

April 12, 2018

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

**BY EMAIL ONLY**

**RE: PROGRESS REPORT, JANUARY THROUGH MARCH 2018  
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 first quarter of 2018, January through March, as part of the ongoing Remedial Investigation (RI) monitoring and Feasibility Study (FS) being conducted at the Capital Site at 5801 3<sup>rd</sup> 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 4<sup>th</sup> Group. The West of 4<sup>th</sup> 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 4<sup>th</sup> Avenue South and the Olympic Medical Facility at 5900 First Avenue South in Seattle, Washington. This work included periodic inspection of system operations.
- Conducting a semiannual groundwater monitoring and sampling event in March 2018 for select SU2 monitoring wells.
- Replacing the previously decommissioned monitoring well CI-12-30 at the CertainTeed Gypsum facility on 1<sup>st</sup> Avenue South. Monitoring well CI-12-35 was installed at a similar



location outside the gypsum recycling area on March 23, 2018 and was sampled as part of the March 2018 semiannual groundwater monitoring and sampling event.

- Submitting a *Draft Capital Industries Plant 4 Field Implementation Work Plan, West of 4<sup>th</sup> Group Site, Capital Industries, Inc., 5815 4<sup>th</sup> Avenue South, Seattle, Washington* dated March 6, 2018, prepared by Farallon. (Draft FIWP). This document was based on Ecology comments regarding the *Final Capital Industries Plant 4 Interim Action Work Plan, West of 4<sup>th</sup> Group Site, Capital Industries, Inc., 5815 4<sup>th</sup> Avenue South, Seattle, Washington* dated December 21, 2017 (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 reduced below the applicable air cleanup levels. Normal SSDS operation continued through the end of March 2018. The system operations were verified on March 22, 2018. Water accumulation at the SSDS blower location, which was a previous issue in 2017, has not occurred in 2018 and the SSDS blower appeared to be operating in accordance with expectations. Pressure field monitoring was not conducted but will be conducted as part of a larger pressure field monitoring event that will occur in April 2018.

On December 6, 2017, Advanced Radon Technologies, Inc. (ART) of Spokane, Washington, Farallon, and Ecology conducted a Site visit to allow ART to independently review the SSDS design/operation and present recommendations, if necessary, for system modifications or operations. The ART inspection summary, scope of work for further actions, and schedule are being prepared for Ecology's review in April 2018. In the interim, the SSDS continues to operate.

The SSDS at the Olympic Medical Facility operated continuously during the first quarter of 2018. The SSDS was operating in accordance with standard operating conditions during the inspection conducted by Farallon on March 21, 2018. During the inspection, the SSDS blower was noted as making more noise than previously noted by the building personnel. The blower appears to be operating normally but the increased noise may be an initial sign of blower failure. The tenant will be monitoring the system periodically to confirm that it is operating and will contact Farallon immediately if the SSDS blower fails. Indoor, outdoor, and influent air samples were collected during the Site visit and the results will be evaluated in April 2018 and reported to Ecology. Operation of the SSDS at the Olympic Medical Facility will continue, and will be monitored in the second quarter of 2018 to continue to evaluate the condition of the SSDS blower.

### **GROUNDWATER MONITORING AND SAMPLING**

Groundwater monitoring and sampling was performed during the week of March 19, 2018 in accordance with the technical memorandum regarding FINAL West of 4<sup>th</sup> 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 scheduled for sampling and analyzed for chlorinated volatile organic compounds. Groundwater samples from select monitoring wells also were analyzed 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 second quarter of 2018 to evaluate plume stability and the potential for natural attenuation.

### **MONITORING WELL MAINTENANCE**

In December 2016, monitoring well CI-12-30, located at the CertainTeed Gypsum facility at 5931 East Marginal Way South in Seattle, Washington, was decommissioned due to accidental damage associated with heavy equipment use. On March 22, 2018, the monitoring well was replaced. Monitoring well CI-12-35 was installed approximately 40 feet north of the former well location. The location was shifted due to the frequent occurrence of ponding water that prohibits access to the CI-12 monitoring well cluster. Monitoring well CI-12-35 was installed at a depth of approximately 35 feet below the ground surface and was constructed with a 10-foot section of 2-inch-diameter polyvinyl chloride well screen and 25 feet of 2-inch-diameter, Schedule 40, polyvinyl chloride blank pipe. The well screen spans from approximately 25 to 35 feet below the ground surface and is within the Shallow Groundwater Interval. The monitoring well is flush-mounted with the existing asphalt pavement. No soil sampling was conducted during the monitoring well installation. The monitoring well was developed using standard surging and pumping techniques until the groundwater turbidity was reduced to the maximum amount practicable. On March 27, 2018, monitoring well CI-12-35 was sampled and submitted for analysis for chlorinated volatile organic compounds. The monitoring well construction diagram/details will be included in the next quarterly progress report with the groundwater analytical results.

The physical condition of all monitoring wells and monument equipment were evaluated as a component of the semiannual groundwater monitoring program. Where necessary, monument gaskets were replaced, monument bolts were retapped and/or replaced, and monuments were cleaned. Monitoring well CI-12-60 had damaged piping that prohibited the well cap from sealing tightly. The monitoring well casing was trimmed and a new locking well cap was installed. The well casing will be surveyed in April 2018 along with the top of casing for the newly installed monitoring well CI-12-35.

### **FEASIBILITY STUDY REPORT**

Ecology and the West of 4<sup>th</sup> 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 4<sup>th</sup> 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 4<sup>th</sup> 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 preparing planning documents for the interim action work that will occur in 2018.

### **INTERIM MEASURES**

No interim measures were implemented during this reporting period. However, Capital issued the Draft FIWP that includes details regarding treatment of soil and groundwater at the Capital Plant 4 Building using in-situ chemical oxidation. The Draft FIWP included a Sampling and Analysis Plan, a Quality Assurance Project Plan, and a Health and Safety Plan. Ecology provided comments on the Draft FIWP on April 3, 2018 that will be addressed by May 3, 2018.

### **PUBLIC COMMUNICATIONS**

No public communication activities were completed by Capital during this period.

### **ANTICIPATED WORK IN THE NEXT QUARTER**

Work anticipated to be performed during the second quarter of 2018, April through June, is summarized below.

#### **VAPOR INTRUSION**

The ART inspection summary, scope of work for further actions, and schedule are being prepared for Ecology's review in April 2018. Capital also will conduct an evaluation of the negative pressure field extension beneath the Pacific Food Systems North Building in April 2018. The results from the evaluation will determine further actions required regarding vapor intrusion mitigation at this location. A renewed access agreement for the vapor intrusion mitigation work was issued to Pacific Food Systems during the first quarter of 2018 and is anticipated to be executed in April 2018.

Periodic monitoring of the SSDS at the Olympic Medical Facility will continue to be performed by the staff at the facility to monitor the SSDS blower noise levels and applied vacuum to evaluate whether a replacement blower is necessary. A renewed access agreement for the vapor intrusion mitigation work was issued to the owner of the Olympic Medical Facility and the landowner during the first quarter of 2018 and is anticipated to be executed in April 2018.

#### **MONITORING AND SAMPLING ACTIVITIES**

The groundwater data from the March 2018 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 through 2018 will be provided to Ecology and included in the second quarter progress report.

#### **FEASIBILITY STUDY WORK**

The revised versions of the SU1 and SU2 FS Reports comprising the West of 4<sup>th</sup> Group FS are considered final versions of these reports. Following completion of the SU1 pilot study and Capital Plant 4 interim action in 2019, 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 4<sup>th</sup> Group and Ecology regarding the selected remedial alternative.

### **INTERIM MEASURES**

The interim action proposed at Capital Plant 4 will be implemented upon Ecology approval of a final Field Implementation Work Plan. The current estimate is that the first phase of work for the interim action measures will be implemented in the second quarter of 2018.

### **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 April through June 2018, and will be submitted on or before July 6, 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.**

A handwritten signature in blue ink that reads "Jeffrey Kaspar".

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

Attachments: Attachment A, Site Diagram

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

Email 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

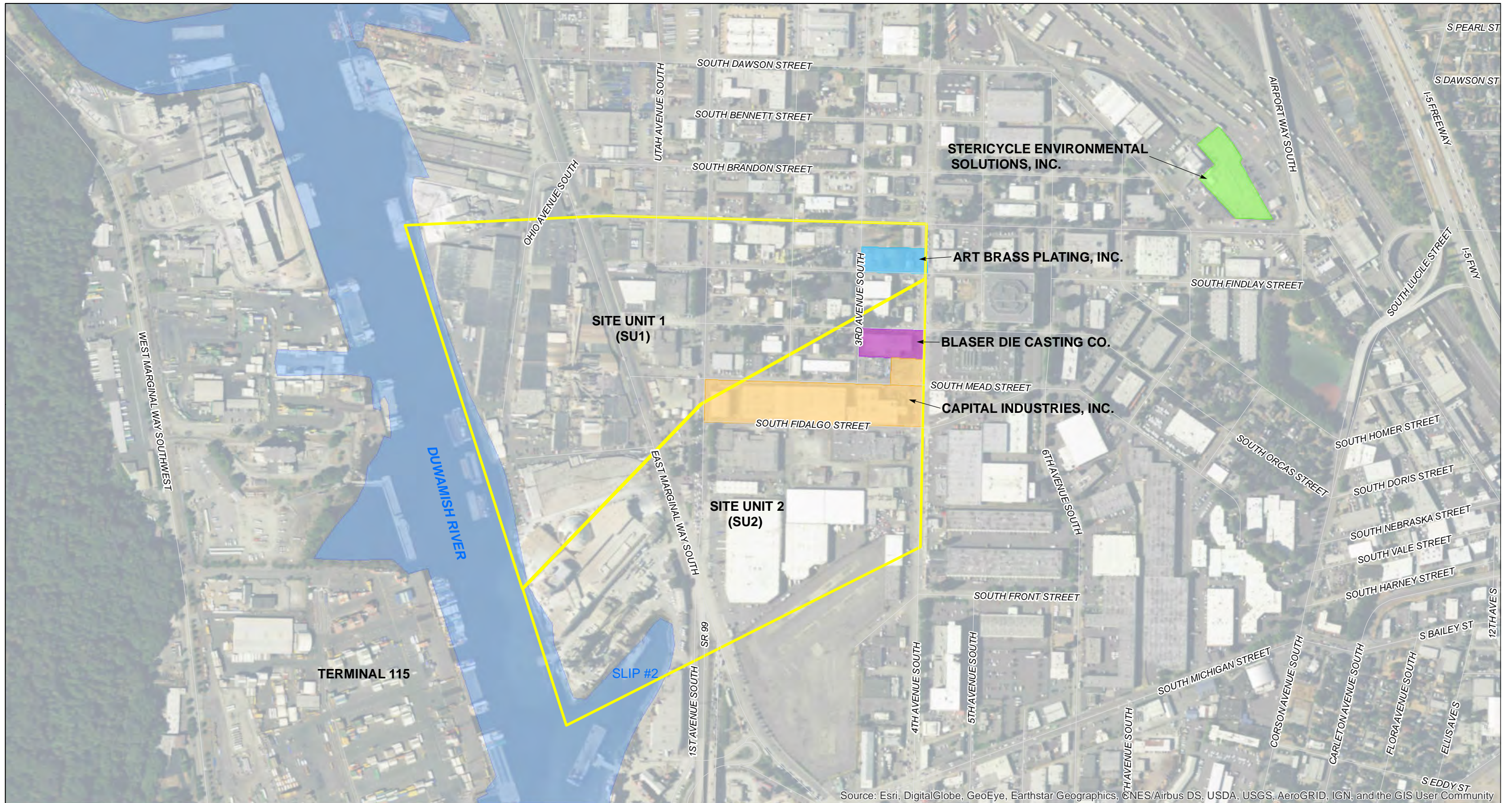
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**ATTACHMENT A  
SITE DIAGRAM**

PROGRESS REPORT, JANUARY THROUGH MARCH 2018

Capital Industries, Inc.  
Seattle, Washington

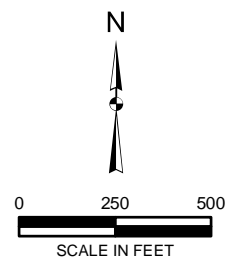
Farallon PN: 457-008




Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

**LEGEND**

- ART BRASS PLATING, INC.
- BLASER DIE CASTING CO.
- CAPITAL INDUSTRIES, INC.
- STERICYCLE ENVIRONMENTAL SOLUTIONS, INC.
- SITE UNIT BOUNDARY





Washington  
Issaquah | Bellingham | Seattle

Oregon  
Portland | Bend | Baker City

California  
Oakland | Sacramento | Irvine

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**FIGURE 1**  
SITE DIAGRAM  
WEST OF 4TH GROUP SITE  
SEATTLE, WASHINGTON

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