

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.

EcoCon, Inc. | Environmental Consulting Services
Office: (253) 238-9270 | Fax: (253) 369-6228 | email: info@ecocononline.com

ECI Project No.: 0359-01-03

14610 Purdy Dr. NW Gig Harbor, Washington 98332

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 Hydrogeologisi 203 203 DAVID R. POLIVKA

Attachments:

Boring Logs: Boring B2, MW1 attempts (4)

ECI Project No.: 0359-01-03

		1	Project:	Monitorir	ng Well Installation	Boring ID:			Attempt 1	
EC envir	onment	al services w.ecocononline.com	Location:	14610 P Harbor, \	urdy Drive Northwest, Gig Washington 98332	В	or	יטו ing:	Atter	npt 1
Anchorage 1	icoma Port	tland	Client:	Tracey L		-	Proj	ect Number:	0359-	01-05
Date Start/Finish:	10/5/201	17	Drilling Me		Direct Push		GW	Unified Soil Class		
Logged By:	Kaden F	Reed	Auger ID/C			SOILS	GP POORLY-GRADED GRAVEL, FI			NOL GIVAVEL
Checked By:		Borehole I	Borehole ID/OD: 2 inches			GC SW	CLAYEY GRAVEL WELL-GRADED SAND) FINE TO COARS	E SAND	
Contractor:	Environmental Probe	Borehole ID/OD: 2 inches Sampler: Macro Core 5					POORLY-GRADED SA SILTY SAND		L SAND	
Operator:		Hammer Wt./Fall:					CLAYEY SAND SILT			
Boring Location:	ing Locations Map	Ground El			LS.	CL UL	CLAY			
Coordinates:			Water Dep	oth:		VE SO	MH	ORGANIC SILT, ORGA	CITY, ELASTIC SI	LT
Weather:	Sunny		Boring De		22.5 feet	COHESIVE SOILS	CH CLAY OF HIGH PLASTICITY, FAT CLAY OH ORGANIC CLAY, ORGANIC SILT			
	,		1 3 1	•	-	O	PT	PEAT		
Depth (ft bgs) Sample Number	PID Reading	Remarks		Soil and Rock Description						Graphical Representation
1		No odor	1	Brown,	dry, coarse, dense, silty sand v	with c	grave		SM	
2										
3			↓							
4		No odor	1	Light brown, dry, coarse, dense, silty sand with gravel Dark brown, dry, coarse, dense, silty sand with gravel Grayish brown, dry, coarse, dense, silty sand with gravel						
5		No odor	Ţ							
6		No odor								
7			X							
8		No odor	- X	Brown, dry, coarse, dense, silty sand with gravel						
9		No odor	-	Brown, dry, coarse, dense, sand with gravel and silt						
10			\dashv							
12			┧							
13		No odor	- X	Brown, dry,	coarse, very dense, sand with	grav	el an	d silt	SW	
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15										
16		No odor		Brown, dry,	coarse, very dense, sand with	cobb	le an	d silt	SW	
17			_							
18		1	4							
19			4							
20			4							
21 22										
23			*	Т	ermination of boring due to ref	usal				
24		1	\dashv	'	Sindustrial borning due to ren	JULI				
25			1							
26			1							
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Notes:										

				1	Project:	Monitorin	ng Well Installation	D		ina ID:	A 44 a 11		
E	CI	enviro	nment	al services	Location:		urdy Drive Northwest, Gig Washington 98332		or	ing ID:	Attempt 2		
	And	horage Tac	oma Port	land	Client:	Tracey L	arson		<u>Proj</u>	ect Number:	0359-	0359-01-05	
D	ate Start/F	Finish:	10/5/201	7	Drilling Me		Direct Push		GW	Unified Soil Class			
	Logged	By:	Kaden R	eed	Auger ID/C	DD:		GP POORLY-G		POORLY-GRADED GR SILTY GRAVEL		. 102 0101122	
Checked By:			Borehole ID/OD:		2 inches	NON-COHESIVE	GC SW	CLAYEY GRAVEL WELL-GRADED SAND	. FINE TO COARS	E SAND			
Contractor: Standard Environmental Probe				Environmental Probe	Sampler: Macro Core 5				SP SM	POORLY-GRADED SA SILTY SAND			
Operator: Russel					Hammer Wt./Fall:					CLAYEY SAND SILT			
E	Boring Loc	ation:	See Bori	ng Locations Map	Ground El	evation:		SILS	CL OL	CLAY ORGANIC SILT, ORGA	NIC CLAY		
	Coordina	ites:			Water Dep	th:		SIVE SC	MH CH	SILT OF HIGH PLASTI CLAY OF HIGH PLAST	CITY, ELASTIC SI	LT	
	Weath	er:	Sunny		Boring De	pth:	13 feet	COHESIVE SOILS	OH PT	ORGANIC CLAY, ORG			
Depth (ft bgs)	Sample Number	Time	PID Reading	Remarks	Soil and Rock Description						Unified Classification	Graphical Representation	
1				No odor	1	Brown,	dry, coarse, dense, silty sand v	with g	grave		SM		
2													
3					X								
4				No odor	-	Brown, dry, coarse, very dense, silty sand with large cobble SM							
5 6				No odor	- I int	Light brown, dry, large grained, very dense, silty sand with cobble							
7				NO OGOI									
8					┪								
9				No odor	Light	Light brown, dry, large grained, very dense, sand with cobble and silt							
10													
11				No odor	Light bro	own, dry, larç	ge grained, very dense, sand w	ith la	ırge c	obble and silt	SW		
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E	CI	enviro	nment	al services	Location:	14610 P Harbor, \	urdy Drive Northwest, Gig Washington 98332	B	or	ing ID:	Attempt 3		
	And	horage Tac	oma Port	land	Client:	Tracey L	arson	_	Proje	ect Number:	0359-	01-05	
D	ate Start/F	Finish:	10/5/201	7	Drilling Me		Direct Push		Unified Soil Classification System GW WELL-GRADED GRAVEL, FINE TO COARSE (
	Logged	By:	Kaden R	eed	Auger ID/C	DD:		SOILS	GP GM	POORLY-GRADED GR SILTY GRAVEL		.102 0.01122	
Checked By:			Borehole I	D/OD: 2 inches		NON-COHESIVE	GC SW	CLAYEY GRAVEL WELL-GRADED SAND	. FINE TO COARS	E SAND			
Contractor: Standard Environmental Probe				Environmental Probe	Sampler: Macro Core 5				SM	POORLY-GRADED SA SILTY SAND			
Operator: Russel					Hammer Wt./Fall:				SC ML	CLAYEY SAND SILT			
Boring Location: See Boring Locations Map				ng Locations Map	Ground El	evation:		OILS	CL UL	CLAY ORGANIC SILT, ORGA	NIC CLAY		
	Coordina	ites:			Water Dep	th:		COHESIVE SOILS	MH CH	SILT OF HIGH PLASTI CLAY OF HIGH PLAST		LT	
	Weath	er:	Sunny		Boring De	pth:	13 feet	COHE	OH PT	ORGANIC CLAY, ORG PEAT	ANIC SILT		
Depth (ft bgs)	Sample Number	Time	PID Reading	Remarks	Soil and Rock Description						Unified Classification	Graphical Representation	
1				No odor	1	Brown,	dry, coarse, dense, silty sand v	with (gravel		SM		
2													
3					-				_				
4				No odor	Brown, dry, coarse, very dense, silty sand with gravel								
5 6				No odor	Ligh	Light brown dry large grained year dense sittle and with cabble							
7				140 0001	Light brown, dry, large grained, very dense, silty sand with cobble SM								
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10				No odor	Light	Light brown, dry, large grained, very dense, sand with cobble and silt							
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E	CI	enviro	nment	al services	Location:		urdy Drive Northwest, Gig Washington 98332	В	or	וחם וט:	Atter	Attempt 4	
	And	horage Tac	oma Port	land	Client:	Tracey L	arson	╣,	Proje	ect Number:	0359-	01-05	
D	ate Start/F	inish:	10/5/201	7	Drilling Me		Direct Push	L	GW	Unified Soil Clas			
	Logged	By:	Kaden R	eed	Auger ID/C	D:		GP POORLY-GRADED GR			TOE GIVAVEE		
Checked By:			Borehole ID/OD:		2 inches	NON-COHESIVE	GC SW	CLAYEY GRAVEL WELL-GRADED SAN	D. FINE TO COARS	SE SAND			
Contractor: Standard Environmental Probe				Environmental Probe	Sampler: Macro Core 5				SP SM	POORLY-GRADED S. SILTY SAND		.2 07 11 10	
Operator: Russel					Hammer Wt./Fall:				SC ML	CLAYEY SAND SILT			
Boring Location: See Boring Locations Map				ng Locations Map	Ground Ele	evation:		SILS	CL UL	CLAY ORGANIC SILT, ORG	ANIC CLAY		
	Coordina	ites:			Water Depth:					SILT OF HIGH PLAST CLAY OF HIGH PLAST	TCITY, ELASTIC SI	LT	
	Weathe	er:	Sunny		Boring De	pth:	15.5 feet	COHESIVE SOILS	OH PT	ORGANIC CLAY, ORG	GANIC SILT		
Depth (ft bgs)	Sample Number	Time	PID Reading	Remarks	Soil and Rock Description						Unified Classification	Graphical Representation	
1				No odor	1	Brown,	dry, coarse, dense, silty sand v	vith c	gravel		SM		
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3					 X						SM		
4				No odor	⊣Ţ Ľ	Light brown, dry, large grained, dense, silty sand with gravel Light brown, dry, large grained, dense, silty sand with cobble Light brown, dry, large grained, very dense, sand with cobble and silt Light brown, dry, large grained, very dense, sand with large cobble and silt							
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11				No odor	Light bro								
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13				No odor	Light	brown, dry, l	arge grained, very dense, sand	d with	ı cobl	ole and silt	SW		
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