October 24, 2017

Washington State Department of Ecology
Southwest Regional Office
Toxics Cleanup Program
300 Desmond Drive
Lacey, Washington 98504

Re: **Groundwater Monitoring Gig Harbor Transmission**
14610 Purdy Dr. NW
Gig Harbor, Washington 98332
Facility/Site No.: 11876
Cleanup Site No.: 1952
VCP Project No.: SWI590

Attention: Mr. Timothy Mullin, L.G.

Mr. Mullin:

In May 2017, ECI submitted to Ecology an application to enter the Voluntary Cleanup Program (VCP) for the Gig Harbor Transmission Site. Along with that application ECI submitted two reports for Ecology review and an opinion on the work conducted. Those reports were:

- Focused Subsurface Investigation-14610 Purdy Drive NW prepared by ECI and dated February 3, 2017; and
- Cleanup Action Report (CAR) prepared by ECI and dated April 26, 2017.

Those reports describe the investigation and cleanup activities related to two apparent heavy oil releases at the Site, where the first one occurred prior to March 12, 2009 (ERTS #609920) and a second release which occurred between February 2010 and January 2017. These releases were identified at the Site by the Tacoma Pierce County Health Department and during Phase 1 and Phase 2 Environmental Assessments conducted at the Property.

In an e-mail dated July 12, 2017, you requested that before Ecology could complete a review of the Site information that the previous reports prepared by ECI and other consultants regarding the Site be submitted to Ecology. Those reports were submitted to Ecology on July 31, 2017.

On September 27, Ecology issued a "*No Further Remedial Action Likely*" opinion based on the work performed at the Site. In that letter, Ecology expressed concerns regarding the detection of metals in a groundwater grab sample from boring B2 that was located near the former exterior hoist at the Site. As a result of those concerns, Ecology requested:

> *"…**installation of one monitoring well at boring location B2.***
>
> *i. For example, the monitoring well could be installed with an approximately 10 foot screen over an interval which ensures that:*
>
> *1. A representative groundwater sample can be collected from the perched groundwater layer during all seasons of the year.*
>
> *2. The same interval which was sampled in February 2010 at boring B2 is accessible for sampling from the new monitoring well.*
>
> 3. *The top of the monitoring well screen will not be submerged."*

Ecology also requested:

> "***…Groundwater samples collected from the new monitoring well should be analyzed for: Heavy oil, cPAHs, total and dissolved cadmium, total and dissolved chromium, hexavalent chromium, and total lead and dissolved lead.***"

On October 5, 2017, ECI mobilized to site with a push probe drilling rig operated by Standard Probe of Tumwater, Washington to install one well at the Site. ECI drilled four borings adjacent to boring B2 at the Site in an attempt to install a monitoring well. In each attempt, water was not encountered in the boring. Therefore, a well was not installed.

The borings were drilled until refusal was reached by the push-probe. The depths drilled were 22 feet below ground surface (bgs), 13 feet bgs, 13 feet bgs, and 15½ feet bgs. All of these depths were similar or deeper than the depth drilled for boring B2 which was 14 feet bgs.

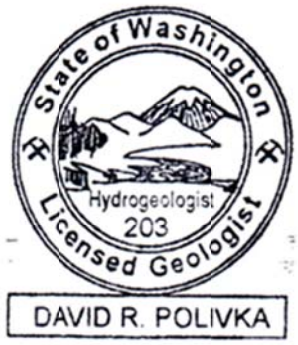
The soils encountered were silty sands and gravels. These sands and gravels were noted as being dry to the total depth of each boring. In addition, the soils did not appear to have any staining or odor.

In boring B2, the soils were of similar composition and were noted as being wet at depths of 10½ to 14 feet bgs and moist at a depth of 4 to 7 feet bgs. The material above 4 feet was considered fill. Boring logs for boring B2 drilled in February 2010 and each attempt to install a well in October 2017 are attached to this letter.

Boring B2 was drilled in February of 2010, during the "rainy season" and it was raining at the time of the drilling. It is ECI's opinion that the water that was observed in boring B2 was a "wetting front" as a result of surface water infiltration and was not actually a perched zone that is able to be monitored. Therefore, we are requesting that no further action be required at this site.

If there are any questions or wish to discuss this or any other matter regarding the Site, please do not hesitate to call.

Sincerely,
ECI | Environmental Consulting



David R. Polivka L.G./L.Hg.
Senior Hydrogeologist
Direct: 360-349-0851

Attachments:
Boring Logs: Boring B2, MW1 attempts (4)

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Project:	Monitoring Well Installation
Location:	14610 Purdy Drive Northwest, Gig Harbor, Washington 98332
Client:	Tracey Larson

Boring ID: Attempt 1

Project Number: 0359-01-05

Date Start/Finish:	10/5/2017	**Drilling Method:**	Direct Push
Logged By:	Kaden Reed	**Auger ID/OD:**	--
Checked By:		**Borehole ID/OD:**	2 inches
Contractor:	Standard Environmental Probe	**Sampler:**	Macro Core 5
Operator:	Russel	**Hammer Wt./Fall:**	--
Boring Location:	See Boring Locations Map	**Ground Elevation:**	--
Coordinates:	--	**Water Depth:**	--
Weather:	Sunny	**Boring Depth:**	22.5 feet

Unified Soil Classification System

NON-COHESIVE SOILS	GW	WELL-GRADED GRAVEL, FINE TO COARSE GRAVEL
	GP	POORLY-GRADED GRAVEL
	GM	SILTY GRAVEL
	GC	CLAYEY GRAVEL
	SW	WELL-GRADED SAND, FINE TO COARSE SAND
	SP	POORLY-GRADED SAND
	SM	SILTY SAND
	SC	CLAYEY SAND
COHESIVE SOILS	ML	SILT
	CL	CLAY
	OL	ORGANIC SILT, ORGANIC CLAY
	MH	SILT OF HIGH PLASTICITY, ELASTIC SILT
	CH	CLAY OF HIGH PLASTICITY, FAT CLAY
	OH	ORGANIC CLAY, ORGANIC SILT
	PT	PEAT

Depth (ft bgs)	Sample Number	Time	PID Reading	Remarks	Soil and Rock Description	Unified Classification	Graphical Representation
1				No odor	Brown, dry, coarse, dense, silty sand with gravel	SM	
2							
3							
4				No odor	Light brown, dry, coarse, dense, silty sand with gravel	SM	
5				No odor	Dark brown, dry, coarse, dense, silty sand with gravel	SM	
6				No odor	Grayish brown, dry, coarse, dense, silty sand with gravel	SM	
7							
8				No odor	Brown, dry, coarse, dense, silty sand with gravel	SM	
9				No odor	Brown, dry, coarse, dense, sand with gravel and silt	SW	
10							
11							
12							
13				No odor	Brown, dry, coarse, very dense, sand with gravel and silt	SW	
14							
15							
16				No odor	Brown, dry, coarse, very dense, sand with cobble and silt	SW	
17							
18							
19							
20							
21							
22							
23					Termination of boring due to refusal		
24							
25							
26							
27							
28							
29							
30							

Notes:

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Project:	Monitoring Well Installation
Location:	14610 Purdy Drive Northwest, Gig Harbor, Washington 98332
Client:	Tracey Larson

Boring ID: Attempt 2

Project Number: 0359-01-05

Date Start/Finish:	10/5/2017	**Drilling Method:**	Direct Push
Logged By:	Kaden Reed	**Auger ID/OD:**	--
Checked By:		**Borehole ID/OD:**	2 inches
Contractor:	Standard Environmental Probe	**Sampler:**	Macro Core 5
Operator:	Russel	**Hammer Wt./Fall:**	--
Boring Location:	See Boring Locations Map	**Ground Elevation:**	--
Coordinates:	--	**Water Depth:**	--
Weather:	Sunny	**Boring Depth:**	13 feet

Unified Soil Classification System

NON-COHESIVE SOILS	GW	WELL-GRADED GRAVEL, FINE TO COARSE GRAVEL
	GP	POORLY-GRADED GRAVEL
	GM	SILTY GRAVEL
	GC	CLAYEY GRAVEL
	SW	WELL-GRADED SAND, FINE TO COARSE SAND
	SP	POORLY-GRADED SAND
	SM	SILTY SAND
	SC	CLAYEY SAND
COHESIVE SOILS	ML	SILT
	CL	CLAY
	OL	ORGANIC SILT, ORGANIC CLAY
	MH	SILT OF HIGH PLASTICITY, ELASTIC SILT
	CH	CLAY OF HIGH PLASTICITY, FAT CLAY
	OH	ORGANIC CLAY, ORGANIC SILT
	PT	PEAT

Depth (ft bgs)	Sample Number	Time	PID Reading	Remarks	Soil and Rock Description	Unified Classification	Graphical Representation
1				No odor	Brown, dry, coarse, dense, silty sand with gravel	SM	
2							
3							
4				No odor	Brown, dry, coarse, very dense, silty sand with large cobble	SM	
5							
6				No odor	Light brown, dry, large grained, very dense, silty sand with cobble	SM	
7							
8							
9				No odor	Light brown, dry, large grained, very dense, sand with cobble and silt	SW	
10							
11				No odor	Light brown, dry, large grained, very dense, sand with large cobble and silt	SW	
12							
13							
14					Termination of boring due to refusal		
15							
16							
17							
18							
19							
20							
21							
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Notes:

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Project:	Monitoring Well Installation
Location:	14610 Purdy Drive Northwest, Gig Harbor, Washington 98332
Client:	Tracey Larson

Boring ID: Attempt 3

Project Number: 0359-01-05

Date Start/Finish:	10/5/2017	**Drilling Method:**	Direct Push
Logged By:	Kaden Reed	**Auger ID/OD:**	--
Checked By:		**Borehole ID/OD:**	2 inches
Contractor:	Standard Environmental Probe	**Sampler:**	Macro Core 5
Operator:	Russel	**Hammer Wt./Fall:**	--
Boring Location:	See Boring Locations Map	**Ground Elevation:**	--
Coordinates:	--	**Water Depth:**	--
Weather:	Sunny	**Boring Depth:**	13 feet

Unified Soil Classification System

NON-COHESIVE SOILS	GW	WELL-GRADED GRAVEL, FINE TO COARSE GRAVEL
	GP	POORLY-GRADED GRAVEL
	GM	SILTY GRAVEL
	GC	CLAYEY GRAVEL
	SW	WELL-GRADED SAND, FINE TO COARSE SAND
	SP	POORLY-GRADED SAND
	SM	SILTY SAND
	SC	CLAYEY SAND
COHESIVE SOILS	ML	SILT
	CL	CLAY
	OL	ORGANIC SILT, ORGANIC CLAY
	MH	SILT OF HIGH PLASTICITY, ELASTIC SILT
	CH	CLAY OF HIGH PLASTICITY, FAT CLAY
	OH	ORGANIC CLAY, ORGANIC SILT
	PT	PEAT

Depth (ft bgs)	Sample Number	Time	PID Reading	Remarks	Soil and Rock Description	Unified Classification	Graphical Representation
1				No odor	Brown, dry, coarse, dense, silty sand with gravel	SM	
2							
3							
4				No odor	Brown, dry, coarse, very dense, silty sand with gravel	SM	
5							
6				No odor	Light brown, dry, large grained, very dense, silty sand with cobble	SM	
7							
8							
9							
10				No odor	Light brown, dry, large grained, very dense, sand with cobble and silt	SW	
11							
12							
13				No odor	Light brown, dry, large grained, very dense, sand with large cobble and silt	SW	
14					Termination of boring due to refusal		
15							
16							
17							
18							
19							
20							
21							
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Notes:

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Project:	Monitoring Well Installation
Location:	14610 Purdy Drive Northwest, Gig Harbor, Washington 98332
Client:	Tracey Larson

Boring ID: Attempt 4

Project Number: 0359-01-05

Date Start/Finish:	10/5/2017	**Drilling Method:**	Direct Push
Logged By:	Kaden Reed	**Auger ID/OD:**	--
Checked By:		**Borehole ID/OD:**	2 inches
Contractor:	Standard Environmental Probe	**Sampler:**	Macro Core 5
Operator:	Russel	**Hammer Wt./Fall:**	--
Boring Location:	See Boring Locations Map	**Ground Elevation:**	--
Coordinates:	--	**Water Depth:**	--
Weather:	Sunny	**Boring Depth:**	15.5 feet

Unified Soil Classification System

NON-COHESIVE SOILS	GW	WELL-GRADED GRAVEL, FINE TO COARSE GRAVEL
	GP	POORLY-GRADED GRAVEL
	GM	SILTY GRAVEL
	GC	CLAYEY GRAVEL
	SW	WELL-GRADED SAND, FINE TO COARSE SAND
	SP	POORLY-GRADED SAND
	SM	SILTY SAND
	SC	CLAYEY SAND
COHESIVE SOILS	ML	SILT
	CL	CLAY
	OL	ORGANIC SILT, ORGANIC CLAY
	MH	SILT OF HIGH PLASTICITY, ELASTIC SILT
	CH	CLAY OF HIGH PLASTICITY, FAT CLAY
	OH	ORGANIC CLAY, ORGANIC SILT
	PT	PEAT

Depth (ft bgs)	Sample Number	Time	PID Reading	Remarks	Soil and Rock Description	Unified Classification	Graphical Representation
1				No odor	Brown, dry, coarse, dense, silty sand with gravel	SM	
2							
3							
4				No odor	Light brown, dry, large grained, dense, silty sand with gravel	SM	
5							
6				No odor	Light brown, dry, large grained, dense, silty sand with cobble	SM	
7							
8				No odor	Light brown, dry, large grained, very dense, sand with cobble and silt	SW	
9							
10							
11				No odor	Light brown, dry, large grained, very dense, sand with large cobble and silt	SW	
12							
13				No odor	Light brown, dry, large grained, very dense, sand with cobble and silt	SW	
14							
15							
16					Termination of boring due to refusal		
17							
18							
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Notes:

Environmental Services emsgroupllc.coms emsgroupllc.com				Boring Number:	B2		Sheet Number:	1	of	1	
				Job Name:	Gig Harbor Transmission			Date:	2/10/2010		
				Client:	Tracy Larson						
				Location:	14610 Purdy Drive NW						
			Casing Depth:	NA	Surface Elevation:				Water Level:		
			Well Screen Size:	NA	Drilling Type:	Direct Push			8.5' to 14'		
			Surface Conditions:	Asphalt					Drilling:		
					Longitude:				Start	Finish	
					Latitude:			Time:	1102	1125	
					Comments:	Drillers using 4 foot Sampler					

Inches Driven	Inches Recovered	Sample Number	Sample Depth	Field Reading	Depth to Water	Boring Depth		Soil Description
						0	-	Asphalt Paving
							-	Black subgrade gravels
						1	-	
							-	Medium brown, clay layer
						2	-	
							-	
						3	-	Medium brown ,dense, gravelly clay fill
							-	
						4	-	
							-	
						5	-	Medium brown, dense, sl. clayey, fine grained Sand w/fine-med gravels, moist.
							-	
						6	-	
							-	
						7	-	
							-	Medium brown, dense, fine grained Sand sl. silty, dry.
						8	-	
					▽		-	Medium brown, dense, fine-coarse grained Sand w/tr. clay & fine gravels, dry.
						9	-	
							-	
						10	-	
							-	
						11	-	Medium brown, dense, fine grained Sand w/traces of silt & clay, wet.
							-	
						12	-	
							-	Medium brown, dense, fine-coarse grained Sand w/fine-med. coarse gravels, wet.
						13	-	
							-	
						14	-	
					△		-	Refusal at Total Depth of 14' bgs
						15	-	
							-	
						16		
						17		
						18		
						19		
						20		