

STATE OF WASHINGTON DEPARTMENT OF ECOLOGY PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

September 17, 2009

Mr. Warren Snyder, P.E. Environmental Engineering Rayonier Forest Resources LP P.O. Box 728 Fernandina Beach, FL 32035

Re: Further Action at a Property associated with a Site:

- Property Address: Front Street, Sekiu
- Facility/Site No.: 43461183
- VCP Project No.: SW1034

Dear Mr. Snyder:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of a Property associated with the Olson's Resort/Former Rayonier Sekiu Log Sorting Yard facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

Issues Presented and Opinion

1. Is further remedial action necessary at the Property to clean up contamination associated with the Site?

YES. Ecology has determined that further remedial action is necessary at the Property to clean up contamination associated with the Site.

2. Is further remedial action also necessary elsewhere at the Site?

YES. Ecology has determined that further remedial action is also necessary elsewhere at the Site.

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided below.

Description of the Property and the Site

This opinion applies only to the Property and the Site described below. This opinion does not apply to any other sites that may affect the Property. Any such sites, if known, are identified separately below.

1. Description of the Property.

The Property includes the following tax parcel in Clallam County, which was affected by the Site and addressed by your cleanup:

• 123219-210150-0000.

The Property does not include the following right-of-way easement, which is located on that parcel:

• Front Street.

Enclosure A includes a legal description of the Property. **Enclosure B** includes a diagram of the Site that illustrates the location of the Property within the Site.

2. Description of the Site.

The Site is defined by the nature and extent of contamination associated with the following releases:

• Petroleum hydrocarbons and associated constituents into the Soil, and Ground Water.

Those releases have affected more than one parcel of real property, including the parcel identified above.

Enclosure B includes a detailed description and diagram of the Site, as currently known to Ecology.

3. Identification of Other Sites that may affect the Property.

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the Property is affected by other sites.

Basis for the Opinion

This opinion is based on the information contained in the following documents:

1. GeoEngineers, Inc., <u>Focused Remedial Investigation, Former Sekiu Log Sorting</u> Yard, <u>Sekiu, Washington</u>, August 19, 2009.

Those documents are kept in the Central Files of the Southwest Regional Office of Ecology (SWRO) for review by appointment only. You can make an appointment by calling the SWRO resource contact at (360) 407-6365.

This opinion is void if any of the information contained in those documents is materially false or misleading.

Analysis of the Cleanup

Ecology has concluded that **further remedial action** is necessary at the Property to clean up contamination associated with the Site. That conclusion is based on the following analysis:

1. Characterization of the Site.

Ecology has determined your characterization of the Site is sufficient to establish cleanup standards for the Site and select a cleanup for the Property. The Site is described above and in **Enclosure B**.

This Property was formerly owned by Rayonier Western Forest Resources (Rayonier) and was used from the early 1900s through the early 1970s as a log sorting and transfer yard. During this time, locomotives were maintained and fueled at the subject Property. Facilities at the Site included Bunker C fuel storage tanks and associated piping, as well as a boiler facility. In October 2007, Rayonier completed a limited soil cleanup in the northeastern portion of the Property. In March 2008, Rayonier completed 15 direct-push borings and obtained soil- and ground-water samples. The approximate locations of the borings are shown in Figure 2. Total petroleum hydrocarbons (TPH) as Bunker C range heavy oil constituents above the MTCA Method A cleanup level was determined to be present in a soil sample collected at approximately 15 to 16 feet below ground surface (ft bgs). Polynuclear aromatic hydrocarbons (PAHs) were detected above the MTCA Method A cleanup level at approximately 12 to 13 ft bgs. A grab ground-water sample collected from the same borehole detected TPH above the Method A ground-water cleanup level.

> Subsequently, GeoEngineers, Inc. (GeoEngineers) sampled soil from 20 test pits and 11 direct-push boring explorations. Selected borings were completed as monitoring wells (10 total), and ground water was sampled from these monitoring wells. Sediment was sampled at four locations in Clallam Bay just off the shoreline of the Property.

> Subsurface conditions encountered at the Site consisted of unconsolidated gravel and silt ranging from ground surface to approximately 11 to 18 ft bgs. Beneath the silt and gravel was a dense, consolidated silt, sand, gravel unit of varying grain-size that was interpreted to be glacial till. Depths to ground water ranged from approximately 4 to 16 ft bgs. Ground-water flow is to the east, toward Clallam Bay.

Bunker C was detected at concentrations greater than the preliminary cleanup level based on unrestricted land use in soil samples obtained from 11 explorations located in the northeastern portion of the Property. PAHs were detected at concentrations greater than the preliminary cleanup levels in soil samples obtained at three of these explorations. The investigations determined the presence of non-aqueous phase liquids (NAPL) in an approximately 2 to 3 ft zone above a sand/gravel and till contact. However, the data do not indicate the presence of mobile free product, nor did contamination penetrate the till layer. Bunker C was detected at concentrations greater than the preliminary cleanup level in one monitoring well (MW-1) located in the northeastern portion of the Property during the October 2008 and February 2009. ground-water sampling events. PAHs were not detected in ground water above the MTCA Method A cleanup level. However, the method reporting limit for benzo(a)pyrene was greater than the most stringent surface-water criteria. Bunker C was detected in three sediment samples at two locations. Although GeoEngineers could not compare the sample results to any TPH cleanup criteria for sediments, Ecology has determined that a screening level of 100 milligrams per kilogram (mg/kg) that has been used at other cleanup sites can be applied at this Site. No sediment sample exceeded this screening level.

The lateral and vertical extent of the Bunker C contamination was determined in each direction except to the north. Delineation to the north onto the adjacent property was not completed because property access was denied by the owner. Figure 6 shows the extent of contamination as determined by the Focused Remedial Investigation.

2. Establishment of cleanup standards for the Site.

Ecology has determined the cleanup levels and points of compliance you established for the Site do not meet the substantive requirements of MTCA.

Based on current and likely future zoning and Property use, preliminary soil cleanup levels were developed based on unrestricted land use. Therefore, preliminary cleanup levels were developed using MTCA Method A for Bunker C-range petroleum hydrocarbons, and MTCA Method B cleanup levels for non-carcinogenic PAHs and carcinogenic PAHs. GeoEngineers has suggested that during the evaluation of remedial alternatives, cleanup levels, and/or risk-based remediation levels for specific land uses and associated institutional controls may be considered as a component of cleanup alternative development and evaluation.

Based on the proximity of the Property to surface water, and because ground water may be assumed unsuitable for use as drinking water, MTCA Method B soil cleanup levels developed for protection of surface water using the MTCA fixed-parameter three-phase partitioning model calculations were considered. However, because only low levels of non-carcinogenic PAHs have been detected in ground water at the Property, the three-phase partitioning calculations were not completed at the time. Carcinogenic PAHs were evaluated using the total toxic equivalency factor (TEF) method as outlined in WAC 173-340-708(8)(e).

Evaluation of the terrestrial ecological evaluation (TEE) criteria was conducted pursuant to WAC 173-340-7490. It was determined that the Site would not qualify for an exclusion. However, the Site could be evaluated using the simplified TEE approach. Because Bunker C is not a listed constituent in Table 749-1, diesel-range petroleum hydrocarbons and benzo(a)pyrene were used as surrogates for Bunker C for the TEE screening levels.

It is stated in the Focused Remedial Investigation that a comparison of soil analytical results to site-specific residual saturation calculations will be discussed and considered in a future feasibility study for the subject Property.

GeoEngineers states that ground water at, or potentially affected by, the Property is not used for drinking water at the present time, and is not a reasonable future source of drinking water due to the availability of a municipal water supply and, in accordance with WAC 173-340-720(2)(d), due to its proximity to marine surface water.

> However, the WAC also states that Ecology may allow ground water to be classified as nonpotable for the "purposes of this section if each of the following conditions can be demonstrated":

- The ground water does not serve as a current source of drinking water.
- Ecology determines it is unlikely that hazardous substances will be transported from the contaminated ground water to ground water that is a current, or potential future source of drinking water at concentrations which exceed ground-water quality criteria published in chapter 173-200 WAC.
- There are known or projected points of entry of ground water into the surface water.
- The surface water is not classified as a suitable domestic water supply source under chapter 173-201A WAC.
- The ground water is sufficiently hydraulically connected to the surface water that the ground water is not practicable to use as a drinking-water source.

Preliminary soil and ground-water cleanup levels were selected based on human health risk. Surface-water criteria were not available for gasoline-, diesel-, and oilrange (Bunker C) petroleum hydrocarbons. Therefore, as recommended in WAC 173-340-730(3)(b)(iii)(C), GeoEngineers used MTCA Method A ground-water cleanup levels for comparison.

In addition, Sediment Quality Standard (SQS) and Cleanup Screening Level (CSL) criteria established under the Sediment Management Standards (SMS) [WAC 173-204] were used as preliminary cleanup standards for the Property. GeoEngineers reiterated that no cleanup levels had been established for petroleum hydrocarbons. However, as stated above, Ecology believes that 100 mg/kg can be applied for TPH in the sediments at this Site.

Before GeoEngineers can establish surface-water cleanup standards, they will need to establish that the ground water is nonpotable because of its proximity to nonpotable marine waters according to the criteria stated above. Ecology would suggest that transducers be incorporated to determine tidal effects on the various

> monitoring wells located on Site. In addition, ground-water samples will need to be taken for water quality constituents to determine the quality of ground water at the Site. Once the ground water has been established as nonpotable, it may be determined that the next most beneficial use is protection of surface water. Surfacewater cleanup levels may need to be determined based on human health consumption of organisms or protection of saltwater organisms, whichever is most stringent.

3. Selection of cleanup for the Property.

Ecology has determined the cleanup you selected for the Property does not meet the substantive requirements of MTCA.

No feasibility study has been conducted yet and no cleanup has been proposed.

Because contamination possibly remains in the ground water and in the soils on an adjacent property (Van Riper's Recreational Vehicle Park) that could be considered part of the Site, the cleanup standards should apply throughout the Site as a whole. However, the feasibility study need only address the contamination on the Property. Should it be determined that an off-Property conditional point of compliance for ground water is necessary, a Site-wide feasibility study will be necessary. If a permanent cleanup action cannot be implemented, a disproportionate cost analysis shall be applied. The analysis shall compare costs and benefits of the cleanup action alternatives evaluated in the feasibility study. The costs and benefits to be compared and the disproportionate cost analysis are described in MTCA WAC 173-340-360(3)(e) and (f). It may also be necessary to determine whether a cleanup action provides for a reasonable restoration time frame as described in WAC 173-340-360(4).

The scope of the feasibility study is Site-specific and depends on:

- 1. The specific characteristics of the Site.
- 2. The cleanup alternatives you evaluate.
- 3. Whether you want to establish a conditional point of compliance.
- 4. Whether you want to select a non-permanent cleanup alternative.

However, you only need to select a cleanup for the Property, not the Site as a whole. As a part of the study, though, you must demonstrate that the cleanup you select for the Property does not exacerbate conditions or preclude reasonable cleanup alternatives elsewhere at the Site. The one exception is that you must conduct a Site-

> wide study if you want to establish an off-Property conditional point of compliance for ground water. That is because you would be effectively selecting a cleanup for the entire Site, not just your Property. You might also need the approval of the other affected property owners. A Property-specific cleanup constitutes only an interim action for the Site as a whole. Therefore, the cleanup you select for the Property must not exacerbate conditions or foreclose reasonable cleanup alternatives elsewhere at the Site.

To establish a conditional point of compliance for ground water, you must demonstrate at a minimum:

- That it is not practicable to meet cleanup levels at the standard point of compliance within a reasonable restoration time frame.
- That the conditional point of compliance is established as close as practicable to the source of contamination.
- That all practicable methods of treatment are used to clean up the contamination.

You must demonstrate that your selected cleanup will prevent recontamination of the Property from sources or contaminants located elsewhere at the Site. You must prevent recontamination to the extent necessary to maintain compliance with cleanup standards within the Property,

A remedial action may be necessary to manage or contain contamination on the Property, or prevent recontamination of the Property. The following types of remedial actions may be required to maintain compliance with cleanup standards:

- <u>Institutional Controls</u>, which prohibit or limit activities that may interfere with the integrity of engineered controls, or result in exposure to hazardous substances.
- <u>Engineered Controls</u>, which prevent or limit movement of, or exposure to, hazardous substances.
- <u>Confirmational monitoring</u>, which may be necessary to confirm the long-term effectiveness of the cleanup.

4. Cleanup of the Property.

Ecology has determined the cleanup you performed does not meet the applicable Site cleanup standards within the Property.

Rayonier completed a limited soil removal in October 2007 in the northeastern portion of the Property. These activities included the excavation and off-Site disposal of approximately 1,250 tons of petroleum-impacted soil. The excavation extended to a depth of approximately 19 ft bgs. During excavation activities, approximately 7 to 10 ft of clean overburden was observed above approximately 9 to 12 ft of petroleum contaminated soil. No contamination was identified below 19 ft bgs. However, the lateral extent of the contamination was not determined at the time of excavation.

Limitations of the Opinion

1. Opinion does not settle liability with the state.

Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

- Change the boundaries of the Site.
- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70.105D.040(4).

2. Opinion does not constitute a determination of substantial equivalence.

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you performed is substantially equivalent. Courts make that determination. *See* RCW 70.105D.080 and WAC 173-340-545.

3. State is immune from liability.

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

Contact Information

Thank you for choosing to clean up your Property under the Voluntary Cleanup Program (VCP). After you have addressed our concerns, you may request another review of your cleanup. Please do not hesitate to request additional services as your cleanup progresses. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our web site: <u>www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm</u>. If you have any questions about this opinion, please contact me by phone at (360) 407-6267 or by e-mail at chcl461@ecy.wa.gov.

Sincerely,

Charles S. Cline SWRO Toxics Cleanup Program

CSC/ksc:Olson's Resort Former Rayonier Log Yard Property Specific FA

Enclosures (2): A – Legal Description of the Property B – Description and Diagrams of the Site (including the Property)

By certified mail: (7007 2560 0000 6214 5346)

cc: Arlen & Donalyn Olson, Olson's Resort
Mr. Stephen Woodward, GeoEngineers, Inc.
Ms. Jennifer Garcelon, Clallam County Health Dept.
Mr. Scott Rose, Ecology
Ms. Dolores Mitchell, Ecology w/o enclosures

Enclosure A

Legal Description of the Property

The former Sekiu log sorting yard Property is located in Clallam County, Washington, as shown in Figure 1 and Figure 1A. The Property is listed as Clallam County tax parcel 123219-210150-0000. The surveyed Property is as shown in Figure 2A. The Property is presently owned by Arlen A. Olson who operates it as Olson's Resort, a recreational vehicle (RV) park. The Property is listed as 3.88 acres, which includes the south 700 feet of Government Lot 1, lying east of Front Street, and including the tidelands abutting the parcel, Section 19, Township 32 North, Range 12 West, Willamette Meridian, Clallam County, Washington. An enlarged figure of the Record of Survey is attached.

The Property is predominantly vacant gravel or grass lots, with the exception of mobile homes located along the western Property boundary. An asphalt access road from Front Street connects to several gravel access roads that run the length of the Property. The gravel and grass lots are used as a parking area for self-contained RVs for several months of the year. It is understood that the current property owner's plans are to continue using the Property for RV parking.

The Property is bounded on the north by a RV park and campground, to the east by Clallam Bay, to the south by the City of Sekiu Publicly Owned Treatment Works (POTW) facility, and to the west by Front Street. According to the Property owner, the U.S. Army Corps of Engineers constructed a rock retaining wall along the entire eastern Property boundary approximately five years ago to protect the Property from ongoing tidal erosion. The rock retaining wall is approximately 10 feet (ft) in height. Two active sewer lines run parallel with each other and the shoreline approximately 5 to 10 ft west of the rock retaining wall and trend north to south along the eastern portion of the Property. The sewer lines are 8 to 12 inches in diameter and connect with the POTW south of the Property. Property features are shown in Figure 2.





Figure 2 A – Olson's Resort / Former Rayonier Log Yard, Sekiu

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507089 VAN RIPER'S RECREATIONAL VEHICLE PARK SECTION 19, TOWNSHIP 32 NORTH, RANGE 12 WEST W.M., CLALLAM COUNTY, WASHINGTON DEDICATION UEURATION VEW ALL NEW BY THESE PRESENTS THAT WE THE UNDERSIONED, CONTRACT PURCHASERS AND OWNERS OF THE LAND HEREBY PLATTED, HEREBY DECLARE. THIS PLAT TO BE KNOWN AS 'WAN RIPER'S REGREATIONAL VEHICLE PARK, 'A RETRAL SUBDUNSION, THE USE OF WINCH SHALL NOT BE INCOMSISTENT WITH CLALLAM COUNTY RESOLUTION NUMBER 30, 1971, AND DEDICATE TO THE POLICL, THE WALKWAY EASENEETTS AS PLATTED AS A MEMALOG MORED'S AND ECREDE OR BEACH ACCESS ONLY FOR AS LONG AS PLAT IS IN USE AS A RECREATIONAL VEHICLE PARK, AND UPIN VACHTION OF RECREATIONAL VEHICLE PARK THE SHID WALKWAY EASENTT IS NOTO, THIS PUBLIC TO CONTROL BY 'VAN RIPER'S RECREATIONAL VEHICLE PARK MANAGEMENT. ALL PROTOKENT, ALL PROTOKING WITHIN THE P NOT DEDICATED TO THE PUBLIC. WITHIN THE PLAT ARE PRIVATE, Oyiners Granold Van Piper HAROLD VANRIPER R.D. MERRILL COMPANY, A WASHINGTON CORPORATION OZaca, Equa V.R. RING COMPANY, A MASHINGTON CORPORATION ACKNOWLEDGEMENT STATE OF WASHINGTON } 55' Quil 80 THIS IS TO CERTIFY THAT ON THIS 2477 DAY OF STPTEMORE, 1979, BEFORE ME, THE UNDERSIGNED, A NOTARY DUBLIC IN AND FOR THE SIATE OF WARNINGTON DULY COMMENSIONED AND SUMME PERBONALLY APPEARED NAROLO VAN RIPER TO ME KNOWN TO BE THE INDIVIOUAL WHO EXECUTED THE FOREGOING INSTRUMENT AND ACKNOWLEGGED TO ME THAT HE SIGNED AND SEALED THE SAME AS HIS FREE AND VOLUNTARY ACT AND DEED FOR THE USES AND PURPOSES THEREIN MENTIONED. APRIL 9 80 THIS 9 2 DAY OF тніз 🤦 🖼 1980 dead DAY OF APRIL APRIL 19 80 WITNESS BY HAND AND OFFICIAL SEAL THE DAY AND YEAR FIRST ABOVE WRITTEN. NULARY POSILIC IN AND FOR THE STATE OF WASHINGTON RESIDING AT DRAT ANGELS 19 80 ACXNOWLEDGEMENT STATE OF WASHINGTON } 55 THIS SUBDIVISION CONFORMS TO THE COMPREHENSIVE PLAN 4. RESPECTI T, THE CORPO TO THE SAID ORATION, FOR T.T. PLANNING DIRECTOR 507085 WITNESS BY HAND AND OFFICIAL SEAL HERE TO AFFICE THE DAY ABOVE WRITTEN. AND YEAR FIRST TREASURER'S CERTIFICATE I, R. Land D. Clark, TREASURER OF CLALLAM COUNTY, WASHINGTON, HEREDY CERTIFY, THAT ALL TAXES ON THE ABOVE PROPERTY ARE FULLY PAID UP TO AND INCLUDING THE YEAR 19 CO. NOTARY RUBLES IN AND FUR THE STATE OF WASHINGTON LYNNWOOD STATE OF WASHINGTON RECORD FILED FOR RECORD AT THE REQUEST OF Clash + Class THIS 234 DAY OF Gipsie , 19 80 A.D. AT 2 MINUTES PAST _____ P.M. AND RECORDED IN VOLUME 17 , RECORDS OF CLALLAM COUNTY, WASHINGTON. PLATS, PAGE WITNESS MY HAND AND DEFICIAL SEAL HERETO AFFIXED THE DAY AND YEAR FIRST ABOVE WRITTEN. ALICE PTHORAK -Xint NOTARY PUBLIC IN AND FOR THE STATE OF WASHINGTON RESIDING AT ______ CLARK & ASSOCIATES Land Surveyors - Engineers - Plenners Construction Coordination - Materials Testing TH LAST DOWN STREET - FORT ANGLES, WASHINGTON SEE SHEET 2 OF 2 VOLIO PAGE 18

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Parcel Number 1232192101500000

Site Address: 9999 FRONT ST SEKIU

Print Quit Back

Taxpayer: OLSON ARLEN A

PO BOX 216 SEKIU, WA 98381-0216

Title Owner: OLSON ARLEN A

PO BOX 216 SEKIU, WA 98381-0216

Description:

S700' GOV LOT 1 LY E OF FRONT ST & TDLS ABUT EX TX#6097&7837 3.88A

Value Summary:

Note: Listed values do not reflect adjustments made for exemption programs such as

Senior/Disabled or Current Use programs (except Commercial Forestland properties).

Land Value: 75,660 Improvements Value: 25,140 Total Assessed Value: 100,800

Property Characteristics:

Note: Use Code is for Assessor's purposes only. Contact the appropriate planning or building departments for Zoning and allowable usage of property.

Use Code: 7516 REC VEH PARK

Land Size (acreage): 3.88 Note: Acreage is not listed for all properties in the

Assessor's records. More information about land size.

Tax Status: Taxable

Tax Code Area:: 0302

Note: Zoning and zoning codes change constantly. Verify all zoning with the appropriate planning or building department.

Building Characteristics:(Click on Bldg. # for more details.)#Bldg. TypeBldg. StyleTotal S.F.BDBA01One Story1104

Tax History Sales History

Print	Quit	Back
2,171,062		

http://apps.clallam.net/website/sitis p.pgm?parcel=1232192101500000

8/26/2009

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Enclosure B

Description and Diagrams of the Site (including the Property)

Site Description

The Site is located as shown in Figure 1. The Site is presently determined to be encompassed by the Olson's Resort former Sekiu log sorting yard as described in Clallam County tax parcel 123219-210150-0000. It also impacts the tax parcel immediately north of the north Property boundary, identified as property owned by Chris W. Mohr and Valerie Mohr; and including, a portion of Government Lot 1, together with those portions of the tidelands as conveyed by the State of Washington lying in front of, adjacent to, and abutting thereon, and all of Van Riper's Recreational Vehicle Park, as recorded in Volume 10 of Plats, Page 17 (Ecology could find this recording only in Volume 10, Page 18 of Plats), Section 19, Township 32 North, Range 12 West, Willamette Meridian, Clallam County, Washington. The Van Riper's Recreational Vehicle (RV) Park survey is attached. The extent of the Site into the Van Riper's RV Park is unknown since the owner refused access to allow complete characterization of the contamination. Figure 6 shows the present known extent of contamination that defines the Site.

Information pertaining to subsurface conditions was obtained during the limited Site assessments completed by Rayonier Properties LLC (Rayonier) and by GeoEngineers, Inc. (GeoEngineers) during the later Focused Remedial Investigation (RI) explorations. In general, subsurface conditions encountered at the Site consisted of unconsolidated gravel and silt at various depths from the ground surface to depths ranging from approximately 11 to 18 feet below ground surface (ft bgs). Wooden and concrete structures and debris were encountered in several test pits completed as part of the Focused RI. The silt and gravel was interpreted to be relatively recent fill material mixed and interbedded with native gravel and sand beach deposits. Beneath the silt and gravel was a dense, consolidated silt, sand, gravel unit of varying grain-size that was interpreted to be glacial till. The glacial till unit was encountered in explorations from depths of approximately 11 to 18 ft bgs. Ground water was encountered at depths ranging from approximately 4 to 16 ft bgs during the Focused RI. Ground-water flow was determined to be toward the east, toward Clallam Bay.

A conceptual Site model (CSM) was developed to show the distribution of hazardous substances at the Property and subsequent potential migration of these substances in environmental media. Bunker C was likely released at the Property from historical below-ground tanks, and/or piping. Contaminant distribution at greater depths in the subsurface, rather than at the ground surface, supports the model that release mechanisms were likely below-ground or at a previous working surface that was at a lower elevation, and subsequently covered with clean fill material. Over time, Bunker C migrated via preferential pathways and to ground water where it was distributed laterally at the ground-water surface as light non-aqueous phase liquids (LNAPL), at the gravel/till contact as dense non-aqueous phase liquids (DNAPL), or both, and eventually migrated towards the shoreline with the direction of ground-water flow. The CSM is shown as Figure 3. No evidence of continued mobility of free product was detected.

Site History

The Property was formerly owned by Rayonier Western Forest Resources, and historically, has been used from the early 1900s through the early 1970s as a log sorting and transfer yard. During this time locomotives would haul logs from the various logging camps to the piers constructed off-shore, and dump logs into the water or transfer logs to barges or ships. Apparently, the locomotives were maintained and fueled at the Property. Facilities at the Site included Bunker C fuel storage tanks, and associated piping, as well as a boiler facility. Each engine could store 1,200 to 1,500 gallons of Bunker C for fuel.

Although the petroleum impacts on the Property appear to be related to historical releases of Bunker C fuel, the exact source of the contamination on the Property has not been confirmed. The fueling and maintenance of locomotives, the transfer of fuel, the storage of Bunker C fuel in underground and/or above ground storage tanks, and activities associated with the on-Site boiler facility may have contributed to the past release or releases of petroleum.

Rayonier completed limited soil cleanup activities in October 2007 in the northeastern portion of the Property. These activities included the excavation and off-Site disposal of approximately 1,250 tons of petroleum-impacted soil. The excavation extended to a depth of approximately 19 ft bgs. Approximately, 9 to 12 ft of petroleum-impacted soil was overlain by 7 to 10 ft of clean overburden. There was no physical evidence of contamination below 19 ft bgs. However, Rayonier did not determine the lateral extent of contamination at that time.

Rayonier returned to the Site in March 2008 to conduct a focused site assessment. Rayonier completed 15 direct-push borings and obtained soil and ground-water samples. The approximate locations of the borings are shown in Figure 2. A total of 10 soil samples and two ground-water samples were submitted for chemical analysis of diesel- and oil-range petroleum hydrocarbons, polynuclear aromatic hydrocarbons (PAHs), and benzene, toluene, ethylbenzene, and total xylenes (BTEX). Bunker C and PAH constituents were identified exceeding MTCA Method A cleanup levels for soil at two locations, and Bunker C was identified exceeding the MTCA Method A cleanup level for ground water at one of the two locations.

Focused RI activities were completed by GeoEngineers in October 2008 and February 2009. The RI activities included characterization of soil, ground water, and sediment to evaluate the vertical and lateral extent of petroleum- and PAH-impacted soil and ground water, and to evaluate potential transport from the Property into the adjacent marine environment. Twenty test pits were completed to a depth of approximately 5 to 16 ft bgs. Eleven direct-push borings were completed to depths ranging between 12 and 20 ft bgs. Monitoring wells were installed in 10 of the 11 borings. Sediment was sampled in Clallam Bay using a vibracore sampling device deployed from a 36-ft boat. The approximate locations of the test pits, direct-push borings, and monitoring wells are shown in Figure 4. The approximate locations

of the sediment samples are shown in Figure 5. The lateral extent of contamination was determined in all directions, except to the north. Access to the property to the north was not granted by the property owner. In general, NAPL was present in a 2- to 3-ft zone above the sand/gravel and till contact. Based on the open test pits, free product was not observed seeping from test pit sidewalls or accumulating in ground water, indicating that mobile free product is most likely not present at the Property. Based on current distribution, it appears that the NAPL was mobile historically, but was no longer mobile once equilibrium/residual saturation conditions were reached. Depths and occurrences of NAPL within the petroleum-impacted area are indicated on Figure 6.

A total of 46 soil samples were obtained from the test pits and soil borings for chemical analysis of gasoline-, diesel-, and oil-range total petroleum hydrocarbons (TPH) using HCID and NWTPH-Dx, and PAHs using Environmental Protection Agency Method 8270C. Ground water was sampled in nine of the ten monitoring wells on October 24 and 25, 2008, and February 18 and 19, 2009. At MW-6S, there was not a sufficient volume of water for sampling. Bunker C range TPH was detected at MW-1 at concentrations greater than the MTCA Method A cleanup level. Non-carcinogenic PAHs either were not detected or were detected at concentrations less than the preliminary cleanup levels in water samples submitted for chemical analysis. The detected non-carcinogenic PAHs were also below the most stringent surface-water criteria. Carcinogenic PAHs were not detected above the method reporting limits. However, the method reporting limits are greater than the most stringent surface-water standards for benzo(a)pyrene and the toxicity equivalency factor (TEF) equivalence for benzo(a)pyrene.

A total of four sediment samples were obtained at three locations on February 19 and 20, 2009. Bunker C was detected in three of the four samples. However, GeoEngineers did not compare the results to any sediment screening levels. Ecology has used a screening level of 100 milligrams per kilogram (mg/kg) at other cleanup sites. Attached is an e-mail that discusses the screening level. No concentration detected exceeded the 100 mg/kg screening level. The detected Bunker C and PAH concentrations likely indicate former Bunker C migration into the marine environment (as indicated in the CSM), or possibly contributions from incidental releases of Bunker C in the working harbor over time, but show that the Bunker C and PAHs have attenuated with time. The data and field observations do not indicate the presence of mobile free product.

Site Diagrams



Olson's Resort, Sekiu

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) modified by thichaud on Aug 19, 2009 – 9:2

CTS/010137018100/CAD/TASK 310/013701800 T310 FIG 6.DW01TA

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AFTER RECORDING MAIL TO:

Name Chris W. Mohr and Valerie Mohr

Address P.O. Box 246

City, State, Zip Sekiu, WA 98381



the following described real estate, situated in the County of Clallam , State of Washington:

FILED FOR RECORD AT THE REQUEST Land Title Conipan.

DF_____ RECORDED IN RECORDS/CLALLAN CO.

98 AUG 18 AM 10: 16

CLAKLAN COUNTY, WASH.

BY KLH DEPUTY

Abbreviated Legal: Ptn GL 1 19-32-12 & Van Riper's RV Park 10/17 Additional Legal Description is on Page 4 of Document Assessors Tax Parcel Number: 123219-210000-1000 / 123219-510000 123219-510020

DATE PAID

LEGAL DESCRIPTION ATTACHED HERETØ MARKED "EXHIBIT A" AND BY THIS REFERENCE MADE A PART HEREOF.

Dated: August 5, 1998 R.D. Merrill Company king Family General Partner ance Ø By: Ring Management Company, Inc., Charles B. Wright, Chairman 🛫 General Partner Korte By: Richard E. Stroble, President NO. 40336 CLALLAM COUNT Tr LIAM TRANSACITION SYCISE TAX AUG 1 8 1993

State of Washington County of King

AMOUNT \$172,000 00 COUNTY ASUE ASUE ANTIN lnul

I certify that I know or have satisfactory evidence that Charles B. Wright is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he is authorized to execute the instrument and acknowledged it as the Chairman of R.D. Merrill Company to be the free and voluntary act of such party for the uses and purposes mentioned in

the instrument. formi 18 TED: 'ani -0! 1. 1. 1 "In LPB-10

Melina - UN

Signature of Notary Public Printed Name of Notary Weldon Lee Lamb My commission expires: 2-5-99

State of Washington County of King

I certify that I know or have satisfactory evidence that William D. Pettit, Jr, is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he is authorized to execute the instrument and acknowledged it as the President of R. D. Merrill Company to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: 8-14-98 Signature of Notary Public My commission expires: Notary Public State of Washington KATHERINE R. NICHOLS Opointment Expires feb 2, 2001

State of Washington County of <u>KING</u>

an S. P. Garrett and

I certify that I know or have satisfactory evidence that Richard E. Stroble is the person's who appeared before me, and said person's acknowledged that There signed this instrument, on oath stated that the is authorized to the structure of the instrument and acknowledged it as the president of Ring Management Company, Inc., General Partner for Ring Family Limited Partnership to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

DATED: Augura 14, 1998 ner Signature of Notary Public Printed Name of Notary Hern - u mi My commission expires: 9 WERNER NEUMANN 6 20 STATE OF WASHINGTON NOTARY ----- PUBLIC HY COMMISSION EXPIRES 2-20-99

EXHIBIT A

FILE NO. CL-37090

PARCEL A:

Government Lot 1 in Section 19, Township 32 North, Range 12 West, W.M., Clallam County, Washington;

TOGETHER WITH those portions of the tidelands as conveyed by the State of Washington lying in front of, adjacent to and abutting thereon; EXCEPT those portions of the North 225 feet and of the North 50 feet of the South 750 feet, and of the North 40 feet of the South 949 feet, and of the North 50 feet of the South 1027 feet, lying Westerly of county road known as Front Street;

EXCEPT ALSO the South 700 feet;

EXCEPT ALSO tract conveyed to Edward Bell by deed recorded (April 25, 1952 under Auditor's File No. 267969;

EXCEPT ALSO Van Riper's Recreational Vehicle Park, as recorded in Volume 10 of Plats, page 17;

AND EXCEPT ALSO that portion conveyed to Clallam County for road by deed recorded June 11, 1960 under Auditor's File No. 322146.

PARCEL B:

All of Van Riper's Recreational Vehicle/Park, as recorded in Volume 10 of Plats, page 17, records of Clallam County, Washington.

SUBJECT TO:

Exceptions and Reservations contained in Deed of record under Auditor's File Nos. 29486 and 69934.

Right of the State of Washington contained in Deed of record under Auditor's File No. 69934.

Easement of record under Auditor's Rile No. 447450.

Easements disclosed on plat recorded in Volume 10 of Plats, Page 17.

Rights of the public in County Road known as Front Street, as disclosed by the Clallam County Assessors map.