

August 24, 2009

Mr. Ed Jones, Project Manager Washington State Department of Ecology 3190 160<sup>th</sup> Avenue Southeast Bellevue, Washington 98008-5452

RE: PROGRESS REPORT, APRIL THROUGH JUNE 2009, QUARTER 2
REMEDIAL INVESTIGATION
CAPITAL INDUSTRIES, INC., SEATTLE, WASHINGTON
AGREED ORDER NO. DE5348
FARALLON PN: 457-004

Dear Mr. Jones:

Farallon Consulting L.L.C. (Farallon) has prepared this progress report on behalf of Capital Industries Inc. (Capital) to summarize the activities conducted for the Remedial Investigation (RI) from April through June 2009, Quarter 2 (Q2) at the Capital Site located at 5801 3<sup>rd</sup> Avenue South in Seattle, Washington. The progress report has been prepared in accordance with Agreed Order No. DE5348 entered into by Capital and the Washington State Department of Ecology (Ecology) dated January 24, 2008.

## **ACTIVITIES DURING REPORTING PERIOD**

Activities completed from April through June 2009, Q2 for the RI are summarized below.

## REMEDIAL INVESTIGATION

The following RI activities were conducted during this reporting period.

- Capital submitted the Revised Tier 1 Reconnaissance Sampling Results Technical Memorandum (Tier 1 Technical Memorandum) to Ecology on April 13, 2009. The Tier 1 Technical Memorandum provided a summary of the results of the Tier 1 Sampling effort, and provided the scope of work for Tier 2 Sampling based on the results of the Tier 1 Sampling.
- Capital obtained access agreements for nearby properties targeted for Tier 2 Sampling.
- Capital conducted utility locates on June 26, 2009, and began Tier 2 Reconnaissance Sampling on June 29, 2009. Tier 2 Reconnaissance Sampling continued into Quarter 3.

#### INTERIM MEASURES

No interim measures were implemented during this reporting period.

#### VAPOR INTRUSION

The following vapor intrusion (VI) activities were completed during this reporting period.

• Capital continued operation and maintenance of the sub-slab depressurization system (SSDS) installed at the Olympic Medical Building.





- Capital submitted the Draft Sampling and Analysis Plan (SAP) for Air Quality Monitoring to Ecology for review and comment. The scope of work presented in the SAP is for air quality monitoring at the Olympic Medical Building to confirm that adequate VI protection is being achieved in the manufacturing and warehouse areas.
- Capital collected indoor air samples from the Olympic Medical Building on April 15, 2009. Three air samples were collected over 8 hours from the manufacturing area, the warehouse area, and outdoors and upwind of the Olympic Medical Building. The laboratory analytical results are provided in Table 1 and will be included in the forthcoming draft Post-Installation VI Mitigation Report.

### **GROUNDWATER MONITORING**

Groundwater level measurements were collected on May 18, 2009 for monitoring wells MW-1 through MW-8. The results are presented in Table 2. Water level measurements were coordinated with Philip Service Corporation and Art Brass Plating at the request of Ecology. Groundwater samples were not collected by Capital during Q2.

### **PUBLIC COMMUNICATIONS**

The project website was updated with an electronic copy of the previous progress report and the revised Tier 1 Technical Memorandum. No other public communications were completed during this period.

## ANTICIPATED WORK IN THE UPCOMING QUARTER

Work anticipated to be performed during the next progress reporting period (July through September 2009) is summarized below.

#### REMEDIAL INVESTIGATION

The following RI activities are anticipated to be performed during the next reporting period:

- Complete the Tier 2 Reconnaissance Sampling, which will include advancement and sampling of reconnaissance borings B19 through B28;
- Prepare a draft First Phase RI Report presenting the results of the First Phase RI Field Program, including Tier 1 and Tier 2 Sampling; and
- Prepare a draft Groundwater Monitoring Plan to outline the scope of work for monitoring well installation and groundwater monitoring and sampling as part of the Second Phase RI Field Program.

#### **INTERIM MEASURES**

No interim measures are anticipated during the next reporting period.

## VAPOR INTRUSION MITIGATION - OLYMPIC MEDICAL BUILDING AT 5900 $1^{\mathrm{ST}}$ AVENUE SOUTH

The following VI activities are anticipated to be performed during the next reporting period:

• Submit a draft VI Inspection, Monitoring, and Maintenance Work Plan to Ecology for the SSDS installed at the Olympic Medical Building; and



• Submit a draft/revised Post-Installation VI Mitigation Report to Ecology for approval of the SSDS final design and operation.

## GROUNDWATER MONITORING

Groundwater level measurements will be collected from Capital monitoring wells MW-1 through MW-8 in August 2009. Collection of water levels will be coordinated with Blaser Die Casting and Art Brass Plating at the request of Ecology. Groundwater samples will not be collected during the upcoming quarter.

#### **PUBLIC COMMUNICATIONS**

The project website will be updated with an electronic copy of this progress report; the draft First Phase RI Report; the draft Groundwater Monitoring Plan; the draft VI Inspection, Monitoring, and Maintenance Work Plan; and the draft Post-Installation VI Mitigation Report.

The next progress report will summarize activities completed from July through September 2009 and will be submitted on or before November 24, 2009.

#### **CLOSING**

Farallon trusts that this quarterly progress report provides sufficient information for Ecology. If you have any questions regarding this project, please contact either of the undersigned at (425) 295-0800.

Sincerely,

Farallon Consulting, L.L.C.

Daniel Caputo Project Manager

Attachments: Table 1, Analytical Results for TCE in Air at the Olympic Medical Building

Principal

Peter Jewett, L.G., L.E.G.

Table 2, Groundwater Elevation Data Summary

cc: Ron Taylor, Capital Industries, Inc.

Don Verfurth, Gordon and Rees, L.L.P.

Tong Li, Groundwater Solutions

Email with link to electronic copy on project website:

Janet Knox, Pacific Groundwater Group

Doug Hillman, Aspect Consulting

Bill Carroll, Arrow Environmental

Bill Beck, PSC

DC/PJ:bw

#### Table 1

### Analytical Results for TCE in Air in the Olympic Medical Building

Capital Industries, Inc. Seattle, Washington Farallon PN: 457-004

				Commercial	Air IPIMALs <sup>1</sup>				Corrected Indoor
Sample Identification	Sampled By	Sample Date	Sample Location	Cancer (µg/m³)	Noncancer (μg/m³)	TCE $(\mu g/m^3)^2$	CEF <sup>3</sup>	NCEF <sup>3</sup>	CEF <sup>4</sup>
59001-IA1	PSC	10/2004	Office	0.02	1.6	1.4	70	0.88	
59001-IA2	PSC	10/2004	Warehouse	0.02	1.6	3.5	175	2.19	45
59001-9-IA2	PSC	10/2004	Warehouse	0.02	1.6	3,7	185	2.31	55
59001-AA1	PSC	10/2004	Outdoor	0.02	1.6	2.6	130	1.63	
R-59001-IA1	PSC	07/2005	Manufacturing	0.02	1.6	4.4	220	2.75	212.5
R-59001-AA1	PSC	07/2005	Outdoor	0.02	1.6	0,15	7.5	0.09	M.W
AA001	GeoEngineers	03/2006	Outdoor	0.02	1.6	0.28	14	0.18	
AA002	GeoEngineers	03/2006	Warehouse	0.02	1.6	2.1	105	1.31	91
AA003	GeoEngineers	03/2006	Manufacturing	0.02	1.6	1.6	80	1.00	66
AA004	GeoEngineers	03/2006	Manufacturing	0.02	1.6	1.5	75	0.94	61
AA005	GeoEngineers	03/2006	Office	0.02	1.6	0.44	22	0.28	8
AA006	Farallon	4/15/2009	Manufacturing	0.02	1.6	<14 <sup>6</sup>			44.74
AA007	Farallon	4/15/2009	Warehouse	0.02	1.6	<18 <sup>6</sup>	<del></del>		
AA008	Farallon	4/15/2009	Outdoor	0.02	1.6	<0.90			the state of the s
cology Exceedance Factor Benchmarks <sup>5</sup>						10	10	10	

#### Notes:

Results in **bold** denote concentrations above Ecology Exceedance Factor Benchmark.

-- denotes value not applicable.

<sup>1</sup>Commercial Air IPIMALs for TCE as part of the IPIM Approach, developed by PSC and Ecology.

<sup>2</sup>Analyzed by U.S. Environmental Protection Agency Method TO-15 SIM.

<sup>3</sup>CEFs and NCEFs are calculated by dividing the corrected indoor air concentrations by cancer and noncancer-based indoor air IPIMALs, respectively.

<sup>4</sup>Corrected indoor CEFs are calculated by subtracting the outdoor CEF from the individual indoor CEFs for each sampling location.

<sup>5</sup>A CEF/NCEF of 10 indicates that exposure to indoor air concentrations could potentially lead to a cumulative risk of 1E-05, and further evaluation is recommended to determine if the location should proceed to Tier 4.

<sup>6</sup>Laboratory reporting limits were elevated due to the presence of high level non-target compounds.

Ecology = Washington State Department of Ecology

CEF = cancer exceedance factor

GeoEngineers = GeoEngineers, Inc.

IPIM = Inhalation Pathway Interim Measure

IPIMALs = Inhalation Pathway Interim Measures Action Levels

μg/m3 = micrograms per cubic meter

NCEF = noncancer exceedance factor

PSC = Philip Services Corporation

TCE = trichloroethene

## Table 2

# Groundwater Elevation Data Summary Capital Industries, Inc.

Seattle, Washington Farallon PN: 457-004

Monitoring Well Identification	Date Collected	Casing Elevation (feet) <sup>1</sup>	Depth to Water (feet) <sup>2</sup>	Potentiometric Surface Elevation (feet) <sup>3</sup>	
MW-1	2/9/2006	16.34	6.60	9.74	
	5/15/2007	16.34	7.66	8.68	
	8/1/2008	16.34	8.60	7.74	
	12/15/2008	16.34	8.43	7.91	
	3/23/2009	16.34	7.94	8.40	
	5/18/2009	16.34	7.85	8.49	
	2/9/2006	16.48	7.25	9.23	
	5/15/2007	16.48	8.29	8.19	
	8/1/2008	16.48	9.14	7.34	
MW-2	12/15/2008	16.48	8.93	7.55	
	3/23/2009	16.48	8.50	7.98	
	5/18/2009	16.48	8.43	8.05	
	2/9/2006	15.74	6.84	8.90	
	5/15/2007	15.74	7.85	7.89	
	8/1/2008	15.74	8.61	7.13	
MW-3	12/15/2008	15.74	8.43	7.13	
	3/23/2009	15.74	8.02		
	5/18/2009	15.74	7.99	7.72	
	2/9/2006	15.62	6.39	7.75	
	5/15/2007	15.62		9.23	
	8/1/2008	15.62	7.35	8.27	
MW-4	12/15/2008	15.62	8.17	7.45	
	3/23/2009		8.03	7.59	
		15.62	7.60	8.02	
	5/18/2009	15.62	7.52	8.10	
	2/9/2006	15.90	6.30	9.60	
	5/15/2007	15.90	7.41	8.49	
MW-5	8/1/2008	15.90	8.31	7.59	
	12/15/2008	15.90	8.10	7.80	
	3/23/2009	15.90	7.65	8.25	
	5/18/2009	15.90	7.54	8.36	
	2/9/2006	17.43	7.72	9.71	
	5/15/2007	17.43	8.58	8.85	
MW-6	8/1/2008	17.43	9.51	7.92	
	12/15/2008	17.43	9.44	7.99	
	3/23/2009	17.43	8.96	8.47	
	5/18/2009	17.43	8.87	8.56	
	2/9/2006	16.93	7.32	9.61	
	5/15/2007	16.93	8.19	8.74	
MW-7	8/1/2008	16.93	9.10	7.83	
	12/15/2008	16.93	9.03	7.90	
	3/23/2009	16.93	8.55	8.38	
-	5/18/2009	16.93	8.45	8.48	
	2/9/2006	16.68	6.71	9.97	
	5/15/2007	16.68	7.60	9.08	
MW-8	8/1/2008	16.68	8.57	8.11	
	12/15/2008	16.68	8.51	8.17	
	3/23/2009	16.68	8.01	8.67	
	5/18/2009	16.68	7,91	8.77	

#### NOTES:

<sup>&</sup>lt;sup>1</sup>Relative elevation of top of casing, in feet, as surveyed by PLS, Inc., Issaquah, Washington 8/22/2003.

<sup>&</sup>lt;sup>2</sup>Depth to water below top of well casing.

<sup>&</sup>lt;sup>3</sup>Potentiometric Surface Elevation (Casing Elevation - Depth to Water) (feet above mean sea level).