

# STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

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July 6, 2017

Mr. Jack Anderson Rayonier Timberlands 116 Quillayute Rd Forks WA 98331

# Re: Determination of No Further Action at the following Site:

• Site Name: Rayonier Timberlands

• Site Address: 181202 Hwy 101 S, Forks, Jefferson County, WA

Facility/Site No.: 82796527Cleanup Site No.: 6719

Dear Mr. Anderson:

On November 7, 2001, Ecology was notified by a telephone call of a release of petroleum to the environment related to an underground storage tank at 181202 Hwy 101 S, Forks, Jefferson County, Washington.

#### **Issue Presented and Opinion**

Ecology has determined that no further remedial action is necessary to clean up contamination 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 Site**

This opinion applies only to the Site described below. The Site is defined by the nature and extent of contamination associated with the following release:

Total Petroleum Hydrocarbons-Gasoline (TPH-G) and total xylenes into the soil.

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the parcel(s) associated with this Site are affected by other sites.

### Basis for the Opinion

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

• Removal of Underground Storage Tanks and Final Cleanup Report, Ken Morgan Consulting, February 26, 2002.

This document is kept in the Central Files of the Southwest Regional Office of Ecology (SWRO) for review by appointment only. You may 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 **no further remedial action** is necessary to clean up contamination at 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 and select a cleanup action.

The Site is located at approximately 181202 Highway 101 South, Forks, Jefferson County, Washington (Figure 1). The immediate surrounding area is relatively flat. The general area is rural with some residents. The parcel immediately to the west was a logging company and is now used as a residential property.

Two underground storage tanks (USTs) were discovered on Rayonier Timberlands parcel, approximately 15 feet east of the property line of the adjoining property (Figure 2). The USTs apparently were installed on Rayonier's land by the adjoining former property owner during its use as a logging company.

The USTs consisted of a 1,000-gallon gasoline tank and a 5,000-gallon diesel tank. Two suction pumps were installed on a pad between the USTs (Figure 3). When the USTs were discovered, the pumps had already been removed.

The USTs were removed in October 2001. After removal of the USTs, contaminated soil was found, apparently from leaking piping. The excavation was expanded to remove as much contaminated soil as practicable. The final dimensions of the excavation measured approximately 17 feet in length by 11 feet in width and 10.5 feet in depth. Soil samples were collected at the extent of the excavation.

Samples collected in the gasoline UST area were analyzed for Total Petroleum Hydrocarbons-Gasoline (TPH-G), total aliphatic components, total aromatic components, benzene, ethylbenzene, toluene, xylenes (BTEX), and lead. Samples collected in the diesel UST area were analyzed for Total Petroleum Hydrocarbons extended with results for diesel (TPH-D) and motor oil (TPH-O). Selected samples were also analyzed for TPH-G, BTEX, and lead.

Detections of TPH-G were found up to 222 milligrams per kilogram (mg/kg). The maximum concentrations of TPH-D was 571 mg/kg, for TPH-O it was 86.7 mg/kg. Toluene, ethylbenzene, xylenes, and lead were all detected at low concentrations. All the results for benzene were non-detect.

The base of the excavation was found to be a layer of peat. A sample was collected of the peat and analyzed for total organic carbon with a result of 23,700 mg/kg. This sample was collected approximately 140 feet south of the gasoline UST in order to get a representative sample that was not affected by the release. The detected value is high and will tend to bind petroleum to it thus preventing migration.

Figure 3 shows the locations of all samples collected within the excavation. Analytic results are presented in Table 1.

Groundwater was not encountered during the UST removal and excavation. A search of Jefferson County Health Department records and Ecology records did not find any groundwater wells within a 1 mile radius of the Site.

# 2. Establishment of cleanup standards.

Ecology has determined the cleanup levels and points of compliance established for the Site meet the substantive requirements of MTCA.

Ecology's *Model Remedies for Sites with Petroleum Contaminated Soils* (Publication 15-09-043, September 2015) may be applied to this site since groundwater was not impacted and due to the depth of groundwater, is highly unlikely to be impacted. Model Remedy 4 is appropriate for determining cleanup levels at this Site.

The cleanup levels for the Model Remedy 4 are based on generic Method B values. For total petroleum, this value is 1,500 mg/kg. Since the remaining contamination is less than this value, the Site is considered cleaned up and compliant with the MTCA.

### 3. Selection of cleanup action.

Ecology has determined the cleanup action you selected for the Site meets the substantive requirements of MTCA.

The selected remedy was excavation and disposal of affected soil.

# 4. Cleanup.

Ecology has determined the cleanup you performed meets the cleanup standards established for the Site.

All accessible contaminated soil was removed from the excavation. Confirmation samples were collected at the extent of the excavation and analytical results showed that remaining concentrations were below the generic Method B values used for comparison.

The 96.21 tons of contaminated soil was disposed of at TPS Technologies, Inc., in Tacoma, Washington.

#### Listing of the Site

Based on this opinion, Ecology will initiate the process of removing the Site from our lists of hazardous waste sites, including:

Confirmed and Suspected Contaminated Sites List.

#### 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**:

- 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).

If you have any questions about this opinion or the termination of the Agreement, please contact me by phone at (360) 407-6263 or e-mail at <a href="mailto:Carol.Johnston@ecy.wa.gov">Carol.Johnston@ecy.wa.gov</a>.

Sincerely,

Carol A. Johnston

**SWRO Toxics Cleanup Program** 

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CAJ: kb

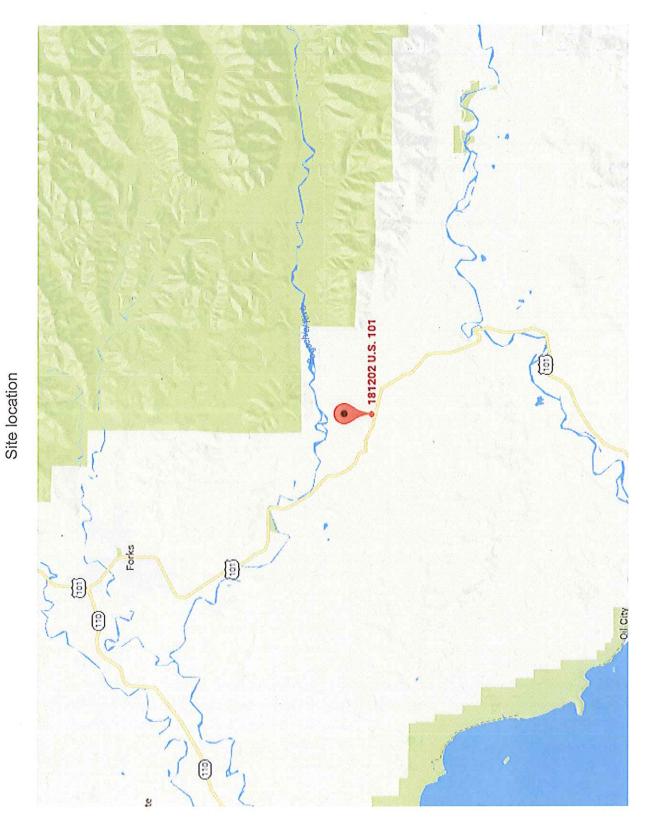
By Certified Mail: [91 7199 9991 7037 0291 6333]

Attachments: Figure 1: Location map

Figure 2: Site features map Figure 3: Sampling locations Table 1: Analytical results

cc: Ken Morgan

Nicholas Acklam, Ecology Mark Gordon, Ecology



# Approximate location of former USTs



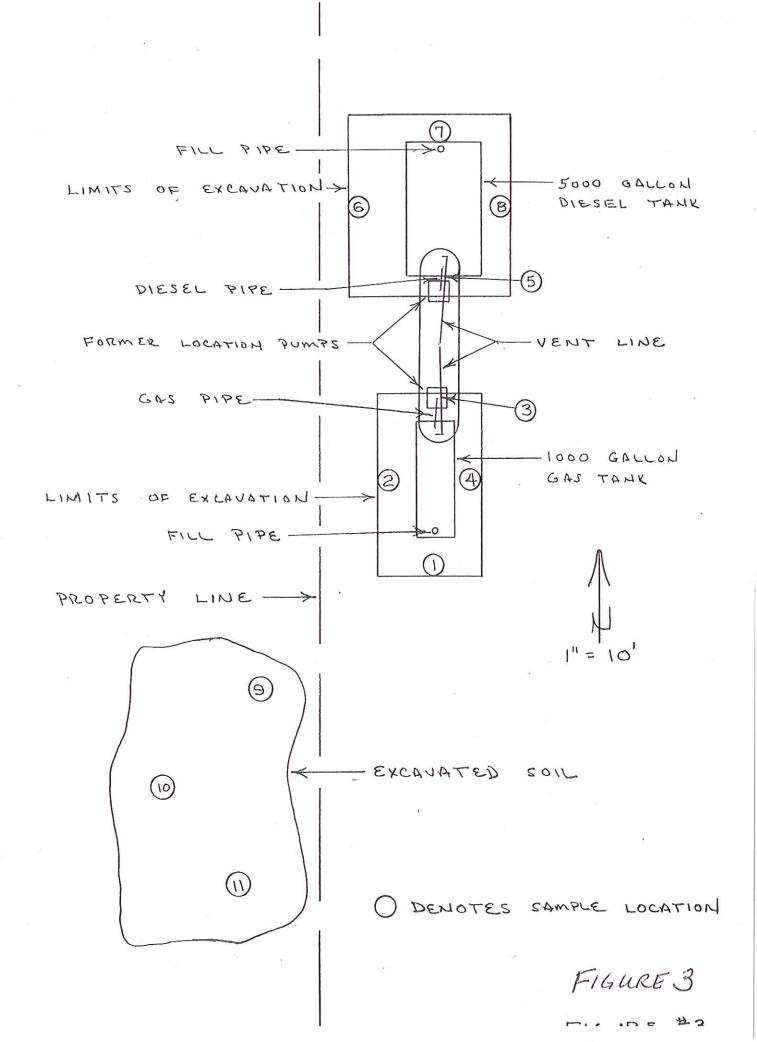


TABLE 1

# (All Results Are In PM)

Sample Depth		6-1/2 Feet – Bottom	6 Feet - West Wall	6-1/2 Feet – Bottom	6 Feet - East Wall	10-1/2 Feet - Bottom	6 Feet - West Wall	10-1/2 Feet - Bottom	6 Feet – East Wall	Excavated Contaminated Soil	Excavated Contaminated Soil	Excavated Contaminated Soil	6-1/2 Feet - Bottom	
Organic	Carbon	1	1	ı	ı	1	I	I	1	I	1	1	23,700	
Total	Lead	9.04	5.61	7.54	5.77	1	ı	ı	1	4.85	3.89	3.71	ı	
Xylene		1.244	1.327	7.37	0.308	1	1	1	1	0.109	0.2002	18.15	ı	
Toluene		0.0923	0.0859	0.349	0.0901	1	-	-	1	0.0764	0.0666	1.34	1	ND = Not Detected
Ethyl	Benzene	0.208	0.207	1.04	0.0916	-	1	-	I	R	R	2.87	1	
Benzene		R	£	Ð	Q.	1	1	1	1	£	Ð	R	1	2
Total	Aromatic	46	20	2	1	1	.1	1	1	1	1	f	1	
Total	Aliphatic	37	25	50	1	1	1	ı	1		ı	1		
NWTPH-Gx	Gasoline	45.3	34.8	222	14.1	1	1	ı	1	214	97.8	743	1	
NWTPH-D <sub>x</sub>	Motor Oil	1	1	1	1	2	9.89	54.1	2	86.7	52.8	48.4	ı	
LMN -	Diesel	1	1	1	1	16.6	49.8	51.9	E	526	313	571	1	
Sample	Number	RT-1	RT-2	RT-3	RT-4	RT-5	RT-6	RT-7	RT-8	RT-9	RT-10	RT-11	RT-12	