the UST was present at the time of the decommissioning of the two 8,000 gallon USTs in 1995, why wasn't it removed at the same time? Was the 4,000 gallon tank actually an above-ground tank and had it been removed from the site before the decommissioning of the two USTs? Mr. Anderson is trying to determine exactly what happened to the missing tank and if it is still at the site, buried at some unknown location. Perhaps a sweep of the site using a technology such as ground penetrating radar could be used to determine whether a UST is still present. This type of technology is expensive and will require acquisition of funds to cover the costs.

## Swinomish Fish Processing Plant and Background Information

An excellent summary of the current Fish Processing Plant location and uses of the property over 70-plus years along with a time line of events has been prepared by the Tribal Archivist, Ms. Theresa Trebon, and summarized by Mr. Kevin Anderson. This information is found in the Appendix of this report. Ms. Trebon and Mr. Anderson state that:

*The recent history of the site begins shortly after dredging of the Swinomish Channel beginning in 1937 when the Swinomish Channel, then called the Swinomish Slough, was first dredged and the upland areas created from the dredged materials. During the period of World War II a small boatyard (Sagstad Shipyard) built small barges for the war effort near the site of the present Fishing Docks and Fish Plant.*

*In 1948, a small dock composed of boom logs and decking was built at the current Fish Dock location for the Tribal fishing fleet. By 1963 the construction of Skagit Shores Moorage, a Tribal enterprise, started with construction of a 300-foot bulkhead and pilings to hold finger floats. Skagit Shores Moorage was in operation starting in 1965 with slips dredged to 12 feet in depth and "fuel service for 50 vessels" provided in partnership with Union Oil. During these operations, two 8,000-gallon tanks and one 4,000-gallon tank were installed in the uplands adjacent to the current fishing Docks. Commercial marina operations lasted until the early 1970s when the fuel service ended and the focus of the docks shifted to commercial fishing operations. The two 8,000 gallon USTs were removed on May 31, 1995 from the former marina area.*

*At the site of the current Tribal fishing fleet docks, there was a commercial dock, transient moorage for fishing vessels offloading at the fish plant, and a dock for Tribal moorage. At the site previous activities included processing of seafood, vessel maintenance, marine fueling, hatchery operations, cold storage, and retail sales of seafood and a restaurant.*

*The tribe started to develop a fish packing and marketing facility in 1970 and the facility grew from that, going through several periods of closures and restarts and expansions through the years.*

Please refer to the Swinomish Fish Processing Plant Background Information in the Appendix of this report, prepared by Theresa Trebon the Tribal Archivist and summarized by Kevin Anderson, dated 8/20/2018.

## SITE VISIT OBSERVATIONS

### Background Information

**NWHGC** made a visit to the subject site on Monday, August 27, 2018. The subject site is located at 11545 Moorage Way, LaConner, WA 98257 and lies adjacent to the Swinomish Channel. As mentioned before the Fish Processing Plant is a large complex which has been added to at various times until it now occupies an area of approximately 2.3 acres of land, including the dock that extends out into the Swinomish Channel. This facility is no longer open for commercial fish processing, but operates to provide limited runs of product for Tribal members.

The **NWHGC** geologist was accompanied for this investigation by Mr. Kevin Anderson and Mr. Ken Henderson, Facilities Manager, Swinomish Enterprises. Mr. Henderson has a thorough knowledge and understanding of the plant's operations from its earlier times down to the present.

**NWHGC** arrived here at the fish processing plant at around 9:15 AM. We drove around the perimeter of the building complex before meeting with Kevin Anderson and Ken Henderson. The building is very large, occupying an area including the dock on the east side of approximately 2.3 acres of land. Next to the Swinomish Channel were a large number of stacked crab pots. Around the Fish Plant dock are a number of boats tied up, with more crab pots.

The Fish Processing Plant roof is semi-flat but since the additions to the plant were made at different times the roof designs vary. Part of it is gabled, particularly on the south end. At the north end of the plant a man was observed washing out large blue plastic containers using what appears to be a steam cleaner. North of the Fish Processing Plant is a large warehouse-type building known as the Net Building. Here we saw a man repairing a large

fishing net. At the northwest corner of the Fish Plant is a fenced off backup power supply in case of a power failure so the refrigeration equipment will still continue to function.

The past use of the facility is outlined in a brief report prepared by Ms. Theresa Trebon, Tribal Archivist and summarized by Mr. Anderson. Ms. Trebon is the historian of the Tribe. She reports that the channel was dredged again to widen it in 1965, to provide better access to the channel for large boats. As a result of that dredging Union Oil installed two 8000-gallon USTs and one 4000-gallon UST adjacent to the docks. These fuel sources were installed to fuel boats bring fish product to the new fish processing plant. On May 31 1995 the two 8000-gallon tanks were decommissioned by removal. That still leaves a question about the 4000-gallon UST; it appears it may be still on the site from the information we currently have. It may be that the 4,000 gallon tank was an above- ground storage tank but we just don't know. The fish processing plant ceased operations in 2016, although part of the operation is still ongoing, processing small amounts of fish for Tribal members.

### **Highlights of Fish Plant Interior**

The Fish Processing Plant is a large building divided into many areas. These separate areas are the results of the many closures and restarts of the Fish Plant under new management until final closure in 2016. Often parts of the Fish Processing Plant Building were added onto, reflecting new needs of the fish plant. The reader should refer to the excellent time line of the Fish Processing Plant as compiled by Ms. Theresa Trebon, Tribal Archivist and summarized for this report by Mr. Kevin Anderson. Those summery documents are found in the Appendix of this report. Mr. Henderson says about 150 people were employed here at the height of the operation and I can certainly believe that. There were a lot of things getting done here.

Mr. Anderson, Mr. Henderson and myself entered the Fish Processing Plant complex through an east-facing doorway which leads into the break room. This room contains tables, chairs and a copy machine. On the other side is another microwave. The floor is composed of poured concrete painted green. One common sight in this room as in all the rooms visited is that all electrical cables are in cased in conduit and affixed to walls and ceilings. We saw nothing in our observations that would appear to be an electrical hazard.

The break room also contains large soft drink, candy and chips dispensing machines mounted next to the wall.

Adjacent to the break room are offices one, of which one was occupied at the time of our visit. The floor in the office areas is covered in industrial-grade carpeting. Walls are drywall painted with white latex. Fluorescent fixtures are mounted in the ceiling. One of the offices is occupied; the gentleman is hard at work in here. This office contains the same kind of carpeting and, again, white drywall.

Nearby there are bathrooms and shelves for storage along the wall. The floor area is covered in a non-asbestos floor tile. The drop ceiling contains fiberglass insulation, and mounted in the ceiling are fluorescent lighting fixtures. On the plywood wall is a large electrical panel, and all electrical wiring is contained in conduit. Ken Henderson is very knowledgeable in the workings of the Fish Processing Plant and had this to say:

### **Ken Henderson**

*This area used to be the fish egg (caviar) processing area. This first room outside the break room door is the raw egg rubbing area. On the other side of the yellow post is the area where they package the product into buckets or run it through a vacuum backflush. This was for salmon eggs exclusively. Right next to the vacuum backflush machine is an egg cooling and drying area, as they come out of the salt brine when they're cooked. They go into that drying room to dry to a certain specification, and then they are taken out and packaged.*

*Adjacent to the egg processing area is chemical storage, where we have Sanite 75 as a sanitizer and foamer, a chlorinated product FMR 3-C. They spray the foamer, and let it set. It attacks proteins. We rinse it off and then spray it down with Sanite to sanitize it.*

<p style="text-align: center;"><b>SANITE 75 LC</b> <b>Disinfectant – Sanitizer – Virucide</b></p>
<p style="text-align: center;">Sold by WESMAR CO, Inc. 5720 205<sup>th</sup> Street SW • Lynnwood, WA 98036</p>

Made in USA  
EPA Reg Number 10324-81-10428 EPA Est # 10428-WA-3

*We've got hand-dipped chemicals here, soap dispensers, we have Pittsburgh Paints Savrite BWT 220 W, oxygen scavenger and alkalinity booster for water.*

*This is no longer in use; it was decommissioned several years ago. We couldn't use it for commercial production because it's not going to be sanitary enough to be produced and then put into the can.*

*Adjacent to the egg-processing area is the shop area. The shop consists of a lathe, a hydraulic press, hand tools, electrical tools and the majority of the electrical components we use in maintenance and otherwise needed. There is a drill press and a sand-blasting cabinet.*

*The floor is bare poured concrete. The ceiling is drywall, unpainted, with suspended fluorescent fixtures. All but one of the fluorescent fixtures is working at this time. This is very busy shop area, with lots of tools and parts. The sand blaster here is still in operation.*

**NWHGC Observation:** It should be noted here that the shop area was the only place in the entire building that appeared messy. The rest of the building inspected looked clean and well maintained. The rest of the building has the appearance that it could resume full operations within a very short period of time.

The finished cooked egg room has a concrete floor and drywall again. The ceiling is wood and the same suspended fluorescent fixtures as before. From there we moved into a cavernous room that is empty as far as any fish processing is concerned. I observed a hydraulic high lift parked next to the wall. There were folding tables with boxes stacked on them. Shelves along one wall and cleaning equipment such as buckets and mops. Another shelf contains gallon plastic jugs containing labeled Activator P-35 FG. Another set of one-gallon jugs is labeled disinfectant and another shelf of hand sanitizer. Next to this shelf is a cabinet with doors and inside are 5-gallon plastic jugs of a liquid labeled UN-3266 and in large capital letters CORROSIVE plainly marked. It is used as a cooling water treatment. To the right of the cabinet is a wooden shelf containing one-gallon cans of paint.

The cans all had tops in place; some had obviously been opened and resealed. In the same offset room were stacks of 5-gallon unused plastic containers.

The floor was poured concrete and free of cracks. Part of the ceiling was supported by large I-beams held up by steel posts painted yellow. Lighting in the room is provided by fluorescent fixtures mounted in the ceiling. A sign suspended from the ceiling reads: Finish Department Entrance.

Next we moved into the employee work preparation area. Here as the name implies is where the employees prepared for the work day. There are hangers on the wall for plastic aprons. Along the opposite wall is an area for hand washing and before leaving the room a foot dip. In a separate room a large water heater is against the wall, and there is a hand washing area and foot dip. Lighting is provided by fluorescent fixtures mounted in the ceiling.

We exit the employee work preparation room into a large room where salmon is canned. The room is a big area with four large machines driven by electric motors.. The ceiling is constructed of corrugated aluminum. Supporting the ceiling are metal posts as seen in the large open area described before. The large area is well-lit by fluorescent fixtures mounted in the ceiling. The floor is poured concrete with channels cut in the floor and with grates to allow surface water to flow into and out of the room. The use of this room is further explained by Mr. Henderson:

### **Ken Henderson**

*The fish come off the pot and go into totes, then onto a tote dumper and are taken onto a conveyor that moves them into the eviscerating room. This room takes the head and offal (guts) out. This is captured on a dewatering conveyor and put into a tote. The totes of offal are taken by **Ilwaco Fish Company** to a rendering plant, so the fish come into the cannery and are distributed to whichever line is running at the time of production.*

Jessie's Ilwaco Fish Company 117 Howerton Way SE • Ilwaco, WA 98634 360.642-3773
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*The line in front of us right now is the one-pound line and consists of the 1938 model cutter, filleting machine, can washer, weighing machine and patch table where if the cans are light the personnel will add the correct amount of product to the can to make it up to the correct weight. After that the cans run into a curler clincher that puts the lid on the can and then into a vacuum chamber steamer where the atmosphere is extracted from the can, the lid is hermetically sealed onto the can and a vacuum is applied in the can, using about 12 inches of vacuum. Out of the steamer they go into a mechanical conveyor and through a can track through the wall into the retorting area of the loading table. The baskets are loaded and pushed into the retort and given a thermal process, depending upon the size and diameter of the content and the product contained within.*

**NWHGC Observation:** The room next to the large room just described by Mr. Henderson is the pressure retort area. There are six very large pressure vessels in here. These are large and horizontally mounted, approximately four feet in diameter and about 35 feet long. Mr. Henderson explains the operation:

### **Ken Henderson**

*There are process controls constructed throughout to control the steam pressure and extreme temperature. It's a thermal process applied to the product. A boiler on the other side of the wall generates the steam; you can see the header coming through here.*

*The greenish-grey ones are reed boiler works made in Bellingham. These are canal boiler works. They all have national board numbers on them so they are not insurable.*

*Pressure-relief valves are set at 15 psi; they will lift and relieve pressure at 15 psi. The temperature we cook at is 240° F; that equates to about 12.5 psi when it's cooking.*

*Stacking or pelletizing: the cans come out of the retort hot and are stored in this cooling room until the temperature drops to 130° F or below. If the cans*

*are stacked when they're at 130° the cans in the middle will retain heat and develop a "scorched" flavor.*

**NWHGC Observation:** The floors are all poured concrete and in excellent condition. Cracks are few and pose no structural problem. Walls in this particular area are aluminum attached to steel trusses and the ceiling has wooden cross-members to which the roof is attached.

This is the shipping and receiving room. The floor is concrete and the ceiling is aluminum panels. Walls are covered with that polymax sheeting: plastic poly film sealed by plastic rivets. The dividers here are plastic that keep bacteria from migrating from outside the walls to the backside of the wall. I imagine bacteria could be the major consideration here.

Ken has turned on the lights to the smokehouse area. This is for smoking the salmon. This area is finished product storage. The QC room has the same type of polymax lining as noted earlier. Fluorescent lighting and electrical panels are on the wall, with all electric service protected by conduit. The floor is grey epoxy concrete, and there is a sink area here. It's a pretty clean room.

This is a dehumidifier or cooling room. There is a bank of three fans mounted in the ceiling, one fan on every side. Those are heaters and this is the evaporator for the refrigeration system. The small cooler is used to try to get the product down to about 34°, which is pretty cool. Mr. Henderson describes the area as:

### **Ken Henderson**

*The construction of the cooler here is a sheeted foamed insulating panel that is four inches thick. Walls and ceilings both have that type of insulating material, and the floors are concrete painted with epoxy paint. We try to keep the room at 38° during processing to keep the bacteria life down. We have a fan that pulls in outside air through a HEPA filter to pressurize the room so that no outside bacteria can get in. It's pushing everything out rather than pulling anything in.*

*That is a roll stock machine. It vacuum forms the plastic to the size of the container that you've set it for. Place product inside the pocket index up to a vacuum chamber that pulls the atmosphere out of the package and heat seals it.*

**NWHGC Observation:** We move into the area where smoked salmon is prepared. The smoke is created from sawdust trucked in from Seattle. There are two burners which create the smoke from the sawdust which goes into the smoker units. The sawdust is made only from alder lumber during the cutting process.

We're standing in the low-risk area for bacteria here; the high-risk area is on the other side of a doorway which we stepped through. The door has to be kept closed at all times.

In the main breaker room there are six large breaker panels mounted on the wall: four 440v panels, one 220v panel, one 110v panel. The conduit is either PVC or aluminum. Aluminum panels form the interior of the ceiling area. There is conduit on the walls and ceiling. We also have an overhead door which leads to a loading dock and another one going downgradient to an exterior slab.

The salmon egg screen washing room is a smaller area for wash screens. It has a concrete floor, the same kind of siding as we've already seen, and fluorescent lighting.

The big doorway here has a sliding door to the left, which is the product receiving area. Mr. Henderson explains:

### **Ken Henderson**

*This area right here is a crab holding pen. Beneath the wooden deck is a 20,000-gallon reservoir that we circulate through the crab totes. The crabs consume the water and generate waste; the feces go back into the water, where the bacteria in the water consume the feces and the crabs consume the bacteria.*

I asked Mr. Henderson about where the wastewater goes, and he said.

*There is no wastewater created here. It's all contained in the pit. As long as the pumps are running, the water will not go stagnant because it's constantly circulating and pulling oxygen into the water. We also have a sweet water bubbler or air blower on top where we take the crab totes and stack them three high. Each one of those hoses over there represents either water or air. We put a water and an air hose in a tote. We bubble the water to keep it oxygenated, and we keep the water at 38°F. This keeps the crabs less active so they don't consume each other.*

*This large room is divided into two areas: receiving is the room where we came in. It's a pretty good-sized room. This area used to be a fillet line. The machine is still here.*

I'm not sure which direction we're facing here or anywhere! We walk into the primary processing room, which is a large area. That's a blast freezer over there, and right now we have got a lot of machinery: heading machinery, eviscerating machines, offal removal conveyors, trim tables, where the product is trimmed to the buyer's specifications, a fish screening machine and a small fillet machine, and a couple of vacuum seal machines.

I asked what happens to the waste material?

*It's captured from the machines onto a dewatering conveyor; the water is filtered out through the gaps in the conveyor. The offal that falls into the conveyor goes into a tote taken to the end of the bay where a company called Ilwaco Fish (as noted before) collects the offal and takes it for rendering.*

The freezing chamber is divided into two halves. The first half is a two-sided freezer divided in the middle.

*If you only have a few fish you can use one freezer system. It's one plastic freezer divided into two chambers. The purpose of that two-chamber system is that if there is only a small amount, the whole system doesn't have to engage.*

**NWHGC Observation:** We are in the main freezer holding cooler now. There are six fans blowing extremely cold air in this room. The walls have that same polymax plastic covering. The main floor is poured concrete. Around the perimeter on all four sides is a drain to capture any materials that they want to get rid of. Then the materials go to a central drain where it's cleaned and captured with the waste water wire screens. Taking a photo from the ground floor up to the second story, where the ice machine is located. There is a chain across the doorway to keep people from falling down.

Outside now, we are looking at three large holding freezers. These are like semi-trailer loads: Gross Weight is listed as 30,480 kg or 67,280 lbs. The large wood-frame warehouse building on the north side is not part of this operation. It's a net shed and there was a man fixing nets as we drove by.

### **Ken Henderson**

*All the process water from the cannery to the far west wall – all this process water comes to a sump outside. From that sump the process water is pumped up into a wedge wire screener with 30-thousandths gap between the wedge wires.*

*The offal from the wedge wires drops into a tote. The water that filters through the wedge wires goes into the 30,000-gallon storage tank. And the waste water is slowly restricted and fed back to the city water treatment facility.*

*This is the Iron Fish Butcher machine, or eviscerating room. The fish come in from outside. The conveyor goes to this huge tank. They come out of the tank onto a double drop table that feeds an indexer. The indexer indexes the fish into the proper position to have the heads cut off at the same place each time for every fish. The fish then come out of the indexer into the bull wheel. The vent is taken out of the fish; the pectoral and dorsal fins are removed too. The belly remains closed. After the fish goes through the bull wheel they come out onto an egg extractor table. If there is milt, they let that fish go. If they see eggs in the fish, they grasp the fish, pull the eggs out, and drop them onto a chute where they are sorted, graded and taken off to be processed. After that they come off the egg extraction table, they go onto*

*another contraption conveyor that feeds a smaller hopper. The hopper feeds the eviscerating machine on that other side of the wall. And on the other side of the wall we have a Pisces eviscerating machine. The eviscerating machine removes the guts from the fish, along with the kidneys and any membrane they may have left in the fish. They then drop onto an inspection table where any remaining unwanted parts of the fish are removed. They then come off the table into a tote and are either taken directly to the cooler or are dropped into a tote and taken into the cannery and distributed onto whichever line is in operation at that time.*

*Once again, inside this room the walls are corrugated polymax. Floors are concrete. The offal that comes out these eviscerating machines is captured by a dewatering conveyor and captured in a tote to be removed by Ilwaco Fish Company at the end of the day.*

The floor here, like all in this plant, is poured concrete. Drainage capture is approximately in the middle of this room.

*This eviscerating area and above the entire cannery is what we call the CAN LOFT. And containers are set onto a conveyance system that brings them down to whichever line is running at the time. So we have container storage and dry boxing storage up there and some electric motor storage up there as well.*

## **NWHGC Comment on Completion of Our Tour of the Fish Plant**

The tour of the Fish Processing Plant was very interesting and without Mr. Henderson's explanations I would have been lost. With his help we did see the entire operation and his explanations of how everything worked were most helpful.

I was surprised that the plant did not have a "fishy" smell at all. My overall impression of the plant was that it was clean and well maintained. I did see Hazardous Materials in the form of paints, and material kept in plastic containers that were capped or sealed, having not been opened. The more dangerous hazardous materials were all clearly marked and

the 5-gallon containers were kept in a separate container. We observed no Hazardous Wastes during our inspection tour.

We did not observe any asbestos during our tour. Asbestos is usually involved in and around furnaces where pipes, steam pipes are wrapped with asbestos. This is not a problem if sealed and not disturbed.

### **Vapor Intrusion**

Vapor intrusion occurs when vapor-forming chemicals migrate from any subsurface source into an overlying structure. The large Fish Processing Plant Building is slab-on-grade construction and there is little risk of vapor intrusion from under or outside the building. The site is built on Glacial Till, a very non-porous sedimentary material. As discussed before, two 8,000-gallon Underground Storage Tanks (USTs) were located approximately 80 feet southwest of the Fish Processing Plant Building; these were decommissioned on May 31, 1995 by Advanced Soil Mechanics of Mount Vernon, WA. The risk of vapors from this site are remote. We don't believe there is any risk to the subject site from vapor intrusion.

## **CONCLUSIONS**

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

- The Swinomish Fish Plant is located at 11545 Moorage Way and is situated on the west bank approximately 100 feet from the Swinomish Channel, a waterway that connects with Skagit Bay on the south and Padilla Bay on the north. The Fish Processing Plant has a Parcel Number of P20869. The facility is a slightly rectangular in shape with the long axis measuring approximately 250 feet in a northeast-southwest direction and the short width measuring approximately 180 feet

in a northwest to southeast direction. In the past the area was used to construct barges during the Second World War years and had a sawmill operation in 1947. In 1965 Union Oil opened a marine fuel service from a fuel dock and two 8,000 gallon one for gasoline and the other for diesel underground storage tanks (USTs) were installed along with one 4,000 gallon tank. In 1970 a wholesale seafood processing and market was built on the site. From there the site expanded, adding new additions until the present time.

- The Fish Processing Plant is single story slab-on-grade construction with upper levels built in the interior. The structural materials have varied over the years from woodframe to steel girders. Also, aluminum siding is mostly on the exterior but this varies too. Various areas are internally isolated to preserve the necessity to maintain a sterile environment necessary for fish processing. We observed many of the interior walls are covered with polymax plastic covering, particularly where sterile conditions had to be maintained.
- There is little risk of vapor intrusion from outside the building in the form of petroleum hydrocarbons, as the nearest site is the Chevron Station located adjacent to the building. The Chevron has leak detection devices installed on the USTs as well as on the distribution lines to the two pump islands.
- 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 184-page report and a Summary Radius Report of 54 pages. The subject site was listed on four of the EDR databases. They are:  
**1) Indian Reservation: 2) FINDS: 3) ECHO: 4) ASBESTOS:**
- The **Indian Reservation** database simply indicates it is located on an Indian Reservation. The **FINDS** database stands for Facility Index System and contains information and 'pointers' to other sources that contain more detail. The **ECHO** database stands for **Enforcement & Compliance History Information** and provides integrated compliance and enforcement information. Perhaps the most important is the **ASBESTOS** database which indicates there is Asbestos on the site. Asbestos is primarily associated with boilers and piping. Asbestos is not a problem

as long as the piping it encapsulates remains undisturbed. If in the future it is desirable to remove the asbestos, special care must be implemented to keep any asbestos fibers from escaping the area where it is found.

- There are no known Underground Storage 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 has three USTs on site and all three have early leak detection devices installed as well as piping to the two pump islands.
- Two 8,000-gallon USTs were decommissioned on May 31, 1995 by Advanced Soil Mechanics of Mount Vernon, WA (no longer in business). Soil samples taken from the pit showed no contamination. There was no mention of the 4,000-gallon UST assumed to still be somewhere at the site.
- A visit to the site was accomplished on Monday, August 27, 2018 by the **NWHGC** geologist and accompanied by Mr. Kevin Anderson, Environmental Specialist with the Swinomish Tribe and Mr. Ken Henderson, Facilities Manager, Swinomish Enterprises. Mr. Henderson has a wide range of knowledge of the site from when it was in operation down to the present. Mr. Henderson acted as our tour guide through the Fish Processing Plant and answered all of our questions concerning the site.
- 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 not find any evidence of hazardous materials or hazardous wastes on the site. Waste generated when the Fish Processing Plant was in operation was handled responsibly and nothing was discharged into the environment. Asbestos could be a problem onsite if not handled properly. We expected to detect a “fishy” smell inside the Fish Processing Plant but there was none known. The Plant was well maintained.
- We have performed this Phase I Environmental Site Assessment investigation in conformance with the scope and limitations of ASTM Practice E1527-13 and AAI Rules for the subject site.

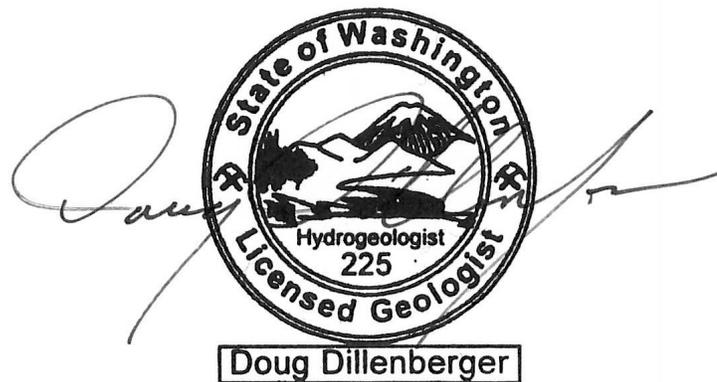
## RECOMMENDATIONS

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.

- We believe the status of the missing 4,000-gallon tank should be pursued. The status of the tank could most likely be determined if present underground using ground penetrating radar technology. If the tank was actually above ground, a record search in the Swinomish Indian files may show that the tank was previously removed from the site. An Addendum Letter will follow this report once results are received.

Please call me 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

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