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Seattle, WA 98121

Transmitted via Electronic Mail

April 18, 2023

Ms. Sunny Becker
Washington State Department of Ecology
Toxics Cleanup Program
15700 Dayton Ave N., Shoreline, WA 98133

RE: **Quarterly Progress Report: January 1 through March 31, 2023**
Terminal 30 Cleanup Action Site, Cleanup Site ID # 4394
Consent Decree, Dated July 19, 2017

Dear Ms. Becker:

The Port of Seattle submits the attached Quarterly Progress Report for the Terminal 30 Cleanup Action per Section XI of the Consent Decree filed on July 19, 2017 (Consent Decree). The quarterly progress report consists of a brief narrative summary of notable activities that occurred during the reporting period and that are anticipated for the upcoming reporting period.

If you have any questions about this report, please contact me at 206-787-3814.

Sincerely,

Roy Kuroiwa
Project Coordinator
Port of Seattle

Distribution List:
Erin DeBroux – Northwest Seaport Alliance
Kelly Garber, Jason Maxwell – SSA Marine
Scott Silcox, Michael DeSota – Port of Seattle
Paul Kalina – AECOM

Terminal 30 Cleanup Action Site
Consent Decree Dated July 19, 2017
Quarterly Progress Report: January 1 through March 31, 2023

This report has been prepared in accordance with the requirements of the Terminal 30 (T-30) Cleanup Action Site Consent Decree between the State of Washington Department of Ecology (Ecology) and the Port of Seattle (Port). This progress report provides details on the following: 1) all on site activities; 2) any deviations from required tasks; 3) plans for recovering lost time and maintaining compliance with the schedule; 4) quality assurance/quality control review data received; and 5) work planned for the upcoming 3-month period.

Summary of the On-Site Activities Performed During the Reporting Period

- Monthly light non-aqueous phase liquid (LNAPL) gauging was completed as described in the CMP on January 12, February 9, and March 9, 2023.
- Quarterly LNAPL recovery was completed following gauging on March 9, 2023. During that recovery event, approximately 32.78 gallons of LNAPL were extracted from 5 recovery wells (MW-35, RW-1, RW-12, RW-106, and RW-107).
- On January 27, 2023, the air sparging and soil vapor extraction (AS/SVE) remediation system equipment that was damaged during the December freeze event was repaired and the system was restarted again. The telemetry system was also updated at this time, restoring the functionality of alarm and fault notifications and adding new notifications for AS and SVE faults.
- Based upon prior communication with the Puget Sound Clean Air Agency (PSCAA) on December 13, 2022[1], the system was briefly shut down on March 14, 2023, to add a 10-ft exhaust stack to the SVE discharge to bypass the oxidizer. The system was then restarted with SVE emissions directed through the new exhaust stack and the oxidizer remained off.
- Outside of the downtime described above, the AS/SVE system was operated, and routine system checks were conducted throughout this reporting period as described in the Cleanup Action Plan (CAP). Vapor monitoring was conducted every other week, which exceeds the substantive equivalent recommendation of the PSCAA notice of construction (NOC) worksheet, which recommends monthly testing. During this quarter, vapor monitoring was conducted on February 16, March 2, March 15, and March 30, 2023. A vapor sample was also collected for laboratory analysis on March 15, 2023. The results, combined with the system flowrate, calculated to an SVE removal rate of 0.87 lb/day. This was well below the 2.74 lb/day that tracks to PSCAA's 1000 lb/year TPH emission threshold. All field results prior to March 15 achieved the destruction efficiency goal[2] of 90.0% during this reporting period.

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[1] Telephone communication between AECOM (Paul Kalina and Gus Friedman) and PSCAA (Madeline McFerran) on December 13, 2022 regarding NOC worksheet recommendations.

[2] The draft permit includes the following minimum destruction based on inlet TPH concentrations: efficiencies: ≥97% if inlet TPH ≥200 ppmv; or ≥90% if inlet TPH <200 ppmv; or ≤10 ppmv TPH at the outlet of the control device, measured as hexane or equivalent. During this reporting period, Inlet and outlet concentrations were below 200 ppmv.

Deviations from Required Tasks

- None.

Compliance with the Schedule

All key upcoming milestones from the Consent Decree are shown in Table 1, below.

Table 1: T 30 Upcoming Schedule Milestones

Milestone	Consent Decree Schedule	Port's Current Schedule	Status
Performance Groundwater Monitoring – First Year 3 Event	Not Listed	April 2022	Completed
Performance Groundwater Monitoring – Second Year 3 Event	Not Listed	October 2022	Completed
Performance Groundwater Monitoring – First Year 4 Event	Not Listed	April 2023	Completed
Performance Groundwater Monitoring – Second Year 4 Event	Not Listed	October 2023	Pending

Quality Assurance/Quality Control Data Collected

- Vapor samples were collected from the SVE system oxidizer inlet and outlet to confirm acceptable destruction efficiencies on March 15, 2023. A detailed summary of performance and compliance monitoring, including laboratory analytical reports, will be submitted with the annual report.

Work Planned during the Upcoming Reporting Period

The following work is planned for the 2nd Quarter 2023:

- AS/SVE system operation is planned to continue as described in the CAP. Per communication with PSCAA and in accordance with permit recommendations, vapor monitoring will continue to include field monitoring with a handheld photoionization detector (PID) every other week and collection of vapor samples for laboratory analysis once each quarter. The AS/SVE system will continue to emit direct to atmosphere with continued monitoring as described above.
- The propane tank and associated oxidizer connections and delivery piping will be removed.
- Monthly LNAPL gauging will continue, and quarterly LNAPL recovery will be performed in June.
- Alternatives for LNAPL management will also be evaluated - including alternative methods, frequencies, and to determine recommendations for most effective future management

practices based upon current limited residual thicknesses and asymptotic decline in recovery volumes.

- The Annual Terminal 30 Site Performance Report – Year 2 will be submitted to Ecology in the first half of the quarter. This report will summarize the second year of system operation, LNAPL gauging and recovery, and groundwater monitoring. This report will also provide an evaluation of system performance and provide conclusions and recommendations.
- The Annual Terminal 30 Site Performance Report – Year 3 will be submitted to Ecology in the second half of the quarter. This report will summarize the third year of system operation, LNAPL gauging and recovery, groundwater monitoring, and associated conclusions and recommendations.
- We would like to schedule a call with Ecology May 2023 to review site information and discuss future monitoring and recovery methods.

End Quarterly Progress Report