



Memo

To: Mark Pugh
Oregon Department of Environmental
Quality Northwest Region Cleanup Section
700 NE Multnomah Street, Suite 600
Portland, OR 97232

Date: September 4, 2024

From: John Kuiper, RG, VP
WSP

c: Ryan Webb, P.E.
The Confederated Tribes of Grand Ronde
Community of Oregon

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Heidi Nelson, DEQ

Subject: **Response to Comments – Blue Heron Mill PPA
Draft Soil and Groundwater Focused Remedial Investigation Report
ECSI 4811 (Order on Consent – PPA; DEQ PPA No. 19-12)**

On behalf of the Confederated Tribes of Grand Ronde Community of Oregon (CTGR), WSP USA Environment & Infrastructure Inc. (WSP) thanks the Oregon Department of Environmental Quality (DEQ) for its considered comments regarding the Draft Soil and Groundwater Focused Remedial Investigation Report (Draft Focused RI). The Draft Focused RI was submitted to the DEQ on February 26, 2024, and DEQ's comments were received on April 3, 2024. WSP has prepared these responses to DEQ's comments. Our responses generally follow the format of the DEQ comments letter, with DEQ comments summarized/paraphrased in italicized text, followed by our responses in standard **bold** text.

GENERAL COMMENTS

- 1) *DEQ no longer recognizes “urban residential” as a generic risk exposure scenario. Please use residential RBCs for screening in the revised report.*

The revised Focused RI Report (and future memos, tables, correspondence, etc.) will reference residential RBCs. The contaminant tables have been updated to reflect this (and updated to address other comments listed below). Updated versions of Tables 1 through 5 (drafts) are attached. These Tables will continue to be updated as additional data is generated (i.e. from the data gaps investigation described below).

- 2) *Risk screening methodology used in the data evaluation does not differentiate between exposure intervals for the various potential receptors. The residential or occupational direct contact exposure pathway, which only considers the upper 3 (sometimes 5) feet of soil, would not be considered a complete pathway for deeper soil unless this deeper soil was brought to the surface or exposed during site grading. This could result in overestimates of remedial soil volumes and/or data gaps identified for vertical soil delineation.*

Risk screening tables and associated data evaluation have been updated to differentiate soils from above and below depths of five (5) feet below ground surface (bgs), with the five-foot depth interval being used as a conservative value considering the potential for future site grading activities). For human health, soils at or above 5 feet are now screened against the residential RBC and soils below 5 feet are screened against the excavation worker RBC. Estimates of soil volumes requiring remediation, and data gaps for vertical delineation of contaminated soils, will be updated in the Revised Focused RI Report.

- 3) *It would be helpful to include a figure showing how the site was divided into “north” and “south” areas for the purpose of the RI.*

A figure showing “north” versus “south” areas will be added to the Revised Focused RI Report.

- 4) *A map of bedrock topography, which would provide information on the depth and extent of unconsolidated deposits would be useful for planning purposes.*

A “Depth to Bedrock” map has been prepared and is attached herein as Figure “X”. A copy of this map also will be included in the revised Focused RI Report.

SPECIFIC COMMENTS

- 5) Section 1.3.1 Report Content, first bullet
Soil Screening did not include total PCBs. See comment on Table 3.

Total PCBs have been added.

- 6) Section 1.3.1 Report Content, last sentence
The recommendations presented in the report are general. Substantive recommendations on additional work to address data gaps or areas that should be remediated should be provided.

The recommendations will be updated based on the results of the forthcoming data gaps investigation (scheduled for October 2024). The updated recommendations will be specific and actionable.

- 7) Section 2.2.1 North Side
The inability to advance S37 and S43 should be discussed in terms of whether this presents a data gap and how it affects delineation of contamination.

Inability to advance S37 and S43 is not considered a data gap. These locations are along the easternmost site boundary where soils are either very thin or absent, and where the presence of shallow bedrock and/or building foundations prevents sampling. The limited amount of soil in this area is assumed to contain similar concentrations of lead and arsenic as the nearby soil samples that were successfully collected from S35, S36, S38, S39, S40, and S41.

- 8) Section 2.3 Bleach Plant Waste Pile Investigation, last paragraph
These samples are not included in Table 1.

The samples will be added to Table 1E.

- 9) Section 2.4.1.1 North Side
Boring logs indicate that temporary wells were installed for 3 hours, not 2 as reported here.

Noted. Report text will be corrected to 3 hours.

- 10) Section 4 Nature and Extent of Contamination
In many cases the source and release mechanism of detected contaminants is unknown (e.g., BaP TEQ, arsenic, lead) and therefore the basis for estimating impacted soil volumes is unclear.

Buildings or other infrastructure may constrain soil contamination. In some areas, e.g. Group 5, there are no bounding samples, so the assignment on extent of contamination seems arbitrary without further explanation in the text.

The estimated volumes of contaminated soils and the estimated boundaries of the contaminated soil areas are primarily meant to serve as a convenient general reference in support of future redevelopment planning activities. In addition, the generally mapped areas of contaminated soils are designed to alert planners and contractors regarding potential soil management requirements for different areas of the site.

- 11) Section 4.2 Data Quality Assessment and Validation
Hotspots are presented here but there is no other discussion in the report on whether hotspot concentrations are present in site media. Include a section that identifies hotspot concentrations. Hot spot considerations should also consider the presence of NAPL or highly concentrated residuals in the tank area, for instance - and any other areas where sheen, etc. is present that is mobile and/or not reliably contained.

A section will be included that discusses the presence/absence of hotspots across the site. Results from the upcoming data-gaps investigation will be used to supplement this discussion.

12) Section 4.3.1.2 North Side RI Group 2 – Parking Lot West of Building 1

Ideally, the RI sample area would have encompassed both samples F01-01 and F01-02, which may have resolved the question on extent of contamination.

Agreed. It is anticipated that this area will remain capped. If excavation is planned to support redevelopment in this area, then additional sampling will be conducted during the excavation process. Likewise, soil contaminant boundaries will be better defined for all areas of the site where excavation is planned and will likely be accomplished by actual closure sampling during the excavation work.

The text indicates sampling depths range from 3 to 12 feet. The maximum sample depth listed in Table 1A is 10 feet.

Noted. Text will be updated to 10 feet.

13) Section 4.3.1.12 South Side RI Group 5

The small areas of lead impacts and basis for volume estimates are not clear. Please expand and clarify.

The estimated volumes/boundaries of lead impacts in this area will be re-drawn based on switching to the Residential RBC and differentiating soil exposure pathways above and below 5 feet bgs. Additional discussion will be added. This will likewise be done for the other soil contamination boundaries as well.

14) Section 4.3.5 UST Area

DEQ RBCs have not been established for heavy oil due to its variable composition. Tables for the RI north area (correctly) do not include screening criteria for heavy oil and they should be removed from data tables. It is acceptable to use TPH-D RBCs for screening, but this should be noted in the data tables for both RI areas.

Tables will be corrected, and TPH-D RBCs will be used in the textual screening discussion only.

15) Section 8.1 Risk Assessment

Without a quantifiable risk assessment, it is unclear how identification of areas requiring remedial action will be identified for carrying into a feasibility study.

The presence of extensive hardscape across the site makes it impractical to collect sufficient soil samples to generate a quantifiable risk assessment for soil. Based on the high number and widely distributed nature of RBC exceedances documented across the site to date, it seems the practical alternative is to assume that all soils pose an unacceptable risk to human health. The feasibility study would then look at two main options for addressing risk posed by soils at the site:

1) capping (which is already in place across most of the site) and 2) excavation/removal (which would be used where future development activities disturb the existing cap).

The forthcoming data gaps evaluation will include groundwater monitoring wells which will provide additional quantifiable data for evaluating risk from shallow/perched groundwater.

16) Section 8.2 Specific Site Areas

Please include the type of RBC (residential/occupational/construction/excavation work) is exceeded in each area.

This will be added.

Recommendations for specific investigative or remedial tasks to address Table 6 data gaps should be provided. It would be helpful to include a column on Table 6 with the general approach to addressing each data gap.

Table 6 will be updated following completion of the forthcoming data gaps investigation. If additional data gaps remain then a column will be added with the general approach to addressing the data gap(s).

17) Tables

Tables 1A-1F are not referenced in the body of the report.

Noted. References will be added.

- 18) Table 2.
Please fix the page number formatting.
This has been fixed.
- 19) Table 3, Page 1
Total PCBs should be compared to RBC for total PCBs.
This has been done in the updated table.
- 20) Table 3, Page 7
Please check the screening criteria for 2,3,7,8 TCDD and 2,3,7,8 TCDD Equivalents. E.g., occupational, construction and excavation worker RBCs for 2,3,7,8 TCDD Equivalents are not listed.
Noted.
- 21) “W”-series boring logs
It would be helpful to indicate on the logs that the drill casing was driven to target depth and no soil samples or cuttings were collected/observed.
Noted.
- 22) Boring log S28
Table 1A indicates a deep sample collected from 11-12 feet; this log lists 8-9 feet.
Noted. Table 1A will be corrected to reflect a sample depth of 9-10 feet (which is what is shown on the boring log).
- 23) Boring Log S30
Tables 1A et al list boring depths as 9 feet.
Noted. Depths in Tables have been corrected.
- 24) Boring Logs S35, S36 and S38
Boring depths listed in Tables 1 differ than what is indicated on these logs.
Noted. Depths in Tables have been corrected.
- 25) Figure 4A
The estimated extent of lead is based on 800 mg/kg, the DEQ RBC for direct contact under occupational exposure settings. For other contaminants of concern urban residential RBCs are used for inferring extent of contamination.
Figure 4A will be updated to show extent of contamination based on the Residential RBC (for soils at or above 5 feet bgs) and Excavation Worker RBC (for soils below 5 feet bgs). The extend of lead will be based on the updated 200 mg/kg value for a Residential receptor.

CLOSING

If you have any questions regarding this Response to Comments, please let us know. WSP plans to submit a Sampling and Analysis Plan (SAP) addendum in late September 2024 to address data gaps on the south portion of the site. It is our understanding that Stantec will submit a SAP addendum to address data gaps on the north portion of the site (UST removal area). Upon completion of the data gaps investigation WSP will submit a revised Focused RI Report.

LIMITATIONS

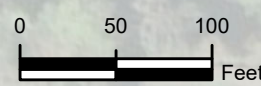
WSP's services have been performed in accordance with the normal and reasonable standard of care exercised by similar professionals performing services under similar conditions in similar geographic locations. Please be aware that WSP's interpretation is limited to site conditions present at the time of WSP's sampling. Except for our stated standard of care, no other warranties or guarantees are offered as part of WSP's contracted services.

Attachments: Figure X – Depth to Bedrock
Tables 1E, 2, 3, 4 and 5

ATTACHMENTS

W i l l a m e t t e R i v e r

 Boring Identification/Location
 Inferred Bedrock Depth (in Feet)
 Inferred Bedrock Depth Contour(in Feet)
 Site Boundary



DATE	SEPTEMBER 2024
SCALE	1" = 100'
PROJECT NO.	961M13558.04
FIGURE	X

Table 1E - Sample Collection Summaries
Sampling Design and Rationale - Bleach Plant Waste Pile
Former Blue Heron Paper Company Mill
Oregon City, Oregon

Area	Proposed Borehole ID	Borehole ID Used Per Sample Location	Sample Location	Sample Depth (ft)	Waste Depth at Location (feet bgs)	Surface Water at Location	Soil Type	Soil Color	Debris Type	Waste Components (By %)	Composite Sample ID	Petroleum Hydrocarbons			Metals by 6020B	Cr6 EPA 3060A/7196A	Metals TCLP List by 1311	VOCs by EPA 8260	VOCs TCLP List by 1311	SVOCs by EPA 8270	SVOCs TCLP List by 1311	PAHs by 8270E SIM	PCBs By 8082A	Dioxin/ Furans by 8290	pH EPA 9045D	Asbestos EPA 600/ R- 93-116	Sample collection notes	Latitude (NAD83)		Longitude (NAD83)		
												TPH (NWTPH-HCID)	Gasoline-Range Organics (NWTPH-Gs)	Diesel-Range Organics (NWTPH-Ds)																		
Bleach Plant Waste Pile Southern Section	-	BH-WP-17-FLF-GRAB-20230816	Sampled from north end of south pile, near the wall under the train track	-	-	-	-	-	Fluff	Fluff - 100%	-	1		1	1	1			1		1		1	1	1	Taken from north end of south pile, near the wall under the train track. Large pile of fluff like debris that backs up to a wall (noting you could see the surface from by the pile, meaning there was no roof above the pile).	45.35392051		-122.6126964			
	BH-WP-01-SOL-0.0-3.0'	BH-WP-01-SOL-3'-20230816	Sampled from test pit 1 - 21' east from stairs / 20' north of dam wall	3.0 ft	3.0 ft	Saturated	Clayey Sand Mix (SC)	Brown to Dark Brown	Metal Wire / Plastic Wrappers	Soil - 75% Wood - 10% Fluff - 5% Concrete - 5% Brick - 5%	BH-WP-Comp01-SOL	1			1	1	1	1	1	1	1	1	1	1	1	First sample was collected from test pit #1 (at 3.0') - soil condition was noted to be saturated.	45.353835502		-122.612795547			
	BH-WP-02-SOL-0.0-2.0'	BH-WP-02-SOL-2'-20230816	Sampled from test pit 2 - 34' east of stairs / 20' north of dam wall	2.0 ft	3.0 ft	Saturated	Clayey Gravel (GC) / Clayey Sand Mix (SC)	Brown to Dark Brown	Bottle Cap, Plastic Rope, Bits of Metal																	Second sample was collected from test pit #2 (at 2.0') - soil condition was noted to be saturated. Deep hollow sounding concrete layer was reported at 3.0'. ~2 hours after sampling, the test pit was noted to be almost halfway filled with water.	45.3538133616		-122.612753113			
	BH-WP-03-SOL-0.0-0.5"	BH-WP-03-SOL-5"-20230816	64' east of stairs / 20' north of dam wall	Surface	< 0.5"	Damp	Clayey Sand Mix (SC)	Light Brown / Streaks of Orange	No Notable Debris																	Sample was collected near a large pile of greenish- yellow rocks. Noted that the surface sample was damp with water.	45.353765414		-122.612661216			
	BH-WP-04-SOL-0.0-0.5"	BH-WP-04-SOL-5"-20230816	34' east of stairs / 32' north of dam wall	Surface	< 0.5"	Saturated	Clayey Sand Mix (SC)	Brown	No Notable Debris																	Noting that this sample area railroad trestles around (some had fallen down)	45.3538388689		-122.612726044			
	BH-WP-05-SOL-0.0-0.5"	BH-WP-05-SOL-5"-20230816	34' east of stairs / 13' north of dam wall	Surface	< 0.5"	Saturated	Clayey Gravel (GC)	Brown	Metal Wire																	Sample area was highly saturated, sample location had a small stream running through the area. Sample area was noted to have a high amount of debris.	45.353791095		-122.612775430			
	BH-WP-01-DEB-0-3.0'	BH-WP-01-DEB-20230816	5.0' radius around BH-WP-01-SOL-3'-20230816	0-3.0'	-	Saturated	-	-	Metal Wire / Plastic Wrappers		BH-WP-Comp01-DEB																-	5.0' radius around sample point BH-WP-01-SOL-3'-20230816				
	BH-WP-02-DEB-0-2.0'	BH-WP-02-DEB-20230816	5.0' radius around BH-WP-02-SOL-2'-20230816	0-2.0'	-	Saturated	-	-	Bottle Cap, Plastic Rope, Bits of Metal																		-	5.0' radius around sample point BH-WP-02-SOL-2'-20230816				
	BH-WP-03-DEB-0.0'	BH-WP-03-DEB-20230816	5.0' radius around BH-WP-03-SOL-5"-20230816	Surface	-	Damp	-	-	Unidentifiable bits of various types of debris																		-	5.0' radius around sample point BH-WP-03-SOL-5"-20230816				
	BH-WP-04-DEB-0.0'	BH-WP-04-DEB-20230816	5.0' radius around BH-WP-04-SOL-5"-20230816	Surface	-	Saturated	-	-	Unidentifiable bits of various types of debris																		-	5.0' radius around sample point BH-WP-04-SOL-5"-20230816				
	BH-WP-05-DEB-0.0'	BH-WP-05-DEB-20230816	5.0' radius around BH-WP-05-SOL-5"-20230816	Surface	-	Saturated	-	-	Metal Wire																		-	5.0' radius around sample point BH-WP-05-SOL-5"-20230816				
Bleach Plant Waste Pile Middle Section	BH-WP-06-SOL-0.0-0.5"	BH-WP-06-SOL-5"-20230816	Sampled from test pit 1 - 11' east of walk path / 84' north of dam wall	0-0.5"	1.9 ft	Dry	Clayey Gravel (GC)	Brown	Concrete Chunks	Soil - 80% Wood - 5% Fluff - 5% Concrete - 5% Brick - 5%	BH-WP-Comp02-SOL	1			1	1	1	1	1	1	1	1	1	1	1	First sample was collected from test pit #1 (at 0.5')	45.3539935181		-122.612689676			
	BH-WP-07-SOL-0.0-1.0'	BH-WP-07-SOL-1'-20230816	Sampled from test pit 2 - 16' west of walk path / 68' north of dam wall	1.0 ft	2.1 ft	Saturated	Clayey Gravel (GC)	Brown to Dark Brown	Metal Wire / Glass																	Second sample was collected from test pit #2 (at 1.0')	45.35400092		-122.612807334			
	BH-WP-08-SOL-0.0-2.0'	BH-WP-08-SOL-2'-20230816	Sampled from test pit 3 - 24' west of walk path / 68' north of dam wall	2.0 ft	3.0 ft	Saturated	Poorly Graded Gravel (GP) / Clayey Sand Mix (GC)	Dark Brown	Plastic Wrapping, Glass, Concrete Chunks																	Third sample was collected from test pit #3 (at 2.0')	45.3540146356		-122.612833622			
	BH-WP-09-SOL-0.0-0.5"	BH-WP-09-SOL-5"-20230816	14' west of walk path / 87' north of dam wall	Surface	<0.5"	Saturated	Clayey Sand Mix (SC)	Dark Brown	Wood Chunks																	This are was noted to be very muddy, samples were saturated	45.354041057		-122.612761312			
	BH-WP-10-SOL-0.0-0.5"	BH-WP-10-SOL-5"-20230816	16' west of walk path / 87' north of dam wall	Surface	<0.5"	Saturated	Clayey Sand Mix (SC)	Dark Brown	Wood Chunks																	This are was noted to be very muddy, samples were saturated	45.3540474047		-122.612773478			
Bleach Plant Waste Pile Middle Section (cont.)	BH-WP-06-DEB-0-0.5"	BH-WP-06-DEB-20230816	5.0' radius around BH-WP-06-SOL-5"-20230816	0-0.5"	-	Dry	-	-	Concrete Chunks/ Unidentifiable bits of various types of debris	Soil - 80% Wood - 5% Fluff - 5% Concrete - 5% Brick - 5% (cont.)	BH-WP-Comp02-DEB																	-	5.0' radius around sample point BH-WP-06-SOL-5"-20230816			
	BH-WP-07-DEB-0-1.0'	BH-WP-07-DEB-20230816	5.0' radius around BH-WP-07-SOL-1'-20230816	0-1.0'	-	Saturated	-	-	Metal Wire / Glass																			-	5.0' radius around sample point BH-WP-07-SOL-1'-20230816			
	BH-WP-08-DEB-0-2.0'	BH-WP-08-DEB-20230816	5.0' radius around BH-WP-08-SOL-2'-20230816	0-2.0'	-	Saturated	-	-	Plastic Wrapping, Glass, Concrete Chunks																			-	5.0' radius around sample point BH-WP-08-SOL-2'-20230816			
	BH-WP-09-DEB-0.0'	BH-WP-09-DEB-20230816	5.0' radius around BH-WP-09-SOL-5"-20230816	Surface	-	Saturated	-	-	Wood Chunks/ Unidentifiable bits of various types of debris																			-	5.0' radius around sample point BH-WP-09-SOL-5"-20230816			
	BH-WP-10-DEB-0.0'	BH-WP-10-DEB-20230816	5.0' radius around BH-WP-10-SOL-5"-20230816	Surface	-	Saturated	-	-	Wood Chunks/ Unidentifiable bits of various types of debris																			-	5.0' radius around sample point BH-WP-10-SOL-5"-20230816			
Bleach Plant Waste Pile Northern Section	-	BH-WP-18-FLF-GRAB-20230816	Sampled 14.0' south of test pit 1	-	-	-	-	-	Fluff	Fluff - 100%	-	1			1	1	1				1			1	1	1	Taken 14.0' south of test pit one. (Noting you could see the surface from by the pile, meaning there was no roof above the pile).	45.35404678		-122.6127083		
	BH-WP-11-SOL-0.0-1.5'	BH-WP-11-SOL-1.5'-20230816	Sampled from test pit 1 - 7' east of walk path / 113' north of dam wall	1.5 ft	1.5 ft	Damp	Clayey Gravel (GC)	Brown	Bits of Plastic, Glass, Metal Shards	Soil - 75% Wood - 5% Fluff - 5% Concrete - 10% Brick - 5%	BH-WP-Comp03-SOL	1			1	1	1	1	1	1	1	1	1	1	1	1	First sample was collected from test pit #1 (at 1.5'). Test pit was noted to be separated from the larger room in the basement by a large cement wall.	45.3540678257		-122.612646240		
	BH-WP-12-SOL-0.0-2.5'	BH-WP-12-SOL-2.5'-20230816	Sampled from test pit 2 - 24' west of walk path / 104' north of dam wall	2.5 ft	0.5"	Saturated	Clayey Gravel (GC)	Brown	Fabric String, Plastic Wrapping																		Second sample was collected from test pit #2 (at 1.5')	45.3540971761		-122.612759725		
	BH-WP-13-SOL-0.0-0.5"	BH-WP-13-SOL-5"-20230816	24' west of walk path / 109' north of dam wall	Surface	<0.5"	Saturated	Clayey Gravel (GC)	Brown	Bits of Wood																		This are was noted to be very muddy, samples were saturated	45.3541026686		-122.612754187		
	BH-WP-14-SOL-0.0-0.5"	BH-WP-14-SOL-5"-20230816	47' west of walk path / 138' north of dam wall	Surface	<0.5"	Damp	Clayey Sand Mix (SC)	Brown to Dark Brown	Wood, Plastic Wrapping, Glass, Debris from Tank																		Sample was collected at the base of a large tank (from around the front side of the tank)	45.3541716425		-122.612759571		
	BH-WP-15-SOL-0.0-0.5"	BH-WP-15-SOL-5"-20230816	47' west of walk path / 138' north of dam wall	Surface	<0.5"	Damp	Clayey Sand Mix (SC)	Brown to Dark Brown	Wood, Plastic Wrapping, Glass, Debris from Tank																		Sample was collected at the base of a large tank (from around the back side of the tank)	45.3542055505		-122.612768118		
	BH-WP-11-DEB-0-1.5'	BH-WP-11-DEB-20230816	5.0' radius around BH-WP-11-SOL-1.5'-20230816	0-1.5'	-	Damp	-	-	Bits of Plastic, Glass, Metal Shards		BH-WP-Comp04-DEB																-	5.0' radius around sample point BH-WP-11-SOL-1.5'-20230816				
	BH-WP-12-DEB-0-2.5'	BH-WP-12-DEB-20230816	5.0' radius around BH-WP-12-SOL-2.5'-20230816	0-2.5'	-	Saturated	-	-	Fabric String, Plastic Wrapping																		-	5.0' radius around sample point BH-WP-12-SOL-2.5'-20230816				
	BH-WP-13-DEB-0.0'	BH-WP-13-DEB-20230816	5.0' radius around BH-WP-13-SOL-5"-20230816	Surface	-	Saturated	-	-	Bits of Wood/ Unidentifiable bits of various types of debris																		-	5.0' radius around sample point BH-WP-13-SOL-5"-20230816				
	BH-WP-14-DEB-0.0'	BH-WP-14-DEB-20230816	5.0' radius around BH-WP-14-SOL-5"-20230816	Surface	-	Damp	-	-	Wood, Plastic Wrapping, Glass, Debris from Tank																		-	5.0' radius around sample point BH-WP-14-SOL-5"-20230816				
	BH-WP-15-DEB-0.0'	BH-WP-15-DEB-20230816	5.0' radius around BH-WP-15-SOL-5"-20230816	Surface	-	Damp	-	-	Wood, Plastic Wrapping, Glass, Debris from Tank																		-	5.0' radius around sample point BH-WP-15-SOL-5"-20230816				
Total													4	6	6	4	4	7	3	6	4	6	4	3	4	4	4					

Table 2 - North Side Soil Sampling Results
Soil Sample Analytical Results - Total Petroleum Hydrocarbons, Arsenic, and Lead
Former Blue Heron Paper Company Mill
Oregon City, Oregon

Sample ID	Date Sampled	NWTPH-Gx (Gasoline)	NWTPH-Dx (Diesel)	NWTPH-Dx (Motor Oil)	Arsenic	TCLP Arsenic (mg/L)	Lead	TCLP Lead (mg/L)
BH-RI-S17-3'-4'	8/21/2023	5.58 U	22.1 U	136 J	3.73	--	21.8	--
BH-RI-S17-4'-5'	8/21/2023	6.01 U	26.1 U	52.1 U	5.42	--	14.9	--
BH-RI-S17-9'-10'	8/21/2023	5.05 U	22.8 U	45.7 U	5.2	--	28.5	--
BH-RI-S18-3'-4'	8/21/2023	4.93 U	23.6 U	47.2 U	84.3	0.100 U	5.28	0.0500 U
BH-RI-S18-4'-5'	8/21/2023	4.83 U	23.9 U	51.9	4.35	--	33	--
BH-RI-S18-9'-10'	8/21/2023	5.26 U	24.7 U	49.4 U	--	--	74.9	--
BH-RI-S19-3'-4'	8/21/2023	6.13 U	1,550	2,680	4.97	--	67.9	--
BH-RI-S19-4'-5'	8/21/2023	4.98 U	929 U	4,380	3.6	0.100 U	345	0.115
BH-RI-S19-9'-10'	8/21/2023	4.94 U	21.6 U	43.1 U	--	--	7.86	--
BH-RI-S30-3'-4'	8/22/2023	--	--	--	--	--	35.9	--
BH-RI-S30-6'-7'	8/22/2023	--	--	--	--	--	2.94	--
BH-RI-S35-3'-4'	8/24/2023	--	--	--	28.3	0.100 U	3,010	9.55
BH-RI-S36-3'-4'	8/24/2023	--	--	--	5.35	0.100 U	154	0.0500 U
BH-RI-S38-3'-4'	8/24/2023	--	--	--	2.85	--	--	--
BH-RI-S38-4'-5'	8/24/2023	--	--	--	2.77	--	--	--
BH-RI-S39-3'-4'	8/24/2023	--	--	--	3.09	--	--	--
BH-RI-S39-4'-5'	8/24/2023	--	--	--	12.8	--	--	--
BH-RI-S39-6'-7'	8/24/2023	--	--	--	4.06	--	--	--
BH-RI-S40-3'-4'	8/24/2023	--	--	--	3.3	--	--	--
BH-RI-FD03 (FD of BH-RI-S40-3'-4')	8/24/2023	--	--	--	2.26	--	--	--
BH-RI-S40-4'-5'	8/24/2023	--	--	--	3.38	--	--	--
BH-RI-S40-6'-7'	8/24/2023	--	--	--	4.84	--	--	--
BH-RI-S59-3'-4'	8/22/2023	--	--	--	--	--	4.78	--
BH-RI-S60-3'-4'	8/22/2023	--	--	--	--	--	19.8	--
BH-RI-S61-3'-4'	8/22/2023	--	--	--	--	--	2,770	14.1
BH-RI-S62-2'-3'	8/21/2023	--	--	--	--	--	3.81	--
BH-RI-S63-2'-3'	8/21/2023	--	--	--	--	--	7.25	--
BH-RI-S64-2'-3'	8/21/2023	--	--	--	--	--	13.4	--
BH-RI-S65-3'-4'	8/22/2023	--	--	--	--	--	147	0.0500 U
BH-RI-S66-3'-4'	8/22/2023	--	--	--	--	--	82.7	--
BH-RI-S67-3'-4'	8/22/2023	--	--	--	--	--	64.2	--
Clean Fill/Background Screening Values		31	1,100	NA	8.8	NA	28	NA
Soil Ingestion, Dermal Contact, and Inhalation RBC - Residential ¹		1,200	1,100	NA	0.43	NA	200	NA
Soil Ingestion, Dermal Contact, and Inhalation RBC - Occupational ¹		20,000	14,000	NA	1.9	NA	800	NA
Soil Ingestion, Dermal Contact, and Inhalation RBC - Construction Worker ¹		9,700	4,600	NA	15	NA	800	NA
Soil Ingestion, Dermal Contact, and Inhalation RBC - Excavation Worker ²		NA	NA	NA	420	NA	800	NA
RCRA TCLP Trigger Concentration (20x Rule)		NA	NA	NA	100	NA	100	NA
RCRA TCLP SL (mg/L)		NA	NA	NA	NA	5.0	NA	5.0
Portland Harbor Site Wide RALs		NA	NA	NA	NA	NA	NA	NA
Portland Harbor PTW Threshold		NA	NA	NA	NA	NA	NA	NA
Portland Harbor Navigation Channel RALs		NA	NA	NA	NA	NA	NA	NA

Notes:
All results expressed as milligrams per kilogram, except for leachate samples which are reporting in milligrams per liter
bold = indicates concentrations detected above method reporting limits
shaded gray = indicates concentration exceeds clean fill/background screening value
highlighted yellow = indicates concentration exceeds background and urban residential direct contact RBC
highlighted orange = indicates concentration exceeds background and occupational direct contact RBC
highlighted red = indicates concentration exceeds background and constuction worker direct contact RBC
highlighted blue = indicates TCLP concentration exceeds characteristic hazardous waste threshold
FD = field duplicate
J = The result is an estimated value
mg/L = milligrams per liter
NA = Not Available, no screening value is listed for this analyte.
RCRA = Resource Conservation and Recovery Act
TCLP = Toxic Characteristic Leaching Procedure
U = Not detected, the associated value is the method reporting limit

¹ = DEQ RBC screened against soils shallower than 5 feet below ground surface
² = DEQ RBC screened against soils deeper than 5 feet below ground surface

Clean Fill/Background Screening Values (Portland Basin), Oregon DEQ April 2019 revision
RBCs = State of Oregon Department of Environmental Quality Risk Based Concentrations, May 2018 amended August 2023
RCRA TCLP = Resource Conservation and Recovery Act toxicity characteristic waste screening levels (40 Code of Federal Regulations 261.24)
Portland Harbor Remedial Action Levels (RAL) and Principal Threat Waste (PTW) Screening Values; USEPA 2017, amended May 2020

Table 2 - North Side Soil Sampling Results
Soil Sample Analytical Results - Polycyclic Aromatic Hydrocarbons
Former Blue Heron Paper Company Mill
Oregon City, Oregon

Sample ID	Date Sampled	1-Methy-naphthalene	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)-anthracene	Benzo(a)-pyrene	Benzo(b)-fluoranthene	Benzo(g,h,i)-perylene	Benzo(k)-fluoranthene	Chrysene	Dibenz(a,h)-anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Total PAHs	Benzo[a]-pyrene TEQ	
BH-RI-S17-3'-4'	8/21/2023	0.0247	0.0312	0.0335	0.210	0.325	1.16	1.42	1.41	0.674	0.586 J	1.18	0.147	2.71	0.114	0.809	0.108	1.10	2.69	15	1.9	
BH-RI-S17-4'-5'	8/21/2023	12.5 U	12.5 U	12.5 U	12.5 U	12.5 U	12.5 U	12.5 U	12.5 U	12.5 U	12.5 U	12.5 U	12.5 U	0.0175	12.5 U	12.5 U	12.5 U	12.5 U	0.0176	0.035	ND	
BH-RI-S17-9'-10'	8/21/2023	11.6 U	11.6 U	11.6 U	11.6 U	11.6 U	0.0150	0.0134	0.0172 J	11.6 U	11.6 U	0.0142	11.6 U	0.0209	11.6 U	11.6 U	11.6 U	0.0129	0.0218	0.12	0.017	
BH-RI-S18-3'-4'	8/21/2023	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	0.0171	0.0179	0.0241 J	11.7 U	11.7 U	0.0271	11.7 U	0.0592	11.7 U	0.0141	11.7 U	0.0582	0.0560	0.27	0.023	
BH-RI-S18-4'-5'	8/21/2023	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	0.0202	11.4 U	11.4 U	11.4 U	0.0147	0.0223	0.057	ND	
BH-RI-S19-3'-4'	8/21/2023	131 U	131 U	131 U	131 U	131 U	131 U	131 U	131 U	0.136	131 U	131 U	131 U	131 U	131 U	131 U	131 U	131 U	131 U	0.14	0.0014	
BH-RI-S19-4'-5'	8/21/2023	113 U	113 U	113 U	113 U	113 U	135 U	113 U	113 U	0.118	113 U	135 U	113 U	113 U	113 U	113 U	113 U	113 U	113 U	0.12	0.0012	
BH-RI-S20-3'-4'	8/21/2023	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	10.4 U	0.0179	10.4 U	0.018	ND	
BH-RI-S20-7'-8'	8/21/2023	11.2 U	0.0156	0.0184	11.2 U	11.2 U	11.2 U	11.2 U	11.2 U	11.2 U	11.2 U	11.2 U	11.2 U	0.0156	0.0177	11.2 U	0.0372	0.0433	11.2 U	0.15	ND	
BH-RI-S21-3'-4'	8/21/2023	0.0286	0.0393	0.0528	0.188	0.202 J	0.749	0.956	0.971 J	0.528	0.372 J	0.796	0.102	1.51	0.0665	0.593	0.113	0.704 J	1.70	9.7	1.3	
BH-RI-FD01 (FD of BH-RI-S21-3'-4')	8/21/2023	0.017	0.0284	0.0413	0.123	0.120 J	0.550	0.731	0.763 J	0.407	0.294 J	0.596	0.077	1.07	0.0442	0.478	0.0953	0.396 J	1.17	1.7	0.99	
BH-RI-S21-9'-10'	8/21/2023	10.8 U	10.8 U	10.8 U	0.0213	0.0310	0.171	0.184 J	0.202 J	0.0784	0.0813 J	0.166	0.0188	0.273 J	10.8 U	0.108	0.0121	0.0585	0.257 J	7.0	0.25	
BH-RI-FD02 (FD of BH-RI-S21-9'-10')	8/21/2023	11.1 U	11.1 U	11.1 U	11.1 U	0.0142	0.0530	0.0583 J	0.0672 J	0.0258	0.027 J	0.0537	11.1 U	0.0876 J	11.1 U	0.0364	11.1 U	0.0323	0.0823 J	0.54	0.075	
BH-RI-S22-3'-4'	8/21/2023	112 U	112 U	112 U	0.194	0.217	0.820	0.925	0.976 J	0.585	0.428 J	0.892	112 U	1.80	112 U	0.660	112 U	0.663	1.92	10	1.2	
BH-RI-S22-9'-10'	8/21/2023	3.18	5.65	5.55	146 U	3.07	0.928	0.429	0.532 J	0.159	0.214 J	0.892	0.0351	5.97	5.87	0.194	12.8	14.6	3.93	64	0.63	
BH-RI-S23-3'-4'	8/22/2023	0.11	0.21	0.114	0.0215	0.0401	0.0159	0.0148	0.0137	11.8 U	11.8 U	0.0189	11.8 U	0.0656	0.0427	11.8 U	1.36	0.189	0.0790	2.3	0.018	
BH-RI-S23-9'-10'	8/22/2023	12.8 U	12.8 U	12.8 U	12.8 U	12.8 U	12.8 U	12.8 U	12.8 U	12.8 U	12.8 U	12.8 U	12.8 U	12.8 U	12.8 U	12.8 U	0.0163	0.0195	12.8 U	0.036	ND	
BH-RI-S24-3'-4'	8/22/2023	11.0 U	11.0 U	11.0 U	11.0 U	11.0 U	11.0 U	11.0 U	11.0 U	11.0 U	11.0 U	11.0 U	11.0 U	11.0 U	11.0 U	11.0 U	11.0 U	11.0 U	11.0 U	0.0	ND	
BH-RI-S24-9'-10'	8/22/2023	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	0.0194	12.0 U	0.019	ND	
BH-RI-S24A-3'-4'	8/22/2023	47.0 U	47.0 U	47.0 U	0.429	0.252	1.18	1.95	2.22	1.65	0.871 J	1.84	0.252	3.34	0.0471	1.72	0.185	1.68	3.56	21	2.7	
BH-RI-S24A-9'-10'	8/22/2023	12.4 U	12.4 U	12.4 U	12.4 U	12.4 U	12.4 U	12.4 U	12.4 U	12.4 U	12.4 U	12.4 U	12.4 U	12.4 U	12.4 U	12.4 U	12.4 U	12.4 U	12.4 U	0.0	ND	
BH-RI-S25-3'-4'	8/21/2023	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	10.5 U	0.0	ND	
BH-RI-S25-9'-10'	8/21/2023	12.2 U	12.2 U	12.2 U	12.2 U	12.2 U	12.2 U	12.2 U	12.2 U	12.2 U	12.2 U	12.2 U	12.2 U	12.2 U	12.2 U	12.2 U	12.2 U	12.2 U	12.2 U	0.0	ND	
BH-RI-S26-3'-4'	8/21/2023	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	11.4 U	0.0	ND	
BH-RI-S26-9'-10'	8/21/2023	11.8 U	11.8 U	11.8 U	11.8 U	11.8 U	11.8 U	11.8 U	11.8 U	11.8 U	11.8 U	11.8 U	11.8 U	11.8 U	11.8 U	11.8 U	11.8 U	11.8 U	11.8 U	0.0	ND	
BH-RI-S27-3'-4'	8/21/2023	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	0.0	ND	
BH-RI-S27-7'-8'	8/21/2023	12.6 U	12.6 U	12.6 U	12.6 U	12.6 U	12.6 U	12.6 U	12.6 U	12.6 U	12.6 U	12.6 U	12.6 U	12.6 U	12.6 U	12.6 U	12.6 U	12.6 U	12.6 U	0.0	ND	
BH-RI-S28-3'-4'	8/22/2023	13.2 U	0.0152	13.2 U	0.0186	0.0141	0.0720	0.0955	0.133	0.0639	0.0415 J	0.131	13.2 U	0.133	13.2 U	0.0694	0.055	0.0648	0.182	1.1	0.12	
BH-RI-S28-11'-12'	8/22/2023	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	0.0148	12.0 U	12.0 U	0.0185	12.0 U	0.0168	12.0 U	12.0 U	12.0 U	0.0175	0.0255	0.093	0.0015	
BH-RI-S29-3'-4'	8/22/2023	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	0.017	0.0167	11.7 U	0.034	ND
BH-RI-S29-5.5'-6.5'	8/22/2023	10.8 U	10.8 U	10.8 U	10.8 U	10.8 U	10.8 U	10.8 U	10.8 U	10.8 U	10.8 U	0.0126	10.8 U	10.8 U	10.8 U	10.8 U	10.8 U	0.0115	0.0130	0.037	ND	
BH-RI-S30-3'-4'	8/22/2023	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	0.0166	0.0216	0.0247	0.0171	12.0 U	0.0313	12.0 U	0.0200	12.0 U	0.0167	0.0143	0.0155	0.0358	0.21	0.028	
BH-RI-S30-6'-7'	8/22/2023	0.104	0.202	0.108	0.0174	0.0337	12.3 U	12.3 U	12.3 U	12.3 U	12.3 U	12.3 U	12.3 U	0.0462	0.0359	12.3 U	1.31	0.163	0.0584	2.1	0.0	
BH-RI-S30A-3'-4'	8/24/2023	12.3 U	12.3 U	12.3 U	12.3 U	12.3 U	12.3 U	12.3 U	12.3 U	12.3 U	12.3 U	12.3 U	12.3 U	12.3 U	12.3 U	12.3 U	12.3 U	0.0221	12.3 U	0.022	ND	
BH-RI-S30A-8'-9'	8/24/2023	0.0135	0.0238	0.0168	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	12.0 U	0.150	0.0299	12.0 U	0.23	ND	
BH-RI-S30B-3'-4'	8/24/2023	10.7 U	10.7 U	10.7 U	10.7 U	10.7 U	10.7 U	10.7 U	10.7 U	10.7 U	10.7 U	10.7 U	10.7 U	10.7 U	10.7 U	10.7 U	10.7 U	10.7 U	10.7 U	0.0	ND	
BH-RI-S30B-8'-9'	8/24/2023	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	11.7 U	0.0	ND	
BH																						

Notes:

All results expressed as milligrams per kilogram

bold = indicates concentrations detected above method reporting limits

shaded gray = indicates concentration exceeds clean fill screening value

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Table 3 - South Side Soil, Waste Pile, and Catch Basin Sampling Results
Former Blue Heron Paper Company Mill
Oregon City, Oregon

Screening Criteria	TPH by NWTPH-HCID			TPH by NWTHP-Gx	TPH by NWTPH-Dx	PCBs by EPA 8082A								Total Metals by EPA 6020B														Hexavalent Chromium by EPA 7195A	
	Gasoline Range (C6-C10)	Diesel Range (C10-C22)	Oil Range (C22-C40)	Gasoline Range (C6-C10)	Diesel Range (C10-C22)	Oil Range (C22-C40) [Bunker C heating oil]	Total PCBs	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Antimony	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc	Hexavalent Chromium	
Portland Harbor PTW Threshold	-	-	-	-	-	-	200	200	200	200	200	200	200	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DEQ RBCss Residential ¹	1,200	1,100	-	1,200	1,100	-	230	230	230	203	230	230	230	230	-	0.43	160	78	120,000	3,100	200	23	1,500	-	390	-	-	0.30	
DEQ RBCss Occupational ¹	20,000	14,000	-	20,000	14,000	-	590	590	590	590	590	590	590	590	-	1.9	2,300	1,100	-	47,000	800	350	22,000	-	5,800	-	-	6.3	
DEQ RBCss Construction Worker ¹	9,700	4,600	-	9,700	4,600	-	4,900	4,900	4,900	4,900	4,900	4,900	4,900	4,900	-	15	700	350	530,000	14,000	800	110	7,000	-	1,800	-	-	49	
DEQ RBCss Excavation Worker ²	-	-	-	-	-	-	140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000	-	420	19,000	9,700	-	390,000	800	2,900	190,000	-	49,000	-	-	1,400	
DEQ RBCsw Residential ¹	31	9,500	-	31	9,500	-	240	240	240	240	240	240	240	240	-	-	-	-	-	-	30	-	-	-	-	-	-	-	
DEQ RBCsw Occupational ¹	130	-	-	130	-	-	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	-	-	-	-	-	-	30	-	-	-	-	-	-	-	
Sediment Screening Level	-	-	-	-	-	-	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	-	2.9	-	0.63	76	-	35	0.20	-	-	-	-	123	-	
Clean Fill Screening Level	-	-	-	-	-	1,100	230	1,100	4.8	4.8	41	7.3	41	240	0.56	9	2.0	0.6	76	34	28	0.230	47	0.71	0.82	5.2	180	0.040	
RCRA Characteristic Waste	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	
Sample ID	Sample Date	mg/kg				µg/kg dry								mg/kg dry														mg/kg	
BH-RI-S1-1.5-2.0	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	10.5	U 10.1	U 10.1	10.5	U 10.1	U 10.1	U 10.1	U 10.1	U 10.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BH-RI-S1-2.5-3.0	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	ND	U 10.3	U 10.3	U 10.3	U 10.3	U 10.3	U 10.3	U 10.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BH-RI-S2-1.5-2.0	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	13.9	U 10.1	U 10.1	U 10.1	13.9	NJ 13.9	U 10.1	U 10.1	U 10.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BH-RI-S2-2.5-3.0	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	11.2	U 10.1	U 10.1	U 10.1	U 10.1	U 10.1	11.2	U 10.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BH-RI-S3-3.0-3.5	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	10.5	U 9.86	U 9.86	U 9.86	U 9.86	U 9.86	NJ 10.5	U 9.86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BH-RI-S3-4.0-4.5	8/16/2023</																												

Table 3 - South Side Soil, Waste Pile, and Catch Basin Sampling Results
Former Blue Heron Paper Company Mill
Oregon City, Oregon

[illegible]

Table 3 - South Side Soil, Waste Pile, and Catch Basin Sampling Results
Former Blue Heron Paper Company Mill
Oregon City, Oregon

[illegible]

Table 3, Page 4 of 14 | August 2024

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Table 3 - South Side Soil, Waste Pile, and Catch Basin Sampling Results
Former Blue Heron Paper Company Mill
Oregon City, Oregon

Screening Criteria	VOCs by EPA 8260D							VOCs by EPA 8260D (continued)																			Total Organic Carbon by EPA 9060	pH by EPA 9045D	
	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Ethylbenzene	Hexachlorobutadiene	Isopropylbenzene	m,p-Xylene	Methyl tert-butyl ether (MTBE)	Methylene chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl Chloride	Total Organic Carbon	pH		
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Portland Harbor PTW Threshold	-	-	-	-	-	-	-	-	-	-	140,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	DEQ RBCss Residential ¹	160,000	-	3,700	-	-	34,000	-	3,500,000	-	250,000	76,000	5,300	-	-	-	-	7,900,000	-	220,000	5,800,000	1,600,000	-	6,700	7,600,000	360	-	-	
	DEQ RBCss Occupational ¹	2,300,000	-	17,000	-	-	150,000	-	57,000,000	-	1,100,000	1,600,000	23,000	-	-	-	-	130,000,000	-	1,000,000	88,000,000	23,000,000	-	51,000	130,000,000	4,400	-	-	
DEQ RBCss Construction Worker ²	710,000	-	210,000	-	-	1,700,000	-	27,000,000	-	12,000,000	2,100,000	580,000	-	-	-	-	56,000,000	-	1,800,000	28,000,000	7,100,000	-	130,000	69,000,000	34,000	-	-		
DEQ RBCss Excavation Worker ²	20,000,000	-	5,800,000	-	-	49,000,000	-	750,000,000	-	320,000,000	58,000,000	16,000,000	-	-	-	-	-	50,000,000	-	770,000,000	200,000,000	-	3,700,000	-	950,000	-	-		
DEQ RBCsw Residential ¹	630	-	2.4	-	-	220	-	96,000	-	110	140	77	-	-	-	-	170,000	-	460	84,000	7,000	-	13	61,000	0.57	-	-		
DEQ RBCsw Occupational ¹	4,500	-	11	-	-	900	-	-	-	540	2,400	340	-	-	-	-	800,000	-	1,900	490,000	51,000	-	87	280,000	10	-	-		
Sediment Screening Level	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Clean Fill Screening Level	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
RCRA Characteristic Waste	630	-	2.4	130	18,000	220	16	96,000	-	110	140	77	190,000	72,000	1,000	350,000	1,200	96,000	180	23,000	7,000	-	13	52,000	0.57	-	-		
Sample ID	Sample Date	µg/kg dry							µg/kg dry																			mg/kg	pH Units
BH-RI-S1-1.5-2.0	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S1-2.5-3.0	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S2-1.5-2.0	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S2-2.5-3.0	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S3-3.0-3.5	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S3-4.0-4.5	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S3-DUP (BH-RI-S3-4.0-4.5)	8/16/2023	NA	NA	NA	NA	NA																							

Table 3 - South Side Soil, Waste Pile, and Catch Basin Sampling Results
Former Blue Heron Paper Company Mill
Oregon City, Oregon

Screening Criteria		Dioxins and Furans by EPA 1613B																		
		2,3,7,8-TCDD	2,3,7,8-TCDD Equivalents (TEQ)	1,2,3,7,8-PeCDD	1,2,3,4,7,8-HxCDD	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDD	1,2,3,4,6,7,8-HpCDD	OCDD	2,3,7,8-TCDF	1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF	1,2,3,4,7,8-HxCDF	1,2,3,6,7,8-HxCDF	2,3,4,6,7,8-HxCDF	1,2,3,7,8,9-HxCDF	1,2,3,4,6,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF	OCDF	
Portland Harbor PTW Threshold		0.01	-	0.01	-	-	-	-	-	0.60	0.20	-	0.040	-	-	-	-	-	-	
DEQ RBCss Residential ¹		4.7	4.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DEQ RBCss Occupational ¹		16	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DEQ RBCss Construction Worker ¹		170	170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DEQ RBCss Excavation Worker ²		4,800	4,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DEQ RBCsw Residential ¹		6.8	6.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DEQ RBCsw Occupational ¹		31	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sediment Screening Level		0.20	10	-	-	-	-	-	-	0.40658	-	0.30	0.40	-	-	-	-	-	-	
Clean Fill Screening Level		0.29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RCRA Characteristic Waste		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sample ID	Sample Date	pg/g																		
BH-RI-S1-1.5-2.0	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S1-2.5-3.0	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S2-1.5-2.0	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S2-2.5-3.0	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S3-3.0-3.5	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S3-4.0-4.5	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S3-DUP (BH-RI-S3-4.0-4.5)	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S4-1.5-2.0	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S4-2.5-3.0	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S5-2.5-3.0	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S9-4.5-5.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S9-8.5-9.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S9-DUP (BH-RI-S9-8.5-9.0)	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S9-12.5-13.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S10-9.5-10.0	8/15/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S10-14.5-15.0	8/15/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S11-9.5-10.0	8/15/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S12-4.5-5.0	8/15/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S12-9.5-10.0	8/15/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S14-3.5-4.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S14-4.5-5.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S15-3.5-4.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S15-4.0-4.5-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S16-2.5-3.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S16-4.5-5.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S31-4.5-5.0-20230817	8/17/2023	U 0.123	0.92	U 0.455	U 0.325	J 1.91	J 0.584	39.1	444	J 0.254	U 0.265	U 0.674	J 1.12	U 0.407	U 0.299	J 0.181	9.83	J 0.545	21.3	
BH-RI-S31-9.0-9.5-20230817	8/17/2023	U 0.255	5.14	U 0.637	U 0.839	5.17	J 2.16	209	2590	0.552	U 0.405	U 1.81	3.8	U 1.22	J 1.84	U 0.319	84.9	2.51	152	
BH-RI-S32-3.0-3.5-20230816	8/16/2023	3.89	12.8	U 1.30	J 1.75	8.26	4.09	360	4850	1.96	U 0.897	J 2.31	5.73	2.65	2.98	U 0.487	85.8	6.47	384	
BH-RI-S32-9.5-10.0-20230816	8/16/2023	U 0.338	0.30	J 0.266	U 0.252	U 0.268	U 0.189	2.66	21.1	U 0.124	U 0.145	U 0.170	U 0.148	U 0.148	U 0.0772	U 0.225	U 0.745	U 0.240	J 2.2	
BH-RI-S33-4.5-5.0-20230816	8/16/2023	U 0.131	0.15	U 0.250	U 0.361	U 0.373	U 0.352	10.7	138	U 0.121	U 0.174	U 0.133	U 0.170	U 0.156	U 0.180	U 0.245	U 0.847	U 0.270	12.4	
BH-RI-S33-9.5-10.0-20230816	8/16/2023	U 0.117	0.02	U 0.283	U 0.333	U 0.364	U 0.353	J 1.94	18.1	U 0.151	U 0.152	U 0.126	U 0.136	U 0.147	U 0.142	U 0.204	U 0.264	U 0.247	U 0.855	
BH-RI-S34-2.5-3.0-20230816	8/16/2023	0.802	27.4	U 1.84	2.94	21.1	9.00	1450	15400	1.16	J 1.13	4.98	12.5	4.3	J 2.82	J 1.86	145	6.63	364	
BH-RI-S34-9.5-10.0-20230816	8/16/2023	U 0.117	0.29	J 0.249	U 0.356	U 0.361	U 0.354	J 1.28	8.85	J 0.215	U 0.149	U 0.116	U 0.141	U 0.130	U 0.148	U 0.202	U 0.194	U 0.170	U 0.489	
BH-RI-S41A-3.0-3.5	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S41A-4.0-4.5	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S41B-2.0-2.5	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S41B-4.0-4.5	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S41C-3.0-3.5	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S41C-DUP (BH-RI-S41C-3.0-3.5)	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S41C-4.5-5.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S41D-3.0-3.5	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S41D-4.5-5.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S41E-4.0-4.5	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S41E-4.5-5.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S41F-3.5-4.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S41F-4.5-5.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S41G-2.5-3.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S41G-4.5-5.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S45-2.0-3.0	8/15/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S45-8.0-8.5	8/15/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S45-9.5-10.0	8/15/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S46-2.5-3.0	8/15/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S46-4.5-5.0	8/15/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Table 3 - South Side Soil, Waste Pile, and Catch Basin Sampling Results
Former Blue Heron Paper Company Mill
Oregon City, Oregon

Screening Criteria		TPH by NWTPH-HCID			TPH by NWTPH-Gx			TPH by NWTPH-Dx			PCBs by EPA 8082A							Total Metals by EPA 6020B													Hexavalent Chromium by EPA 7196A
		Gasoline Range (C6-C10)	Diesel Range (C10-C22)	Oil Range (C22-C40)	Gasoline Range (C6-C10)	Diesel Range (C10-C22)	Oil Range (C22-C40) [Bunker C heating oil]	Total PCBs	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Antimony	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc	Hexavalent Chromium		
Portland Harbor PTW Threshold		-	-	-	-	-	-	200	200	200	200	200	200	200	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DEQ RBCss Residential ¹		1,200	1,100	-	1,200	1,100	-	230	230	230	203	230	230	230	230	-	0.43	160	78	120,000	3,100	200	23	1,500	-	390	-	-	0.30		
DEQ RBCss Occupational ¹		20,000	14,000	-	20,000	14,000	-	590	590	590	590	590	590	590	590	-	1.9	2,300	1,100	-	47,000	800	350	22,000	-	5,800	-	-	6.3		
DEQ RBCss Construction Worker ¹		9,700	4,600	-	9,700	4,600	-	4,900	4,900	4,900	4,900	4,900	4,900	4,900	4,900	-	15	700	350	530,000	14,000	800	110	7,000	-	1,800	-	-	49		
DEQ RBCss Excavation Worker ²		-	-	-	-	-	-	140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000	-	420	19,000	9,700	-	390,000	800	2,900	190,000	-	49,000	-	-	1,400		
DEQ RBCsw Residential ¹		31	9,500	-	31	9,500	-	240	240	240	240	240	240	240	240	-	-	-	-	-	-	30	-	-	-	-	-	-	-		
DEQ RBCsw Occupational ¹		130	-	-	130	-	-	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	-	-	-	-	-	-	30	-	-	-	-	-	-	-		
Sediment Screening Level		-	-	-	-	-	-	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	-	2.9	-	0.63	76	-	35	0.20	-	-	-	-	123	-		
Clean Fill Screening Level		-	-	-	-	1,100	1,100	230	1,100	4.8	4.8	41	7.3	41	240	0.56	9	2.0	0.6	76	34	28	0.230	47	0.71	0.82	5.2	180	0.040		
RCRA Characteristic Waste		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100		
Sample ID		Sample Date		mg/kg				µg/kg dry							mg/kg dry															mg/kg	
Remedial Investigation South Side (cont.)	BH-RI-S50-2.5-3.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.67	NA	NA	NA	NA	NA	4.48	NA	NA	NA	NA	NA	NA	
	BH-RI-S51-9.5-10.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.5	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S51-14.5-15.0-20230816	8/16/2023	U 24.8	U 62.0	U 124	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.23	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S52-9.5-10.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.01	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S52-14.5-15.0-20230816	8/16/2023	U 22.0	U 54.9	110	NA	U 426	1,070	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	133	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S53-9.5-10.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	22.6	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S53-14.5-15.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.67	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S54-3.0-3.5	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.77	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S55-3.5-4.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	323	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S56-3.25-3.75	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.7	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S57-4.0-4.5	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	229	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S57-DUP (BH-RI-S57-4.0-4.5)	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	234	NA	NA	NA	NA	NA	NA	NA		
BH-RI-S57-9.5-10.0	8/17/2023	U 24.0	U 59.9	U 120	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.55	NA	NA	NA	NA	NA	NA	NA		
BH-RI-S58-4.5-5.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	15.70	NA	NA	NA	NA	NA	NA	NA		
Rinse Blank-1-20230817	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	U 1.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Rinse Blank-2-20230817	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	U 0.200	NA	NA	NA	NA	NA	NA	NA		
Bleach Plant Waste Pile	BH-WP-01-2"-20230816	8/16/2023	U 42.3	U 106	U 212	NA	NA	NA	226.7	U 21.7	U 21.7	U 21.7	U 21.7	U 21.7	176	50.7	U 2.27	23.3	0.506	1.09	67.8	153	286	1.35	111.0	U 2.27	0.469	U 0.454	356	NA	
	BH-WP-01-FD-2"-20230816	8/16/2023	U 39.4	U 98.6	U 197	NA	NA	NA	59.3	U 20.1	U 20.1	U 20.1	U 20.1	U 20.1	59.3	U 20.1	U 2.11	20.6	0.577	1.07	57.9	145	201	0.655	111	U 2.11	U 0.422	U 0.422	343	NA	
	BH-WP-17-FLF-GRAB-20230816	8/16/2023	U 164	U 410	DET 820	NA	U 198	990	NA	NA	NA	NA	NA	NA	NA	NA	1.75	23.1	0.218	2.65	114	283	382	0.898	103	U 1.09	0.46	U 0.218	215	U 7.82	
	BH-WP-18-FLF-GRAB-20230816	8/16/2023	U 161	U 403	U 806	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.94	5.15	7.13	0.584	133	103	149	0.174	176	2.19	1.48	0.213	103	U 1.99	
	BH-WP-Comp01-SOL ³	8/16/2023	U 31.8	U 79.4	DET 159	NA	U 657	1870	291.5	U 16.7	U 16.7	U 16.7	56.1	177	58.4	U 16.7	6.67	123	0.428	2.03	116	358	402	1.94	108	U 1.88	0.828	U 0.376	870	U 4.02	
	BH-WP-Comp02-SOL ⁴	8/16/2023	U 22.8	U 57.1	DET 114	NA	U 47.8	315	87.4	U 11.9	U 11.9	U 11.9	U 11.9	U 11.9	63.5	23.9	1.78	49.7	0.282	0.846	55.4	354	578	0.726	70.3	U 1.18	0.319	U 0.236	240	U 2.01	
	BH-WP-Comp03-SOL ⁵	8/16/2023	U 24.2	U 60.4	DET 121	NA	U 120	2790	758	U 60.6	U 60.6	U 60.6	U 60.6	U 60.6	758	U 60.6	19.2	20	0.32	2.63	158	336	136	0.363	288	U 1.21	0.448	U 0.242	628	U 0.399	
	BH-WP-Comp01-DEB ⁶	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	BH-WP-Comp02-DEB ⁷	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	BH-WP-Comp03-DEB ⁸	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	South Substation Catch Basin/Drainage Trench	BH-SSCB-2.0-2.5	8/18/2023	NA	NA	NA	NA	U 22.5	J 1310	21.9	U 11.4	U 11.4	U 11.4	U 11.4	U 11.4	NJ 21.9	U 11.4	U 1.21	8.15	0.410	0.492	J 31.4	64.4	20.2	U 0.0967	23.0	U 1.21	U 0.242	U 0.242	233	NA
		BH-SSCB-2.5-3.0	8/18/2023	NA	NA	NA	NA	U 228	1570	113.1	U 11.9	U 11.9	U 11.9	NJ 22.1	U 11.9	NJ 60	NJ 31.0	1.27	7.52	0.583	0.665	21.4	72.3	224	1.15	34.1	U 1.23	U 0.246	U 0.246	J 245	NA
BH-DU01-SSCB (BH-SSCB-2.0-2.5)		8/18/2023	NA	NA	NA	NA	U 222	J 643	22.2	U 11.0	U 11.0	U 11.0	U 11.0	U 11.0	NJ 22.2	U 11.0	U 1.22	6.65	0.353	0.40	20.5	58.7	31.6	U 0.0974	20.5	U 1.22	U 0.243	U 0.243	186	NA	
BH-SSCB-TOP		8/18/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			

Table 3 - South Side Soil, Waste Pile, and Catch Basin Sampling Results
Former Blue Heron Paper Company Mill
Oregon City, Oregon

Screening Criteria		TCLP Metals by EPA 1311/6020B									Semivolatile Organic Compounds (SVOCs) by EPA 8270E																										
		Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(a)pyrene TEQ Equivalents	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene	Dibenzofuran	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,2-Dinitrobenzene	1,3-Dichlorobenzene	1,3-Dinitrobenzene			
		Portland Harbor PTW Threshold	DEQ RBCss Residential ¹	DEQ RBCss Occupational ¹	DEQ RBCss Construction Worker ⁴	DEQ RBCss Excavation Worker ²	DEQ RBCsw Residential ¹	DEQ RBCsw Occupational ¹	Sediment Screening Level	Clean Fill Screening Level	RCRA Characteristic Waste	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sample ID	Sample Date	mg/L									µg/kg dry																										
Remedial Investigation South Side (cont.)	BH-RI-S50-2.5-3.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S51-9.5-10.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S51-14.5-15.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S52-9.5-10.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S52-14.5-15.0-20230816	8/16/2023	NA	NA	NA	NA	U 0.0500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S53-9.5-10.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S53-14.5-15.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S54-3.0-3.5	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S55-3.5-4.0	8/17/2023	NA	NA	NA	NA	U 0.0500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	BH-RI-S56-3.25-3.75	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	BH-RI-S57-4.0-4.5	8/17/2023	NA	NA	NA	NA	0.0772	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	BH-RI-S57-DUP (BH-RI-S57-4.0-4.5)	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S57-9.5-10.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
BH-RI-S58-4.5-5.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Rinse Blank-1-20230817	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Rinse Blank-2-20230817	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Bleach Plant Waste Pile	BH-WP-01-2"-20230816	8/16/2023	NA	NA	NA	NA	U 0.0500	U 0.00700	NA	NA	U 23	U 23	30.9	210	232	378	275	116	106	270	29.6	291	U 23	119	U 45.9	U 45.9	U 45.9	94.1	324	U 23	U 57.4	U 57.4	U 574	U 57.4	U 574		
	BH-WP-01-FD-2"-20230816	8/16/2023	NA	NA	NA	NA	U 0.0500	NA	NA	NA	U 111	U 111	U 111	U 111	166	492	192	U 166	U 111	160	U 111	170	U 111	U 111	U 221	U 221	U 221	U 111	174	U 111	U 277	U 277	U 2770	U 277	U 2770		
	BH-WP-17-FLF-GRAB-20230816	8/16/2023	NA	NA	NA	0.136	0.158	NA	NA	NA	U 778	U 778	U 778	1500	1850	5194	2290	1180	825	2060	U 778	3220	U 778	9595	U 1550	U 1550	U 1550	1550	2840	U 778	U 1940	U 1940	U 19400	U 1940	U 19400		
	BH-WP-18-FLF-GRAB-20230816	8/16/2023	NA	NA	NA	0.246	4.67	NA	NA	NA	U 789	U 789	U 789	1200	1800	4272	2230	1200	858	1870	U 789	2440	U 789	966	U 1580	U 1580	U 1580	1230	2180	U 789	U 1970	U 1970	U 19700	U 1970	U 19700		
	BH-WP-Comp01-SOL ³	8/16/2023	U 0.100	NA	NA	NA	U 0.100	U 0.0500	U 0.00700	NA	NA	U 178	248	193	711	1180	2004	1840	635	668	1060	U 178	690	U 178	677	U 355	U 355	U 355	U 178	827	U 178	U 444	U 444	U 4440	U 444	U 4440	
	BH-WP-Comp02-SOL ⁴	8/16/2023	NA	NA	NA	NA	2.69	NA	NA	NA	NA	U 130	U 130	240	895	1070	1794	1530	654	498	1090	145	1580	U 130	574	U 260	U 260	U 260	373	1420	U 130	U 326	U 326	U 3260	U 326	U 3260	
	BH-WP-Comp03-SOL ⁵	8/16/2023	NA	NA	NA	NA	U 0.100	U 0.0500	NA	NA	NA	U 130	U 130	U 130	242	358	2093	624	246	U 648	403	U 648	408	U 130	U 648	U 259	U 259	U 259	200	432	U 130	U 324	U 324	U 3240	U 324	U 3240	
	BH-WP-Comp01-DEB ⁶	8/16/2023	U 0.100	U 5.00	U 0.100	U 0.100	0.0531	U 0.00700	U 0.100	U 0.100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	BH-WP-Comp02-DEB ⁷	8/16/2023	U 0.100	U 5.00	U 0.100	U 0.100	94.6	U 0.00700	U 0.100	U 0.100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	BH-WP-Comp03-DEB ⁸	8/16/2023	U 0.100	U 5.00	U 0.100	U 0.100	U 0.0500	U 0.00700	U 0.100	U 0.100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	South Substation Catch Basin/Drainage Trench	BH-SSCB-2.0-2.5	8/18/2023	NA	NA	NA	NA	NA	NA	NA	NA	U 11.0	U 11.0	U 11.0	17.6	22.8	56.9	27.9 J	12.0 J	13.1	20.9	U 11.0	23.6	U 11.0	17.6	U 11.0	U 11.0	U 11.0	15.6	24.8	U 11.0	NA	NA	NA	NA	NA	NA
		BH-SSCB-2.5-3.0	8/18/2023	NA	NA	NA	NA	U 0.0500	R 0.00700	NA	NA	U 46.9	47.7	91.5	359	396	642	453	176 J	228	406	49.1	680	U 46.9	252	U 46.9	U 46.9	U 46.9	374	677	U 46.9	NA	NA	NA	NA	NA	NA
BH-DU01-SSCB (BH-SSCB-2.0-2.5)		8/18/2023	NA	NA	NA	NA	U 43.0	NA	NA	NA	U 43.0	U 43.0	U 43.0	U 43.0	U 43.0	163.8	U 43.0	U 43.0	U 43.0	U 43.0	U																

Table 3 - South Side Soil, Waste Pile, and Catch Basin Sampling Results
Former Blue Heron Paper Company Mill
Oregon City, Oregon

[illegible]

Table 3 - South Side Soil, Waste Pile, and Catch Basin Sampling Results
Former Blue Heron Paper Company Mill
Oregon City, Oregon

Screening Criteria		Semivolatile Organic Compounds (SVOCs) by EPA 8270E																TCLP Semivolatile Organic Compounds by EPA 1311/8270E											VOCs by EPA 8260D									
		Diethylphthalate	Dimethylphthalate	Di-n-butylphthalate	Di-n-octyl phthalate	Hexachlorobenzene	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Isophorone	Nitrobenzene	N-Nitrosodimethylamine	N-Nitroso-di-n-propylamine	N-Nitrosodiphenylamine	Pentachlorophenol (PCP)	Phenol	Pyridine	2-Methylphenol	3-4-Methylphenol(s)	Pentachlorophenol (PCP)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	Hexachlorobenzene	Hexachlorobutadiene	Hexachloroethane	Nitrobenzene	2,4-Dinitrotoluene	Pyridine	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene		
Portland Harbor PTW Threshold		-	-	-	-	210	-	-	7,400	-	-	-	78	110,000	1,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	53,000,000	-	3,200	58,000	1,800,000	-	-		
DEQ RBCss Residential ¹		-	-	-	-	930	-	-	32,000	-	-	-	330	470,000	4,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	870,000,000	-	26,000	260,000	29,000,000	-	-		
DEQ RBCss Construction Worker ¹		-	-	-	-	11,000	-	-	180,000	-	-	-	2,700	3,800,000	34,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	470,000,000	-	54,000	3,200,000	13,000,000	-	-		
DEQ RBCss Excavation Worker ²		-	-	-	-	320,000	-	-	5,100,000	-	-	-	74,000	110,000,000	960,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,500,000	89,000,000	370,000,000	-	-			
DEQ RBCsw Residential ¹		-	-	-	-	18	-	-	22	-	-	-	0.94	10,000	66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	190,000	-	6.3	44	6,700	-	-		
DEQ RBCsw Occupational ¹		-	-	-	-	84	-	-	87	-	-	-	5.4	45,000	170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	880,000	-	29	200	32,000	-	-		
Sediment Screening Level		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Clean Fill Screening Level		100,000	10,000	11	910	18	16	78	22	1,600	5.5	0.0016	0.94	10,000	66	790	410	-	-	-	-	-	-	-	-	-	-	-	-	13	190,000	1.8	6.3	44	6,700	-	1,300	
RCRA Characteristic Waste		-	-	-	-	2,600	10,000	-	60,000	-	40,000	-	-	-	2,000,000	-	100,000	200	200	100	400	2.0	1.3	0.50	3.0	2.0	0.13	5.0	-	-	-	-	-	14,000	-	-		
Sample ID		Sample Date		µg/kg dry																mg/L											µg/kg dry							
Remedial Investigation South Side (cont.)	BH-RI-S50-2.5-3.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S51-9.5-10.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S51-14.5-15.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S52-9.5-10.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S52-14.5-15.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S53-9.5-10.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S53-14.5-15.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S54-3.0-3.5	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S55-3.5-4.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S56-3.25-3.75	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S57-4.0-4.5	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	BH-RI-S57-DUP (BH-RI-S57-4.0-4.5)	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BH-RI-S57-9.5-10.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
BH-RI-S58-4.5-5.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Rinse Blank-1-20230817	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Rinse Blank-2-20230817	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Bleach Plant Waste Pile	BH-WP-01-2"-20230816	8/16/2023	U 230	U 230	422	U 230	U 23	U 57.4	U 114	U 57.4	U 57.4	U 230	U 57.4	U 57.4	U 230	U 45.9	U 114	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	U 3190	U 319	U 31.9	U 79.6	U 159	U 159	U 319	U 1590	
	BH-WP-01-FD-2"-20230816	8/16/2023	U 1110	U 1110	U 1110	U 1110	U 111	U 277	U 553	U 277	U 277	U 1110	U 277	U 277	U 1110	U 221	U 553	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	U 3100	U 310	U 31	U 77.6	U 155	U 155	U 310	U 1550	
	BH-WP-17-FLF-GRAB-20230816	8/16/2023	U 7780	U 7780	U 7780	U 7780	U 778	U 1940	U 3870	U 1940	U 1940	U 7780	U 1940	U 1940	U 7780	U 1550	U 3870	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	BH-WP-18-FLF-GRAB-20230816	8/16/2023	U 7890	U 7890	U 7890	U 7890	U 789	U 1970	U 3930	U 1970	U 1970	U 7890	U 1970	U 1970	U 7890	U 1580	U 3930	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	BH-WP-Comp01-SOL ³	8/16/2023	U 1780	U 1780	U 1780	U 1780	U 178	U 444	U 885	U 444	U 444	U 1780	U 444	U 444	U 444	U 1780	U 355	U 885	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	U 2500	U 250	U 25	U 62.6	U 125	U 125	U 250	U 1250	
	BH-WP-Comp02-SOL ⁴	8/16/2023	U 1300	U 1300	U 1300	U 1300	U 130	U 326	U 649	U 326	U 326	U 1300	U 326	U 326	U 326	U 1300	U 260	U 649	NA	NA	NA	NA	NA	NA	NA	NA												

Table 3 - South Side Soil, Waste Pile, and Catch Basin Sampling Results
Former Blue Heron Paper Company Mill
Oregon City, Oregon

Screening Criteria		VOCs by EPA 8260D																																		
		1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane (EDB)	1,2-Dichlorobenzene	1,2-Dichloroethane (EDC)	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (MEK)	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Isopropyltoluene	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane		
		Portland Harbor PTW Threshold																																		
DEQ RBCss Residential ¹		-	-	430,000	-	160	2,200,000	3,600	-	430,000	-	-	14,000	-	-	-	-	-	-	-	-	860	8,200	-	-	3,400	57,000	46,000	-	7,500	530,000	160,000,000	5,800	1,400,000		
DEQ RBCss Occupational ¹		-	-	6,900,000	-	730	36,000,000	16,000	-	6,900,000	-	-	64,000	-	-	-	-	-	-	-	-	4,000	37,000	-	-	15,000	260,000	750,000	-	34,000	8,700,000	-	26,000	25,000,000		
DEQ RBCss Construction Worker ²		-	-	2,900,000	-	9,000	20,000,000	200,000	-	2,900,000	-	-	1,300,000	-	-	-	-	-	-	-	-	40,000	380,000	-	-	230,000	2,700,000	370,000	-	320,000	4,700,000	-	410,000	25,000,000		
DEQ RBCss Excavation Worker ²		-	-	81,000,000	-	250,000	560,000,000	5,600,000	-	81,000,000	-	-	36,000,000	-	-	-	-	-	-	-	-	1,100,000	11,000,000	-	-	6,300,000	74,000,000	10,000,000	-	8,900,000	130,000,000	-	11,000,000	700,000,000		
DEQ RBCsw Residential ¹		-	-	10,000	-	0.12	36,000	2.8	-	11,000	-	-	57	-	-	-	-	-	-	-	-	0.36	23	-	-	2.0	46	83	-	13	5,800	310,000	3.4	2,200		
DEQ RBCsw Occupational ¹		-	-	48,000	-	0.56	160,000	13	-	53,000	-	-	250	-	-	-	-	-	-	-	-	1.7	100	-	-	8.8	220	400	-	58	27,000	1,300,000	15	9,100		
Sediment Screening Level		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Clean Fill Screening Level		0.019	200	10,000	0.0084	0.12	920	2.8	17	11,000	-	7,800	57	-	72,000	14,000	360	14,000	-	9,700	1,200	0.36	23	2,500	1,300	2.0	46	83	810	13	2,400	310,000	3.4	2,200		
RCRA Characteristic Waste		-	-	-	-	-	-	10,000	-	-	-	-	150,000	-	4,000,000	-	-	-	-	-	-	-	10,000	-	-	-	-	-	-	10,000	2,000,000	-	120,000	-		
Sample ID		Sample Date		µg/kg dry																																
Remedial Investigation South Side (cont.)	BH-RI-S50-2.5-3.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S51-9.5-10.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S51-14.5-15.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S52-9.5-10.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S52-14.5-15.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S53-9.5-10.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S53-14.5-15.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S54-3.0-3.5	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S55-3.5-4.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S56-3.25-3.75	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S57-4.0-4.5	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Bleach Plant Waste Pile	BH-RI-S57-DUP (BH-RI-S57-4.0-4.5)	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S57-9.5-10.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S58-4.5-5.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Rinse Blank-1-20230817	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Rinse Blank-2-20230817	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-WP-01-2"-20230816	8/16/2023	U 1590	U 159	U 159	U 159	U 1590	U 159	U 79.6	U 1590	U 159	U 796	U 159	U 159	U 319	U 796	U 159	U 159	U 79.6	U 79.6	U 79.6	U 319	U 79.6	U 79.6	U 79.6	U 79.6	U 79.6	U 79.6	U 159	U 159	U 159	U 159	U 79.6	U 319		
	BH-WP-01-FD-2"-20230816	8/16/2023	U 1550	U 155	U 155	U 155	U 1550	U 155	U 77.6	U 1550	U 155	U 776	U 155	U 155	U 310	U 776	U 155	U 155	U 77.6	U 77.6	U 77.6	U 310	U 77.6	U 77.6	U 77.6	U 77.6	U 77.6	U 77.6	U 155	U 155	U 155	U 155	U 155	U 77.6	U 310	
	BH-WP-17-FLF-GRAB-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-WP-18-FLF-GRAB-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-WP-Comp01-SOL ³	8/16/2023	U 1250	U 125	U 125	U 125	U 1250	U 125	U 62.6	U 1250	U 125	U 626	U 125	U 125	U 250	U 626	U 125	U 125	U 62.6	U 62.6	U 62.6	U 250	U 62.6	U 62.6	U 62.6	U 62.6	U 62.6	U 62.6	U 125	U 125	U 125	U 125	U 125	U 62.6	U 250	
	BH-WP-Comp02-SOL ⁴	8/16/2023	U 684	U 68.4	U 68.4	U 68.4	U 684	U 68.4	U 34.2	U 684	U 68.4	U 342	U 68.4	U 68.4	U 137	U 342	U 68.4	U 68.4	U 34.2	U 34.2	U 34.2	U 137	U 34.2	U 34.2	U 34.2	U 34.2	U 34.2	U 34.2	U 68.4	U 68.4	U 68.4	U 68.4	U 68.4	U 34.2	U 137	
BH-WP-Comp03-SOL ⁵	8/16/2023	U 668	U 66.8	U 66.8	U 66.8	U 668	U 66.8	U 33.4	U 668	U 66.8	U 334	U 66.8	U 66.8	U 134	U 334	U 66.8	U 66.8	U 33.4	U 33.4	U 33.4	U 134	U 33.4	U 33.4	U 33.4	U 33.4	U 33.4	U 33.4	U 66.8	U 66.8	U 66.8	U 66.8	U 66.8	U 33.4	U 134		
South Substation Catch Basin/Drainage Trench	BH-WP-Comp01-DEB ⁶	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-WP-Comp02-DEB ⁷	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-WP-Comp03-DEB ⁸	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-SSCB-2.0-2.5	8/18/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	B																																			

Table 3 - South Side Soil, Waste Pile, and Catch Basin Sampling Results
Former Blue Heron Paper Company Mill
Oregon City, Oregon

Screening Criteria			VOCs by EPA 8260D						VOCs by EPA 8260D (continued)																		Total Organic Carbon by EPA 9060	pH by EPA 9045D			
			cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Ethylbenzene	Hexachlorobutadiene	Isopropylbenzene	m,p-Xylene	Methyl tert-butyl ether (MTBE)	Methylene chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl Chloride	Total Organic Carbon	pH		
Portland Harbor PTW Threshold	-	-	-	-	-	-	-	-	-	-	-	140,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
DEQ RBCss Residential ¹	160,000	-	3,700	-	-	34,000	-	3,500,000	-	250,000	76,000	5,300	-	-	-	-	-	7,900,000	-	220,000	5,800,000	1,600,000	-	6,700	7,600,000	360	-	-			
DEQ RBCss Occupational ¹	2,300,000	-	17,000	-	-	150,000	-	57,000,000	-	1,100,000	1,600,000	23,000	-	-	-	-	-	130,000,000	-	1,000,000	88,000,000	23,000,000	-	51,000	130,000,000	4,400	-	-			
DEQ RBCss Construction Worker ¹	710,000	-	210,000	-	-	1,700,000	-	27,000,000	-	12,000,000	2,100,000	580,000	-	-	-	-	-	56,000,000	-	1,800,000	28,000,000	7,100,000	-	130,000	69,000,000	34,000	-	-			
DEQ RBCss Excavation Worker ²	20,000,000	-	5,800,000	-	-	49,000,000	-	750,000,000	-	320,000,000	58,000,000	16,000,000	-	-	-	-	-	-	-	50,000,000	770,000,000	200,000,000	-	3,700,000	-	950,000	-	-			
DEQ RBCsw Residential ¹	630	-	2.4	-	-	220	-	96,000	-	110	140	77	-	-	-	-	-	170,000	-	460	84,000	7,000	-	13	61,000	0.57	-	-			
DEQ RBCsw Occupational ¹	4,500	-	11	-	-	900	-	-	-	540	2,400	340	-	-	-	-	-	800,000	-	1,900	490,000	51,000	-	87	280,000	10	-	-			
Sediment Screening Level	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Clean Fill Screening Level	630	-	2.4	130	18,000	220	16	96,000	-	110	140	77	190,000	72,000	1,000	350,000	1,200	96,000	180	23,000	7,000	-	13	52,000	0.57	-	-				
RCRA Characteristic Waste	-	-	-	-	-	-	10,000	-	-	-	-	-	-	-	-	-	-	-	-	14,000	-	-	-	10,000	-	-	4,000	-	-		
Sample ID	Sample Date	µg/kg dry						µg/kg dry																		mg/kg	pH Units				
Remedial Investigation South Side (cont.)	BH-RI-S50-2.5-3.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S51-9.5-10.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S51-14.5-15.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S52-9.5-10.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S52-14.5-15.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S53-9.5-10.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S53-14.5-15.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S54-3.0-3.5	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-S55-3.5-4.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	BH-RI-S56-3.25-3.75	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	BH-RI-S57-4.0-4.5	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Bleach Plant Waste Pile	BH-RI-S57-DUP (BH-RI-S57-4.0-4.5)	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	BH-RI-S57-9.5-10.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	BH-RI-S58-4.5-5.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Rinse Blank-1-20230817	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Rinse Blank-2-20230817	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	BH-WP-01-2"-20230816	8/16/2023	U 1590	U 159	U 159	U 1590	U 1590	U 159	U 319	U 79.6	U 159	U 79.6	U 159	U 79.6	U 159	U 796	U 796	U 79.6	U 79.6	U 79.6	U 79.6	U 1590	U 159	U 159	U 159	U 159	U 79.6	U 159	U 79.6	NA	7.7
	BH-WP-01-FD-2"-20230816	8/16/2023	U 1550	U 155	U 155	U 1550	U 1550	U 155	U 310	U 77.6	U 155	U 77.6	U 155	U 77.6	U 155	U 776	U 776	U 77.6	U 77.6	U 77.6	U 77.6	U 1550	U 155	U 155	U 155	U 155	U 77.6	U 155	U 77.6	NA	7.8
	BH-WP-17-FLF-GRAB-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5	
	BH-WP-18-FLF-GRAB-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2	
	BH-WP-Comp01-SOL ³	8/16/2023	U 1250	U 125	U 125	U 1250	U 1250	U 125	U 250	U 62.6	U 125	U 62.6	U 125	U 62.6	U 125	U 626	U 626	U 62.6	U 62.6	U 62.6	U 62.6	U 250	U 125	U 125	U 125	U 125	U 62.6	U 125	U 62.6	NA	7.4
	BH-WP-Comp02-SOL ⁴	8/16/2023	U 684	U 68.4	U 68.4	U 684	U 684	U 68.4	U 137	U 34.2	U 68.4	U 34.2	U 68.4	U 34.2	U 68.4	U 342	U 342	U 34.2	U 34.2	U 34.2	U 34.2	U 137	U 68.4	U 68.4	U 68.4	U 34.2	U 68.4	U 34.2	NA	7.6	
BH-WP-Comp03-SOL ⁵	8/16/2023	U 668	U 66.8	U 66.8	U 668	U 668	U 66.8	U 134	U 33.4	U 66.8	U 33.4	U 66.8	U 33.4	U 66.8	U 334	U 334	U 33.4	U 33.4	U 33.4	U 33.4	U 134	U 66.8	U 66.8	U 66.8	U 33.4	U 66.8	U 33.4	NA	6.0		
South Substation Catch Basin/Drainage Trench	BH-WP-Comp01-DEB ⁶	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	BH-WP-Comp02-DEB ⁷	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	BH-WP-Comp03-DEB ⁸	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	BH-SSCB-2.0-2.5	8/18/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	13000	NA
	BH-SSCB-2.5-3.0	8/18/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	18000	NA
	BH-DU01-SSCB (BH-SSCB-2.0-2.5)	8/18/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	15000	NA
	BH-SSCB-TOP	8/18/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	120000	NA
BH-DT-3.0-3.5	8/18/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6900	NA	
BH-DT-9.5-10.0	8/18/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1300	NA	
BH-DT-TOP	8/18/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	77000	NA	
BH-DT-DUP	8/18/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	14000	NA	

Table 3 - South Side Soil, Waste Pile, and Catch Basin Sampling Results
Former Blue Heron Paper Company Mill
Oregon City, Oregon

Screening Criteria			Dioxins and Furans by EPA 1613B																	
			2,3,7,8-TCDD	2,3,7,8-TCDD Equivalents (TEQ)	1,2,3,7,8-PeCDD	1,2,3,4,7,8-HxCDD	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDD	1,2,3,4,6,7,8-HpCDD	OCDD	2,3,7,8-TCDF	1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF	1,2,3,4,7,8-HxCDF	1,2,3,6,7,8-HxCDF	2,3,4,6,7,8-HxCDF	1,2,3,7,8,9-HxCDF	1,2,3,4,6,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF	OCDF
Portland Harbor PTW Threshold			0.01	-	0.01	-	-	-	-	-	0.60	0.20	-	0.040	-	-	-	-	-	-
DEQ RBCss Residential ¹			4.7	4.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DEQ RBCss Occupational ¹			16	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DEQ RBCss Construction Worker ¹			170	170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DEQ RBCss Excavation Worker ²			4,800	4,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DEQ RBCsw Residential ¹			6.8	6.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DEQ RBCsw Occupational ¹			31	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sediment Screening Level			0.20	10	-	-	-	-	-	-	0.40658	-	0.30	0.40	-	-	-	-	-	-
Clean Fill Screening Level			0.29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RCRA Characteristic Waste			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sample ID	Sample Date	pg/g																		
Remedial Investigation South Side (cont.)	BH-RI-S50-2.5-3.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-S51-9.5-10.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-S51-14.5-15.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-S52-9.5-10.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-S52-14.5-15.0-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-S53-9.5-10.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-S53-14.5-15.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-S54-3.0-3.5	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-S55-3.5-4.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-S56-3.25-3.75	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-S57-4.0-4.5	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-S57-DUP (BH-RI-S57-4.0-4.5)	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-S57-9.5-10.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-S58-4.5-5.0	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Rinse Blank-1-20230817	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bleach Plant Waste Pile	Rinse Blank-2-20230817	8/17/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-WP-01-2"-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-WP-01-FD-2"-20230816	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-WP-17-FLF-GRAB-20230816	8/16/2023	U 0.352	9.48	1.48	1.51	12.3	3.42	261	3450	2.83	2.22	3.97	3.28	2.13	2.7	0.56	57.8	2.99	111
	BH-WP-18-FLF-GRAB-20230816	8/16/2023	U 0.922	4.9	U 1.89	U 3.43	15	U 3.44	249	1830	U 1.26	U 1.13	U 1.90	3.04	U 1.45	U 2.29	U 2.41	139	U 3.75	320
	BH-WP-Comp01-SOL ³	8/16/2023	U 2.32	236	17.2	28.7	357	72.6	9580	119000	12.1	27.5	59.8	69.5	44.5	44.4	19.3	2240	39.3	2150
	BH-WP-Comp02-SOL ⁴	8/16/2023	3.31	253	12.5	22.1	362	72.3	11200	108000	103	33.7	56.1	67.1	41.7	34.4	32.9	1630	30.4	1810
	BH-WP-Comp03-SOL ⁵	8/16/2023	U 2.07	82.2	6.29	7.21	167	62	2370	31200	90.4	10	15.4	18.5	11.6	9.94	7.63	237	U 13.9	293
	BH-WP-Comp01-DEB ⁶	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-WP-Comp02-DEB ⁷	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-WP-Comp03-DEB ⁸	8/16/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-SSCB-2.0-2.5	8/18/2023	U 0.275	1.01	U 0.579	U 0.599	J 1.45	J 0.937	J 49.3	J 638	U 0.309	U 0.286	U 0.238	U 0.262	U 0.267	U 0.317	U 0.4	J 6.82	UJ 0.462	J 56.0
	BH-SSCB-2.5-3.0	8/18/2023	0.535	17.3	J 1.93	J 1.99	12.3	5.88	1220	32800	0.789	J 0.675	J 2.2	4.03	2.34	U 2.28	U 0.896	319	9.25	4100
	BH-DU01-SSCB (BH-SSCB-2.0-2.5)	8/18/2023	U 0.232	21.3	J 1.35	J 1.57	J 9.02	J4.04	J 907	J 23600	0.667	U 0.446	J 1.58	2.57	J 1.48	J 2.1	U 0.622	J 221	J 8.64	J 3210
South Substation Catch Basin/Drainage Trench	BH-SSCB-TOP	8/18/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-DT-3.0-3.5	8/18/2023	U 0.183	0.20	U 0.338	U 0.642	J 0.642	U 0.545	10.6	82.4	J 0.356	U 0.201	U 0.279	J 0.302	U 0.194	U 0.0650	U 0.290	2.48	U 0.344	6.96
	BH-DT-9.5-10.0	8/18/2023	1.62	34.5	4.28	3.12	25.7	9.86	1260	29200	1.41	J 1.09	3.83	5.54	U 2.75	3.1	U 1.03	239	8.02	3700
	BH-DT-TOP	8/18/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-DT-DUP	8/18/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Bold numbers indicate detections

Gray highlight indicates a ND result which is greater than one or more of the regulatory standards

Orange highlight indicates a detection which exceeds the Sediment Screening Levels

Blue highlight indicates a detection which exceeds Clean Fill screening levels

Purple highlight indicates a detection which exceeds the Clean Fill and Sediment Screening Levels

Red highlight indicates a detection above 5 ft bgs that exceed listed Residential, Occupational, or Construction Worker RBCs

Yellow highlight indicates a detection below 5 ft bgs that exceeds listed Excavation Worker RBCs

Maroon highlight indicates a detection which exceeds RCRA Hazardous Waste Screening Levels

Green highlight indicates Arsenic result less than Portland Basin background level of 8.8 mg/kg, DEQ Clean Fill Determinations, February 2019

- = Screening levels not published/relevant for these constituents

DEQ = State of Oregon Department of Environmental Quality

DET = Detected

J = result is an estimated value

mg/kg = milligrams per kilogram

NA = sample not analyzed for this constituent

ND = Analyte or summation not detected

NJ = The analyte has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the sample

NWTPH = Northwest Method Total Petroleum Hydrocarbons

PCBs = Polychlorinated Biphenyls

pg/g = Picograms per gram

R = result was rejected during data validation due to exceeded holding times or low laboratory control spike recovery

RBC = Risk Based Concentration from DEQ, May 2018. Risk-Based Concentrations for Individual Chemicals

RBCss = RBC for soil ingestion, dermal contact, and inhalation exposure pathways

RBCsw = RBC for leaching to groundwater pathway

TPH = Total Petroleum Hydrocarbons

U = analyte not detected at concentration greater than method reporting limit indicated

TEQ as reported by laboratory. Nondetects not included in calculation. TEQ calculated following method described in Van den Berg et al., 2006. The 2005 World Health Organization Reevaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-Like Compounds. Toxicological Sciences 93(2): 223-241

Total PCBs calculated as the sum of detect aroclors

Principal Threat Waste (PTW) Screening Values; USEPA 2017, amended May 2020

¹ = DEQ RBC screened against soils shallower than 5 feet below ground surface

² = DEQ RBC screened against soils deeper than 5 feet below ground surface

³ = Composite sample comprised of Bleach Plant waste pile soil samples BH-WP-01-SOL-3"-20230816, BH-WP-02-SOL-2"-20230816, BH-WP-03-SOL-0.5"-20230816, BH-WP-04, SOL-0.5"-20230816, BH-WP-05-SOL-0.5"-20230816

⁴ = Composite sample comprised of Bleach Plant waste pile soil samples BH-WP-06-SOL-5"-20230816, BH-WP-07-SOL-1"-20230816, BH-WP-08-SOL-2"-20230816, BH-WP-09-SOL-0.5"-20230816, BH-WP-10-SOL-0.5"-20230816

⁵ = Composite sample comprised of Bleach Plant waste pile soil samples BH-WP-11-SOL-1.5"-20230816, BH-WP-12-SOL-2.5"-20230816, BH-WP-13-SOL-0.5"-20230816, BH-WP-14-SOL-0.5"-20230816, BH-WP-15-SOL-0.5"-20230816

⁶ = Composite sample comprised of Bleach Plant waste pile debris samples BH-WP-01-DEB-20230816, BH-WP-02-DEB-20230816, BH-WP-03-DEB-20230816, BH-WP-04-DEB-20230816, BH-WP-05-DEB-20230816

⁷ = Composite sample comprised of Bleach Plant waste pile debris samples BH-WP-06-DEB-20230816, BH-WP-07-DEB-20230816, BH-WP-08-DEB-20230816, BH-WP-09-DEB-20230816, BH-WP-10-DEB-20230816

⁸ = Composite sample comprised of Bleach Plant waste pile debris samples BH-WP-11-DEB-20230816, BH-WP-12-DEB-20230816, BH-WP-13-DEB-20230816, BH-WP-14-DEB-20230816, BH-WP-15-DEB-20230816

Table 4 - North Side Groundwater Sampling Results
Groundwater Sample Analytical Results - Total Petroleum Hydrocarbons, Lead, and Detected PAHs
Former Blue Heron Paper Company Mill
Oregon City, Oregon

Sample ID	Date Sampled	NWTPH-Gx (Gasoline)	NWTPH-Dx (Diesel)	NWTPH-Dx (Motor Oil)	Total Lead	Dissolved Lead	Naphthalene	Benzo[a]-pyrene TEQ
BH-RI-W8	8/22/2023	--	--	--	1,150	33.7	--	--
BH-RI-W9	8/22/2023	--	--	--	301	4.90	--	--
BH-RI-W10	8/22/2023	--	--	--	164	0.200 U	--	--
BH-RI-W23	8/23/2023	0.119 U	0.298 U	--	2.11	0.200 U	--	--
BH-RI-W14	8/24/2023	--	--	--	5,940	9.15 J	--	--
BH-RI-FD04 (FD of BH-RI-W14)	8/24/2023	--	--	--	5,340	29.8 J	--	--
BH-RI-W16	8/22/2023	--	--	--	--	--	0.0934	ND
BH-RI-EB01	8/24/2023	0.100 U	0.196 U	0.392 U	0.200 U	0.200 U	0.196 U	ND
TB-1	8/23/2023	--	--	--	--	--	--	--
Ingestion & Inhalation from Tapwater RBC - Residential		110.00	NA	NA	NA	NA	0.17	NA
Ingestion & Inhalation from Tapwater RBC - Occupational		NA	NA	NA	NA	NA	0.72	NA
Volatilization to Outdoor Air RBC - Residential		NA	NA	NA	NA	NA	3,600	NA
Volatilization to Outdoor Air RBC - Occupational		NA	NA	NA	NA	NA	16,000	NA
Chronic Vapor Intrusion RBC - Residential		120	400	NA	NA	NA	11	NA
Chronic Vapor Intrusion RBC - Commercial		NA	NA	NA	NA	NA	50	NA
GW in Excavation RBC - Construction & Excavation Worker		14,000	NA	NA	NA	NA	500	NA
Ecological - Chronic RBC for Water ¹		440	640	NA	0.54	0.54	21	0.06

Notes:

All results expressed as micrograms per liter

bold = indicates concentrations detected above method reporting limits

highlighted yellow = indicates detected concentration exceeds one or more potentially applicable RBCs

FD = field duplicate

J = The result is an estimated value

NA = Not Available, no screening value is listed for this analyte.

PAHs = polycyclic aromatic hydrocarbons

RBC = State of Oregon Department of Environmental Quality Risk Based Concentrations, May 2018 amended August 2023

TEQ = Toxic Equivalence Quotient

U = Not detected, the associated value is the method reporting limit

¹ = Risk Based Concentrations for Water. State of Oregon Department of Environmental Quality Guidance for Conducting Ecological Risk Assessments (September 2020)

Table 5 - South Side Groundwater and Production Well Sampling Results
Former Blue Heron Paper Company Mill
Oregon City, Oregon

Screening Criteria			Dissolved Metals by EPA 6020B													Total Metals by EPA 6020B													
			Dissolved Antimony	Dissolved Arsenic	Dissolved Beryllium	Dissolved Cadmium	Dissolved Chromium	Dissolved Copper	Dissolved Lead	Dissolved Mercury	Dissolved Nickel	Dissolved Selenium	Dissolved Silver	Dissolved Thallium	Dissolved Zinc	Total Antimony	Total Arsenic	Total Beryllium	Total Cadmium	Total Chromium	Total Copper	Total Lead	Total Mercury	Total Nickel	Total Selenium	Total Silver	Total Thallium	Total Zinc	
			DEQ RBCwi Residential - Chronic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			DEQ RBCtw Residential	-	0.052	40	20	30,000	800	15	6.0	400	-	100	-	-	-	0.052	40	20	30,000	800	15	6.0	400	-	100	-	-
			DEQ Freshwater Chronic RBC	190	150	11	0.094	24	1.4	0.54	0.012	16	4.6	0.10	6.0	36	190	150	11	0.094	24	1.4	0.54	0.012	16	4.6	0.10	6.0	36
			RCRA Characteristic Waste	-	100	-	20	100	-	5,000	4.0	-	20	100	-	-	-	100	-	20	100	-	5,000	4.0	-	20	100	-	-
			EPA Drinking Water MCL	6	10	4	5	100	1,300	15	2	-	50	100	2	-	6	10	4	5	100	1,300	15	2	-	50	100	2	-
			Sample ID	Sample Date	µg/L													µg/L											
Main RI	BH-RI-W7-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1050*	NA	NA	NA	NA	NA	NA		
	BH-RI-W13-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	13.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	53.2	NA	NA	NA	NA	NA	NA		
	BH-RI-W11-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	5.53	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	48.8	NA	NA	NA	NA	NA	NA		
	BH-RI-W11-DUP (BH-RI-W11-20230821)	8/21/2023	NA	NA	NA	NA	NA	NA	4.82	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-W12-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	25.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	64.2	NA	NA	NA	NA	NA	NA		
	BH-RI-W12-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	25.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	64.2	NA	NA	NA	NA	NA	NA		
	Trip Blank	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
	TB#3362	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Production Well	BH-PW-01-20230404	4/4/2023	U 1.00	U 1.00	U 0.200	U 0.200	U 2.00	U 2.00	U 0.200	U 0.0800	U 2.00	U 1.00	U 0.200	U 0.200	121	U 1.00	U 1.00	U 0.200	U 0.200	U 2.00	U 2.00	3.33	U 0.0800	U 2.00	U 1.00	U 0.200	U 0.200	230	
	BH-FD-PW-01-20230404	4/4/2023	U 1.00	U 1.00	U 0.200	U 0.200	U 2.00	U 2.00	U 0.200	U 0.0800	U 2.00	U 1.00	U 0.200	U 0.200	114	U 1.00	U 1.00	U 0.200	U 0.200	U 2.00	U 2.00	2.7	U 0.0800	U 2.00	U 1.00	U 0.200	U 0.200	192	
	Trip Blank-01-20230404	4/4/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

Table 5 - South Side Groundwater and Production Well Sampling Results
Former Blue Heron Paper Company Mill
Oregon City, Oregon

Screening Criteria			VOCs by EPA 8260D																							
			1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane (EDB)	1,2-Dichlorobenzene	1,2-Dichloroethane (EDC)	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (MEK)	2-Chlorotoluene	
			DEQ RBCwi Residential - Chronic	8.3	13,000	6.8	10	13	300	-	-	47	91	560	0.067	0.34	5,900	4.0	12	400	-	-	5.8	-	4,000,000	-
			DEQ RBCtw Residential	-	8,000	-	0.28	2.8	280	-	-	-	-	54	-	0.0075	300	0.17	-	59	-	-	0.48	-	-	-
			DEQ Freshwater Chronic RBC	85	76	200	730	410	130	-	8.0	-	130	15	-	-	23	2,000	520	26	22	-	9.4	-	22,000	-
			RCRA Characteristic Waste	-	-	-	-	-	14	-	-	-	-	-	-	-	-	10	-	-	-	-	-	-	4,000	-
			EPA Drinking Water MCL	-	200	-	5	-	7	-	-	-	70	-	0.2	0.05	-	5	5	-	-	-	-	-	-	-
			Sample ID	Sample Date	µg/L																					
Main RI	BH-RI-W7-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-W13-20230821	8/21/2023	U 0.400	U 0.400	U 0.500	U 0.500	U 0.400	U 0.400	U 1.00	U 2.00	U 1.00	U 2.00	U 1.00	U 5.00	U 0.500	U 0.500	U 0.400	U 0.500	U 1.00	U 0.500	U 1.00	U 0.500	U 1.00	U 10.0	U 1.00	
	BH-RI-W11-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-W11-DUP (BH-RI-W11-20230821)	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-W12-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-W12-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Trip Blank	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
TB#3362	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Production Well	BH-PW-01-20230404	4/4/2023	U 0.400	U 0.400	U 0.500	U 0.500	U 0.400	U 0.400	U 1.00	U 2.00	U 1.00	U 2.00	U 1.00	U 5.00	U 0.500	U 0.500	U 0.400	U 0.500	U 1.00	U 0.500	U 1.00	U 0.500	U 1.00	U10.0	U 1.00	
	BH-FD-PW-01-20230404	4/4/2023	U 0.400	U 0.400	U 0.500	U 0.500	U 0.400	U 0.400	U 1.00	U 2.00	U 1.00	U 2.00	U 1.00	U 5.00	U 0.500	U 0.500	U 0.400	U 0.500	U 1.00	U 0.500	U 1.00	U 0.500	U 1.00	U10.0	U 1.00	
	Trip Blank-01-20230404	4/4/2023	U 0.400	U 0.400	U 0.500	U 0.500	U 0.400	U 0.400	U 1.00	U 2.00	U 1.00	U 2.00	U 1.00	U 5.00	U 0.500	U 0.500	U 0.400	U 0.500	U 1.00	U 0.500	U 1.00	U 0.500	U 1.00	U10.0	U 1.00	

Table 5 - South Side Groundwater and Production Well Sampling Results
Former Blue Heron Paper Company Mill
Oregon City, Oregon

Screening Criteria			VOCs by EPA 8260D																								
			2-Hexanone	4-Chlorotoluene	4-Isopropyltoluene	4-Methyl-2-pentanone (MIBK)	Acetone	Acrylonitrile	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Ethylbenzene	
			DEQ RBCwi Residential - Chronic	17,000	-	-	1,100,000	-	13	2.8	1,500	1,200	1.6	250	25	1,900	0.71	810	14,000	1.4	350	430	-	-	230	9.8	7.1
			DEQ RBCtw Residential	-	-	-	-	0.052	0.46	-	-	0.13	3.3	7.5	-	0.46	77	21,000	0.22	190	36	-	0.17	-	-	1.5	
			DEQ Freshwater Chronic RBC	99	-	16	170	1,700	78	160	-	-	340	230	16	15	77	25	-	140	-	-	1.7	320	-	-	61
			RCRA Characteristic Waste	-	-	-	-	-	-	10	-	-	-	-	-	-	10	2,000	-	-	-	-	-	-	-	-	-
			EPA Drinking Water MCL	-	-	-	-	-	-	5	-	-	-	-	-	-	5	100	-	-	-	70	-	-	-	-	700
			Sample ID	Sample Date	µg/L																						
Main RI	BH-RI-W7-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-W13-20230821	8/21/2023	U 10.0	U 1.00	U 1.00	U 10.0	U 20.0	U 2.00	U 0.200	U 0.500	U 1.00	U 1.00	UJ 5.00	U 10.0	U 1.00	U 0.500	UJ 10.0	U 1.00	U 5.00	U 0.400	U 1.00	U 1.00	U 1.00	U 1.00	U 0.500		
	BH-RI-W11-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-W11-DUP (BH-RI-W11-20230821)	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-W12-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-W12-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Trip Blank	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	TB#3362	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Production Well	BH-PW-01-20230404	4/4/2023	U 10.0	U 1.00	U 1.00	U 10.0	U 20.0	U 2.00	U 0.200	U 0.500	U 1.00	U 1.00	U 1.00	U 5.00	U 10.0	U 1.00	U 0.500	U 5.00	U 1.00	U 5.00	U 0.400	U 1.00	U 1.00	U 1.00	U 0.500		
	BH-FD-PW-01-20230404	4/4/2023	U 10.0	U 1.00	U 1.00	U 10.0	U 20.0	U 2.00	U 0.200	U 0.500	U 1.00	U 1.00	U 1.00	U 5.00	U 10.0	U 1.00	U 0.500	U 5.00	U 1.00	U 5.00	U 0.400	U 1.00	U 1.00	U 1.00	U 0.500		
	Trip Blank-01-20230404	4/4/2023	U 10.0	U 1.00	U 1.00	U 10.0	U 20.0	U 2.00	U 0.200	U 0.500	U 1.00	U 1.00	U 1.00	U 5.00	U 10.0	U 1.00	U 0.500	U 5.00	U 1.00	U 5.00	U 0.400	U 1.00	U 1.00	U 1.00	U 0.500		

Table 5 - South Side Groundwater and Production Well Sampling Results
Former Blue Heron Paper Company Mill
Oregon City, Oregon

Screening Criteria			VOCs by EPA 8260D																			TPH by NWTHP- Gx	TPH by NWTPH-Dx	
			Hexachlorobutadiene	Isopropylbenzene	m,p-Xylene	Methyl tert-butyl ether (MTBE)	Methylene chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl Chloride	Gasoline Range (C6-C10)	Diesel Range (C10-C22)	Oil Range (C22-C40) [Bunker C heating oil]
			0.74	2,200	-	740	1,200	11	-	5,300	1,000	-	20,000	-	29	36,000	180	-	2.1	-	0.20	120	400	-
			DEQ RBCwi Residential - Chronic	-	440	-	14	11	0.17	-	-	-	1,200	-	12	1,100	360	-	0.49	1,100	0.027	110	100	-
			DEQ RBCtw Residential	-	440	-	14	11	0.17	-	-	-	1,200	-	12	1,100	360	-	0.49	1,100	0.027	110	100	-
			DEQ Freshwater Chronic RBC	-	4.8	-	730	1,500	-	-	27	-	-	-	-	62	-	1.7	220	-	930	0.44	0.64	-
			RCRA Characteristic Waste	-	-	-	-	-	-	-	-	-	-	-	14	-	-	-	10	-	4.0	-	-	-
			EPA Drinking Water MCL	-	-	-	-	5	-	-	-	-	100	-	5	1,000	100	-	5	-	2	-	-	-
Sample ID		Sample Date	µg/L																			mg/L	mg/L	
Main RI	BH-RI-W7-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-W13-20230821	8/21/2023	U 5.00	U 1.00	U 1.00	U 1.00	U 10.0	U 4.00	U 1.00	U 0.500	U 0.500	U 1.00	U 1.00	U 1.00	U 0.400	U 1.00	U 0.400	U 1.00	U 0.400	UJ 2.00	U 0.200	NA	NA	NA
	BH-RI-W11-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-W11-DUP (BH-RI-W11-20230821)	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-W12-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-W12-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trip Blank	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TB#3362	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Production Well	BH-PW-01-20230404	4/4/2023	U 5.00	U 1.00	U 1.00	U 1.00	U 10.0	U 2.00	U 1.00	U 0.500	U 0.500	U 1.00	U 1.00	U 1.00	U 0.400	18.3	U 0.400	U 1.00	U 0.400	U 2.00	U 0.400	U 0.100	U 0.194	U 0.388
	BH-FD-PW-01-20230404	4/4/2023	U 5.00	U 1.00	U 1.00	U 1.00	U 10.0	U 2.00	U 1.00	U 0.500	U 0.500	U 1.00	U 1.00	U 1.00	U 0.400	17.4	U 0.400	U 1.00	U 0.400	U 2.00	U 0.400	U 0.100	U 0.190	U 0.381
	Trip Blank-01-20230404	4/4/2023	U 5.00	U 1.00	U 1.00	U 1.00	U 10.0	U 2.00	U 1.00	U 0.500	U 0.500	U 1.00	U 1.00	U 1.00	U 0.400	U 1.00	U 0.400	U 1.00	U 0.400	U 2.00	U 0.400	NA	NA	NA

Table 5 - South Side Groundwater and Production Well Sampling Results
Former Blue Heron Paper Company Mill
Oregon City, Oregon

Screening Criteria			PCBs by EPA 608.3								SVOCs by EPA 8270E															
			Total PCBs	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(a)pyrene TEQ	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene
			DEQ RBCwi Residential - Chronic			-	17	0.53	0.16	1.3	0.27	1.7	0.36	-	-	-	-	-	-	-	-	-	-	-	-	-
DEQ RBCtw Residential			0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	510	-	-	0.030	0.025	0.025	0.25	-	-	0.025	-	280	-	-	-	
DEQ Freshwater Chronic RBC			0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	15	13	0.02	4.7	0.06	0.060	2.6	0.06	0.012	4.7	0.012	0.8	19	0.012	6.1	4.7
RCRA Characteristic Waste			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
EPA Drinking Water MCL			-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-	-	-	-	0.2	0.2	-	-	-	-	-	-	-	-	-	
Sample ID		Sample Date	µg/L								µg/L															
Main RI	BH-RI-W7-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-W13-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-W11-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-W11-DUP (BH-RI-W11-20230821)	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-W12-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-W12-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trip Blank	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TB#3362	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Production Well	BH-PW-01-20230404	4/4/2023	U 0.0971	U 0.0971	U 0.0971	U 0.0971	U 0.0971	U 0.0971	U 0.0971	U 0.0971	U 0.0755	U 0.0755	U 0.0755	U 0.0755	U 0.113	NA	U 0.113	U 0.113	U 0.0755	U 0.0755	U 0.0755	U 0.0755	U 0.0755	U 0.0755	U 0.151	U 0.151
	BH-FD-PW-01-20230404	4/4/2023	U 0.0971	U 0.0971	U 0.0971	U 0.0971	U 0.0971	U 0.0971	U 0.0971	U 0.0971	U 0.0800	U 0.0800	U 0.0800	U 0.0800	U 0.120	NA	U 0.120	U 0.120	U 0.0800	U 0.0800	U 0.0800	U 0.0800	U 0.0800	U 0.0800	U 0.160	U 0.160
	Trip Blank-01-20230404	4/4/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5 - South Side Groundwater and Production Well Sampling Results
Former Blue Heron Paper Company Mill
Oregon City, Oregon

Screening Criteria			SVOCs by EPA 8270E																											
			Naphthalene	Phenanthrene	Pyrene	Carbazole	Dibenzofuran	2-Chlorophenol	4-Chloro-3-methylphenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	4,6-Dinitro-2-methylphenol	2-Methylphenol	3+4-Methylphenol(s)	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol (PCP)	Phenol	2,3,4,6-Tetrachlorophenol	2,3,5,6-Tetrachlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	Bis(2-ethylhexyl)phthalate	Butyl benzyl phthalate	Diethylphthalate	Dimethylphthalate	Di-n-butylphthalate		
			DEQ RBCwi Residential - Chronic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			DEQ RBCtw Residential	0.17	-	110	-	-	-	-	-	-	-	-	-	-	-	-	0.044	-	-	-	-	-	4.4	5.6	-	-	-	
			DEQ Freshwater Chronic RBC	21	2.3	4.6	4	4	18	1	11	15	71	-	67	-	73	58	6.7	160	1	-	-	1.9	4.9	8	23	220	1,100	19
			RCRA Characteristic Waste	-	-	-	-	-	-	-	-	-	-	-	4,000	4,000	-	-	2,000	-	-	-	-	8,000	40	-	-	-	-	-
			EPA Drinking Water MCL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
			Sample ID	Sample Date	µg/L																									
Main RI	BH-RI-W7-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-W13-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-W11-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-W11-DUP (BH-RI-W11-20230821)	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-W12-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	BH-RI-W12-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Trip Blank	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
TB#3362	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Production Well	BH-PW-01-20230404	4/4/2023	U 0.151	U 0.0755	U 0.0755	U 0.113	U 0.0755	U 0.377	U 0.755	U 0.377	U 0.377	U 1.89	U 1.89	U 0.189	0.189	U 0.755	U 0.755	U 0.755	U 1.51	U 0.377	U 0.377	U 0.377	U 0.377	U 1.51	U 1.51	U 1.51	U 1.51	U 1.51		
	BH-FD-PW-01-20230404	4/4/2023	U 0.160	U 0.0800	U 0.0800	U 0.120	U 0.0800	U 0.400	U 0.800	U 0.400	U 0.400	U 2.00	U 2.00	U 0.200	0.389	U 0.800	U 0.800	U 0.800	U 1.60	U 0.400	U 0.400	U 0.400	U 0.400	U 1.60	U 1.60	U 1.60	U 1.60	U 1.60		
	Trip Blank-01-20230404	4/4/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

Table 5 - South Side Groundwater and Production Well Sampling Results
Former Blue Heron Paper Company Mill
Oregon City, Oregon

Screening Criteria			SVOCs by EPA 8270E																									
			Di-n-octyl phthalate	N-Nitrosodimethylamine	N-Nitroso-di-n-propylamine	N-Nitrosodiphenylamine	Bis(2-Chloroethoxy) methane	Bis(2-Chloroethyl) ether	2,2'-Oxybis(1-Chloropropane)	Hexachlorobenzene	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	2-Chloronaphthalene	1,2,4-Trichlorobenzene	4-Bromophenyl phenyl ether	4-Chlorophenyl phenyl ether	Aniline	4-Chloroaniline	2-Nitroaniline	3-Nitroaniline	4-Nitroaniline	Nitrobenzene	2,4-Dinitrotoluene	2,6-Dinitrotoluene	Benzoic acid	Benzyl alcohol	Isophorone
			-	-	-	-	-	-	0.29	0.74	11	1.6	-	-	-	-	-	-	-	-	-	180	-	-	-	-	-	-
			DEQ RBCwi Residential - Chronic	-	-	0.011	13	-	0.014	-	-	-	0.34	-	-	-	-	-	-	-	-	-	-	-	-	0.049	-	-
			DEQ RBCtw Residential	-	-	-	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			DEQ Freshwater Chronic RBC	220	-	-	-	-	-	-	1	0.45	-	-	-	1.5	-	4.1	0.8	17	-	-	230	44	81	42	8.6	920
			RCRA Characteristic Waste	-	-	-	-	-	-	2.6	10	-	6.0	-	-	-	-	-	-	-	-	-	40	2.6	-	-	-	-
			EPA Drinking Water MCL	-	-	-	-	-	-	1	-	50	-	-	70	-	-	-	-	-	-	-	-	-	-	-	-	-
Sample ID		Sample Date	µg/L																									
Main RI	BH-RI-W7-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-W13-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-W11-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-W11-DUP (BH-RI-W11-20230821)	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-W12-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BH-RI-W12-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Trip Blank	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TB#3362	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Production Well	BH-PW-01-20230404	4/4/2023	U 1.51	U 0.189	U 0.189	U 0.189	U 0.189	U 0.189	U 0.189	U 0.0755	U 0.189	U 0.377	U 0.189	U 0.0755	U 0.189	U 0.189	U 0.189	U 0.377	U 0.189	U 1.51	U 1.51	U 1.51	U 0.755	U 0.755	U 0.755	U 9.43	U 0.755	U 0.189
	BH-FD-PW-01-20230404	4/4/2023	U 1.60	U 0.200	U 0.200	U 0.200	U 0.200	U 0.200	U 0.200	U 0.0800	U 0.200	U 0.400	U 0.200	U 0.0800	U 0.200	U 0.200	U 0.200	U 0.400	U 0.200	U 1.60	U 1.60	U 1.60	U 0.800	U 0.800	U 0.800	U 10.0	U 0.800	U 0.200
	Trip Blank-01-20230404	4/4/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5 - South Side Groundwater and Production Well Sampling Results
Former Blue Heron Paper Company Mill
Oregon City, Oregon

Screening Criteria			SVOCs by EPA 8270E										Dioxins and Furans by EPA Method 1613B																								
			Azobenzene (1,2-DPH)	Bis(2-Ethylhexyl) adipate	3,3'-Dichlorobenzidine	1,2-Dinitrobenzene	1,3-Dinitrobenzene	1,4-Dinitrobenzene	Pyridine	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,3,7,8-TCDD	2,3,7,8-TCDD TEQ	1,2,3,7,8-PeCDD	1,2,3,4,7,8-HxCDD	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDD	1,2,3,4,6,7,8-HpCDD	OCDD	2,3,7,8-TCDF	1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF	1,2,3,4,7,8-HxCDF	1,2,3,6,7,8-HxCDF	2,3,4,6,7,8-HxCDF	1,2,3,7,8,9-HxCDF	1,2,3,4,6,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF	OCDF							
			DEQ RBCwi Residential - Chronic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
			DEQ RBCtw Residential	-	-	0.17	-	-	-	-	300	-	-	0.48	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091	0.091					
			DEQ Freshwater Chronic RBC	-	-	4.5	-	22	-	-	-	-	-	-	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031					
			RCRA Characteristic Waste	-	-	-	-	-	-	-	100	-	-	150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
			EPA Drinking Water MCL	-	-	-	-	-	-	-	-	600	75	-	30	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
			Sample ID		Sample Date	µg/L										pg/L																					
Main RI	BH-RI-W7-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
	BH-RI-W13-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
	BH-RI-W11-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
	BH-RI-W11-DUP (BH-RI-W11-20230821)	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
	BH-RI-W12-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
	BH-RI-W12-20230821	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
	Trip Blank	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
TB#3362	8/21/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						
Production Well	BH-PW-01-20230404	4/4/2023	U 0.189	U 1.89	U 3.77	U 1.89	U 1.89	U 0.755	U 0.189	U 0.189	U 0.189	U 0.261	0.217	U 1.19	U 1.27	U 0.56	U 1.48	J 16.4	J 175	U 0.236	U 0.572	U 0.518	U 0.417	U 0.441	U 0.467	U 0.624	U 2.53	U 1.1	U 1.61	U 1.61	U 1.61						
	BH-FD-PW-01-20230404	4/4/2023	U 0.200	U 2.00	U 4.00	U 2.00	U 2.00	U 0.800	U 0.200	U 0.200	U 0.200	U 0.313	0.0422	U 0.745	U 0.755	U 0.85	U 0.873	J 3.45	J 25.8	U 0.204	U 0.472	U 0.386	U 0.457	U 0.449	U 0.516	U 0.598	U 0.74	U 0.845	U 1.61	U 1.61							
	Trip Blank-01-20230404	4/4/2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA						

Notes:
Bold numbers represent detections
Gray highlight represents a result which is greater than one or more of the regulatory standards
Orange highlight indicates a detected result which exceeds DEQ Freshwater Chronic RBC
Red highlight indicates a result which exceeds DEQ Freshwater Chronic RBC, EPA Drinking Water MCL, and DEQ RBCtw Residential
* Lead results from BH-W7-20230821 high due to extremely low availability of volume from well resulting in turbid sample
- = SLs not published/relevant for these constituents
µg/L = micrograms per liter
DEQ = State of Oregon Department of Environmental Quality
NA = sample not analyzed for this constituent
N/A = not applicable
RBC = Risk Based Concentration from DEQ, May 2018. Risk Based Concentrations for Individual Chemicals
RBCtw = RBC for Ingestion & Inhalation from Tapwater
RBCwi = RBC for Vapor Intrusion into Buildings
U = analyte not detected at concentration greater than method reporting limit indicated