

October 3, 2017

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

BY E-MAIL ONLY

**RE: PROGRESS REPORT, JULY THROUGH SEPTEMBER 2017
REMEDIAL INVESTIGATION MONITORING AND FEASIBILITY STUDY
CAPITAL INDUSTRIES, INC., SEATTLE, WASHINGTON
AGREED ORDER NO. DE 10402
FARALLON PN: 457-008**

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 during the third quarter of 2017, July through September, as part of the ongoing Remedial Investigation (RI) monitoring and Feasibility Study (FS) being conducted at the Capital Site at 5801 3rd Avenue South in Seattle, Washington. This progress report has been prepared in accordance with Agreed Order No. DE 10402 dated April 23, 2014, entered into by potentially liable persons that include Capital; Art Brass Plating, Inc.; Blaser Die Casting Co.; and PSC Environmental Services, LLC (Burlington Environmental, LLC is a wholly owned subsidiary of PSC Environmental Services, LLC, which is a wholly owned subsidiary of Stericycle Environmental Solutions, Inc.); and by the Washington State Department of Ecology (Ecology) (Agreed Order). Capital and the other potentially liable persons listed above are collectively referred to as the West of 4th Group. The West of 4th Group site under the Agreed Order consists of Site Unit 1 (SU1) and Site Unit 2 (SU2) as depicted on Attachment A Figure 1. The Capital Site is located in SU2.

ACTIVITIES DURING REPORTING PERIOD

Activities completed during this progress reporting period included:

- Continuing operation of vapor intrusion mitigation subslab depressurization systems (SSDSs) at the Pacific Foods Systems North Building at 5815 4th Avenue South and the Olympic Medical Facility at 5900 First Avenue South in Seattle, Washington. This work included periodic inspection of system operations.
- Preparing the draft *Vapor Intrusion Mitigation Measures Status Report, Pacific Food Systems, Inc. North Building, 5815 Fourth Avenue South, Seattle, Washington* dated August 2017 for Ecology review.
- Conducting groundwater monitoring at all SU2 monitoring wells, and sampling at select monitoring wells, indicated below.



- Working to obtain Ecology approval to eliminate an SU2 pilot study and proceed instead with an interim action at the Capital Plant 4 Building that will result in cleanup of soil contamination that is a current source of impacts to the groundwater and vapor intrusion pathways. The interim action will consist of application of in-situ chemical oxidation, as proposed in the *West of Fourth Site Unit 2 Feasibility Study, Seattle Washington* dated August 11, 2016, prepared by Pacific Groundwater Group. Farallon provided Ecology the draft *Conceptual Interim Action Work Plan, Site Unit 2, Seattle, Washington* dated July 27, 2017, prepared on behalf of Capital (Interim Action Work Plan).

These activities are summarized in the sections that follow.

VAPOR INTRUSION MITIGATION AND REPORTING

The SSDS applied vacuum has been maximized at the Pacific Food Systems North Building since the third quarter of 2016 to assess whether concentrations of tetrachloroethene and trichloroethene (TCE) in indoor air can be further reduced. The average applied vacuum has been between 6 and 7 inches of water, with corresponding flow rates ranging from 17 to 24 standard cubic feet per minute. Normal SSDS operation at an applied vacuum of 6.8 inches of water was observed during an inspection conducted on September 13, 2017.

Indoor air sampling was conducted in September 2017 to evaluate SSDS performance. TCE concentrations for two indoor air samples collected ranged from 0.225 to 4.48 micrograms per cubic meter. The higher TCE concentration was detected in the sample collected in the machine shop area, although the building inspection did not identify use of products potentially containing TCE. TCE was detected at a concentration of 0.236 micrograms per cubic meter in the outdoor ambient air sample collected from the upwind side of the Pacific Food Systems North Building, suggesting that outdoor ambient air was not a significant contributing source of TCE for the indoor air samples. Tetrachloroethene concentrations detected in indoor air samples have been consistently less than target compliance levels since sampling was initiated in 2012.

Farallon prepared the draft *Vapor Intrusion Mitigation Measures Status Report, Pacific Food Systems, Inc. North Building, 5815 Fourth Avenue South, Seattle, Washington* dated August 2017 on behalf of Capital for Ecology's records. Ecology provided comments to the draft report in the letter regarding West of 4th Site, Agreed Order #DE 10402, Site Unit 2 VI Mitigation Measures Status Report – 5815 4th Avenue South dated August 21, 2017 from Mr. Ed Jones of Ecology to Ms. Dana Cannon, West of 4th Project Coordinator. Farallon and Ecology have exchanged supplemental information per Ecology request, and are coordinating a third-party assessment of the SSDS that will occur in October 2017. A final version of the report will be issued in the fourth quarter of 2017.

The SSDS at the Olympic Medical Facility operated continuously during the third quarter of 2017. The SSDS was operating in accordance with standard operating conditions during an inspection conducted by Farallon in September 2017. Operation of the SSDS at the Olympic Medical Facility will continue, and will be monitored quarterly.



GROUNDWATER MONITORING AND SAMPLING

Groundwater monitoring and sampling was performed during the week of September 25, 2017 in accordance with the technical memorandum regarding FINAL West of 4th Groundwater Monitoring Program Plan, 2017 through Draft Cleanup Action Plan, W4 Joint Deliverable, Agreed Order No. DE 10402 dated March 21, 2017 from Ms. Janet Knox of Pacific Groundwater Group to Mr. Jones of Ecology. Groundwater elevation data were collected at all SU2 monitoring wells. Groundwater samples were collected from monitoring wells MW-7, CI-12-WT, CI-12-60, CI-14-35, CI-14-70, CI-15-60, CI-19-30, CG-141-40, and CG-141-50. All samples were analyzed for chlorinated volatile organic compounds. Samples collected from monitoring wells CI-15-60, CG-141-40, and CG-141-50 were analyzed also for natural attenuation parameters, including nitrate, ferrous iron, sulfate, methane, total organic carbon, and ethane/ethene. The analytical results will be validated and summarized in the fourth quarter of 2017 to evaluate plume stability and the potential for natural attenuation.

FEASIBILITY STUDY REPORT

Ecology and the West of 4th Group had agreed to evaluate the feasibility of select cleanup technologies that could reduce the time frame for cleanup and protect the Lower Duwamish Waterway using bench and/or field-scale pilot testing. In June 2017, the West of 4th Group concurred that changes to the SU2 pilot study location, the reduced scope of work, and the 1-year time frame to complete the pilot study would not achieve the objectives for reducing the contaminant mass in groundwater and providing data to improve the FS cleanup alternative evaluation. The West of 4th Group therefore proposed conducting pilot studies at SU1 and eliminating the SU2 pilot study, and conducting an interim action at the Capital Plant 4 Building instead. Ecology approved this proposal, and Capital is proceeding with planning documents for the interim action work.

INTERIM MEASURES

No interim measures were implemented during this reporting period. However, Capital completed the Interim Action Work Plan that includes treatment of soil and groundwater at the Capital Plant 4 Building using in-situ chemical oxidation. Ecology provided comments regarding the work proposed in its letter regarding West of 4th Site, Agreed Order #DE 10402, Site Unit 2: Capital Industries Plant 4 Interim Action Work Plan dated August 16, 2017 from Mr. Jones to Ms. Cannon, West of 4th Project Coordinator. The Interim Action Work Plan is subject to public comment, which is being coordinated by Ecology. An amendment to the Agreed Order that includes the SU1 pilot study work and the interim action at the Capital Plant 4 Building was prepared by Ecology and issued for public comment on September 29, 2017. A final version of the Interim Action Work Plan that addresses Ecology and public comment will be issued in the fourth quarter of 2017.

PUBLIC COMMUNICATIONS

Public communication activities regarding the amendment to the Agreed Order, SU1 Pilot Study, Capital Interim Action, and State Environmental Policy Act Determination of Non-significance were initiated by Ecology on September 29, 2017. Copies of historical deliverables and comments



received from Ecology are available on the West of 4th website:

(<http://aspectconsulting.com/clients/W4/>).

ANTICIPATED WORK IN THE NEXT QUARTER

Work anticipated to be performed during the fourth quarter of 2017, October through December, is summarized below.

VAPOR INTRUSION

Capital will contract a third party to evaluate SSDS performance at the Pacific Food Systems North Building in October 2017. The results from the evaluation will determine further actions required regarding vapor intrusion mitigation at this location. Periodic monitoring of the SSDS at the Olympic Medical Facility will continue to be performed.

MONITORING AND SAMPLING ACTIVITIES

The groundwater data from the September 2017 sampling event conducted in SU2 will be used to continue to evaluate plume stability and support the selection of potential cleanup alternatives presented in the FS Report. Summary figures with historical data for 2016 and 2017 will be provided to Ecology and included in the fourth quarter progress report.

FEASIBILITY STUDY WORK

The revised versions of the SU1 and SU2 FS Reports comprising the West of 4th Group FS will be considered final versions of these reports. Following completion of the SU1 pilot study and interim action, an addendum to the FS Reports will be prepared, and a final remedial alternative will be proposed for Ecology approval. A Draft Cleanup Action Plan will be prepared for SU1 and SU2 upon concurrence of the West of 4th Group and Ecology regarding the selected remedial alternative.

INTERIM MEASURES

The interim action proposed at Capital Plant 4 will be implemented upon Ecology approval. Public comments on the Interim Action Work Plan are being solicited by Ecology between September 29 and October 30, 2017.

PUBLIC COMMUNICATIONS

The project website (<http://www.farallonconsulting.com/457-capital-industries>) will be updated with an electronic copy of this progress report.

The next progress report will summarize activities completed from October through December 2017, and will be submitted on or before January 5, 2018.



CLOSING

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

Sincerely,

Farallon Consulting, L.L.C.

Jeffrey Kaspar, L.G., L.H.G.
Principal Geologist

Attachment: Attachment A, Site Diagram

cc: Ron Taylor, Capital Industries, Inc. (by e-mail)
Donald Verfurth, Gordon and Rees, L.L.P. (by e-mail)

E-mail with link to electronic copy on project website:

Janet Knox, Pacific Groundwater Group
Dana Cannon, Aspect Consulting
Bill Carroll, Arrow Environmental
Bill Beck, PSC Environmental Services, LLC

JK:bjj

**ATTACHMENT A
SITE DIAGRAM**

PROGRESS REPORT, JULY THROUGH SEPTEMBER 2017

Capital Industries, Inc.
Seattle, Washington

Farallon PN: 457-008