TROY BLOCK SITE MEETING
DECEMBER 4, 2023

Topics for Discussion

- Current Groundwater Conditions
  - Troy Block Property
  - Thomas Street and Seattle Times Property (1120 John Street)
    - Groundwater Trend Analysis
  - Potential Additional Remedial Activities - Thomas Street Right-of-Way (ROW) and MW29R
    - Options and Recommendations
    - Groundwater Remediation Contingency Plan
    - Coordination with the City of Seattle regarding adjacent ROWs
    - Conditional Points of Compliance (CPOCs) and Remediation Levels
    - Long Term Groundwater Monitoring / Restoration Timeframe
    - Next Steps
  - Finalize Feasibility Study (FS) and draft Cleanup Action Plan (dCAP)
  - Consent Decree and Public Participation

Attachments

A. Figure 3 of the PPCD Second Quarter Progress Report (updated with MW29R and MW35 CVOC data)
B. Table 1 – Mann-Kendall Non-Parametric Statistical Trend Results
C. Ecology ROW Template Letter

The groundwater monitoring well locations and groundwater analytical results for chlorinated volatile organic compounds (CVOCs) are shown on Updated Figure 3 of the PPCD Second Quarter 2023 Progress Report (see Attachment A).

Analysis

GROUNDWATER CONDITIONS - TROY BLOCK PROPERTY

The Interim Remedial Action performed on the Troy Block Property included mass excavation of petroleum-contaminated soil and CVOC-impacted soil and groundwater treatment using enhanced reductive dichlorination (ERD) through injection of edible oil substrate into groundwater. Groundwater injections were performed in May & June 2015 and in April & May 2016, followed by bioaugmentation in June 2017.

As of the second quarter of 2023 (June 2023 semi-annual groundwater monitoring and sampling event), the condition of the CVOC groundwater plume on and beneath the Troy Block Property is as follows:

- Tetrachloroethene (PCE) and trichloroethene (TCE) were not detected at concentrations above the laboratory reporting limits or Washington State Model Toxics Control Act

(MTCA) Method A cleanup levels in on-Property groundwater monitoring wells MW17 through MW25 or injection wells IW04, IW06, IW50, IW61, or IW91.

- Cis-1,2-dichloroethene (cis-1,2-DCE) was detected at concentrations above the MTCA Method B cleanup level in on-Property groundwater monitoring well MW22 and injection wells IW50 and IW61.
- Vinyl chloride (VC) was detected at concentrations above the MTCA Method A cleanup level in all on-Property groundwater monitoring wells, except groundwater monitoring wells MW17 and MW20 and injection wells IW06 and IW91.
- VC was detected at concentrations above the groundwater remediation level (RL) for the protection of indoor air under the commercial exposure scenario (1.6 micrograms per liter [µg/L]) in groundwater monitoring wells MW21 and MW23 and injection wells IW50 and IW61.

See Attachment A.

The overall statistical trend for VC in groundwater beneath the Troy Block Property shows concentrations increasing with time, which was anticipated and consistent with expectations. However, due to a relatively flat groundwater gradient, bulk attenuation process, and aerobic conditions in the groundwater in the downgradient Thomas Street ROW, the VC groundwater plume remains confined to areas on and beneath the Troy Block Property.

As presented in the FS, the recommended remedy for CVOC-contaminated groundwater on and beneath the Troy Block Property involves natural attenuation and long-term monitoring. The ERD injections will continue to degrade any residual mass of PCE and TCE in groundwater on or potentially migrating onto the Troy Block Property, and cis-1,2-DCE and VC will continue to degrade as groundwater changes from anaerobic to aerobic conditions.

GROUNDWATER CONDITIONS - THOMAS STREET ROW AND SEATTLE TIMES PROPERTY (1120 JOHN ST)

The downgradient CVOC groundwater plume originating from the Troy Block Property is monitored using MW28 located in the Thomas Street ROW and MW29R and MW35 located on the Seattle Times Property (1120 John Street, currently being redeveloped by Onni). The current groundwater conditions in the Thomas Street ROW and beneath the Seattle Times Property are as follows:

- Since March 2019, the statistical trend analysis for groundwater monitoring well MW28 over 14 groundwater monitoring and sampling events indicates a shrinking groundwater plume for all CVOCs.[1]
    - Since June 2022, PCE, TCE, and VC have not been detected at concentrations above the laboratory reporting limits or MTCA Method A cleanup levels in MW28. In June 2023, cis-1,2-DCE was not detected at a concentration above the MTCA Method B cleanup level in MW28.
- In April 2023, groundwater monitoring wells MW29R and MW35 were installed on the Seattle Times Property. Groundwater monitoring well MW29R is the replacement well for

[1] MW28 is the replacement for MW16, which was decommissioned in 2018.

groundwater monitoring well MW29, which was decommissioned during redevelopment of the Seattle Times Property. [2]

- In August 2023, PCE, TCE and cis-1,2-DCE were detected in MW29R at concentrations above the Method A and B cleanup levels, respectively.
- In August 2023, MW35 did not contain any contamination above MTCA cleanup levels or laboratory reporting limits.
- CVOCs were not detected at concentrations above the groundwater screening levels for the protection of indoor air under the commercial exposure scenario in groundwater monitoring well MW29R.

It is our opinion that the Troy groundwater plume does not extend beyond the area of MW29R. The relatively flat groundwater gradient on the Troy Block Property and in the Thomas Street ROW combined with natural attenuation have resulted in minimal migration. Conditions are currently stable and do not present any threat to human health or the environment based on current physical parameters and contaminant concentrations.

As required by the PPCD, a Statistical Trend Analysis Report will be prepared based on the data collected through the end of 2023 and submitted to the Washington State Department of Ecology (Ecology) in the first quarter of 2024. The fourth quarter groundwater monitoring and sampling event is scheduled for the first week of December 2023. As of the second quarter 2023 (the most recent groundwater monitoring event), the statistical trend analysis is summarized in Table 1 (see Attachment B).

POTENTIAL ADDITIONAL REMEDIAL ACTIVITIES - THOMAS STREET ROW AND MW29R

As presented in the FS, the recommended remedy for CVOC-contaminated groundwater both beneath the Troy Block Property and in areas beneath the Thomas Street ROW and Seattle Times Property is natural attenuation and long-term monitoring. Additional injections in areas beneath Thomas Street and the Seattle Times Property were not recommended for the following reasons:

- Powdered activated carbon (PAC) pilot testing results did not demonstrate significant benefit towards CVOC reduction, as similar reductions in PCE and TCE concentrations were observed in upgradient groundwater monitoring well MW13 (i.e., in general, the groundwater flow direction is to the southeast).
- During the pilot test, the delivery of the PAC slurry to the subsurface via injection wells IW92 through IW94 and angled injection wells AIW10 through AIW12 became increasingly more difficult due to clogging of the soil pores. Given the presence of low-permeability soils, it is anticipated that any further injections beneath the Thomas Street ROW would result in limited distribution and contact with CVOC-contaminated groundwater.
- Installation of new injection wells in the Thomas Street ROW is likely not feasible and poses a safety concern given the potential for encountering dense clusters of subsurface utilities (i.e., an east-to-west-aligned power and communication utility corridor beneath Thomas Street ROW) and shoring tiebacks associated with the Seattle Times Property

[2] MW30, ONNI-MW-4, ONNI-MW-5, and ONNI-MW-9 located on the Seattle Times Property were decommissioned during redevelopment of the Onni Property. CVOCs were not detected above the laboratory reporting limits or applicable MTCA cleanup levels in these four wells prior to decommissioning.

development. In addition, it is not feasible to install injection wells on the Seattle Times Property due to property development. Overall, the inability to install a robust injection well network would limit the distribution of and contact with the injectate and CVOC-contaminated groundwater.

- Additional ERD injections (instead of PAC) would generate VC in the Thomas Street ROW and beneath the Seattle Times Property, potentially extending the footprint of the CVOC groundwater plume and creating VC concentrations which could pose a threat to indoor air under a commercial exposure scenario.[3] Expansion of the CVOC groundwater plume could not be fully characterized without installation of additional groundwater monitoring well(s) on the Seattle Times Property, which is not feasible due to property development and the now-installed vapor barrier.

The incremental benefit of additional injections is disproportionate to the cost when compared to natural attenuation and long-term monitoring. Based on the conceptual remedial approach presented in the FS, the cost to perform additional groundwater injections in the Thomas Street ROW and on the Seattle Times Property will be in excess of $300,000, with no increase in protectiveness of human health or the environment, particularly since the groundwater plume is now inaccessible with no potential areas of surface water infiltration or human contact. As noted in the FS, there is no direct contact with groundwater, groundwater will not be used as a source of drinking water following application of environmental covenants, and the potential inhalation pathway on the Seattle Times Property will be mitigated by engineering controls.

Performance of active treatment in the Thomas Street ROW and Seattle Times Property does not reduce any risk to human health or the environment given the stability of the CVOC groundwater plume, existing engineering controls, and given that current and future risk pathways are incomplete.

GROUNDWATER REMEDIATION CONTINGENCY PLAN

Pursuant to the preferred remedy of monitored natural attenuation, groundwater monitoring and sampling will be performed from the approved groundwater monitoring well network on an annual basis, alternating between June and December. Following a 5-year monitoring and sampling period, groundwater conditions at the Site will be re-evaluated through a combination of comparing CVOC concentrations to applicable MTCA cleanup levels and groundwater RLs (see discussion on application of a CPOC below) and statistical trend analysis. It is anticipated that long-term monitoring will be projected to occur for thirty (30) years, subject to adjustments based on discussions with Ecology and the owners of the Seattle Times Property.

As part of the final FS and dCAP, we will prepare a Groundwater Remediation Contingency Plan that will be part of the 5-year evaluation discussion. If groundwater results do not continue to demonstrate a stable or decreasing plume or demonstrate a potential vapor intrusion risk, then additional injections to promote ERD will be proposed for incorporation into the final remedy.

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[3] A vapor intrusion barrier (DRAGO® Wrap by Stego Industries, LLC) was installed beneath the entire building footprint on the Seattle Times Property. No indoor air testing has been completed because the development on the Seattle Times Property is not complete and the construction is currently on pause. Future indoor air monitoring will be performed at the Seattle Times Property to demonstrate compliance with commercial indoor air standards. An environmental covenant will be recorded on title for the Seattle Times Property.

COORDINATION WITH THE CITY OF SEATTLE REGARDING ADJACENT ROWS

TCE has been detected at concentrations above the roadway excavation worker groundwater screening level in groundwater monitoring well MW27 located in the Boren Avenue North ROW during 4 of the 22 sampling events (two events in December 2017, December 2020, and June 2021). However, as of the second quarter of 2023, TCE concentrations in the groundwater beneath both the Harrison Street and Boren Avenue North ROWs are less than the groundwater screening level for the protection of the inhalation pathway for a roadway excavation worker (TCE 40 µg/L).

The statistical trend analysis as of the second quarter of 2023 indicates a stable (MW04 and MW27) or shrinking (MW07) TCE groundwater plume in adjacent ROW areas. Breakdown products of TCE (i.e., cis-1,2-DCE and VC) are not present in the groundwater beneath the ROWs due to aerobic groundwater conditions that are conducive to the degradation of cis-1,2-DCE and VC.

Because of the presence of TCE in groundwater beneath the ROWs, the City of Seattle will be notified of conditions in groundwater using the Ecology template letter (see Attachment C).

CONDITIONAL POINTS OF COMPLIANCE AND REMEDIATION LEVELS

A CPOC is proposed for the Troy Block Site in combination with RLs on the Troy Block Property. At the CPOC, groundwater cleanup levels will be based on the most beneficial use of the groundwater. Groundwater RLs will be based on the protection of indoor air quality for a commercial exposure scenario. CPOC wells will include MW04, MW07, and MW27 in the Boren Avenue North ROW, MW26 in the Harrison Street ROW, and MW28 in the Thomas Street ROW.

As noted in the RI and FS, the confirmed upgradient source of TCE beyond the Boren Avenue North and Harrison Street ROWs is contributing to the production of VC in the groundwater. As long as this upgradient source of TCE continues to impact groundwater migrating towards and potentially beneath the Troy Block Property, VC concentrations at the Troy Block Site will continue to exceed the MTCA Method A cleanup level of 0.2 µg/L.

A CPOC is appropriate for the Troy Block Site because it is not practicable to meet the cleanup levels throughout the Troy Block Site in a reasonable restoration time frame, and it is not technically possible to design, construct, and implement a reliable and cost-effective remedy to clean up the entire Troy Block Site (WAC 173-340-720(8)). RLs are appropriate because the Interim Remedial Action is treating the groundwater on the Troy Block Property, while CVOC groundwater plume conditions beneath the adjacent ROWs are stable (or shrinking) over time.

LONG-TERM GROUNDWATER MONITORING / RESTORATION TIME FRAME

As of the second quarter of 2023, TCE concentrations in groundwater at CPOC wells MW04, MW07, and MW27 in Boren Avenue ROW and well MW26 in the Harrison Avenue ROW exceed the cleanup level by less than 3x the cleanup level of 5 µg/L. The TCE concentration is statistically stable at wells MW04, MW26, and MW27 as of the second quarter of 2023. The TCE concentration is decreasing at MW07.

An exact restoration time frame cannot be determined with specificity for the Troy Block Site. Going forward, groundwater monitoring and sampling will be performed on an annual basis (alternating between June and December) from the Ecology-approved groundwater monitoring well network to be

specified in the dCAP. Compliance at the CPOC monitoring wells will be achieved when CVOCs[4] are detected at concentrations below the applicable MTCA Method A and B cleanup levels in groundwater samples collected during four consecutive groundwater monitoring events.

[4] As presented in the PPCD Third Quarter 2023 Progress Report, we have requested to discontinue analyzing groundwater samples collected from monitoring wells MW13, MW21, MW22, and MW28 for petroleum hydrocarbons, although gasoline- and diesel-range petroleum hydrocarbon (GRPH and DRPH, respectively) concentrations detected in the samples continue to exceed applicable cleanup levels. Benzene has not been detected at concentrations above laboratory reporting limits or groundwater cleanup levels in groundwater samples collected from monitoring wells MW13, MW21, MW22, and MW28. GRPH, DRPH, and oil-range petroleum hydrocarbons detected in groundwater samples are attributable to the presence of emulsified oil and its polar breakdown products in groundwater. This conclusion is supported by the detection of petroleum hydrocarbons in groundwater samples being flagged by the laboratory as having a chromatographic pattern that did not match the fuel standard used for quantification.

ATTACHMENT A

FIGURE 3 OF THE PPCD SECOND QUARTER PROGRESS REPORT (UPDATED WITH MW29R AND MW35 CVOC DATA)

8/8/2023

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Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW01	12/15/21	<1	0.50	<1	<1	<0.2
	06/07/22	<1	0.73	<1	<1	<0.02
	12/14/22	<1	<1	<1	<1	<0.02
	06/21/23	<1	<0.5	<1	<1	<0.02

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW31	12/15/21	<1	6.3	<1	<1	<0.2
	06/07/22	<1	4.2	<1	<1	<0.02
	12/14/22	<1	3.5	<1	<1	<0.02
	06/21/23	<1	4.1	<1	<1	<0.02

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW26	12/15/21	<1	7.9	<1	<1	<0.2
	06/08/22	<1	3.5	<1	<1	0.038
	12/14/22	<1	10	<1	<1	0.038
	06/22/23	<1	11	<1	<1	<0.02

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW32	12/15/21	<1	<0.5	<1	<1	<0.2
	06/08/22	<1	<0.5	<1	<1	<0.02
	12/14/22	<1	<0.5	<1	<1	<0.02
	06/21/23	<1	<0.5	<1	<1	<0.02

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	DCE	DCE	Chloride
MW33	12/16/21	<1	<0.5	<1	<1	<0.2
	06/07/22	<1	<0.5	<1	<1	<0.02
	12/13/22	<1	<0.5	<1	<1	<0.02
	06/20/23	<1	<0.5	<1	<1	<0.02

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
IW04	12/17/21	<1	<0.5	1.1	<1	0.34
	06/09/22	<1	<0.5	<1	<1	0.34
	12/15/22	<1	<0.5	<1	<1	0.28
	06/22/23	<1	<0.5	<1	<1	0.26

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW04	12/15/21	<1	7.8	<1	<1	<0.2
	06/07/22	<1	9.2	<1	<1	<0.02
	12/14/22	<1	8.2	<1	<1	<0.02
	06/22/23	<1	9.3	<1	<1	<0.02

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
IW06	12/17/21	<1	<0.5	<1	<1	<0.2
	06/09/22	<1	<0.5	<1	<1	<0.02
	12/15/22	1.7	<0.5	<1	<1	<0.02
	06/22/23	1.1	<0.5	<1	<1	<0.02

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW17	06/27/20	<1	<1	<1	<1	<0.2
	12/12/20	<1	<1	<1	<1	<0.2
	06/25/21	<1	1.7	<1	<1	<0.2
	12/17/21	<1	1.5	<1	<1	<0.2
	Well not sampled 2022 or 2023					

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW18	12/17/21	<1	<0.5	<1	<1	1.8
	06/09/22	<1	<0.5	<1	<1	1.6
	12/15/22	<1	<0.5	<1	<1	1.1
	6/22/23	<1	<0.5	<1	<1	1.4

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW20	06/27/20	<1	1.2	6.1	<1	<0.2
	12/12/20	<1	1.3	6.0	<1	<0.2
	06/25/21	<1	1.6	5.3	<1	<0.2
	12/17/21	<1	0.94	5.2	<1	<0.2
	Well not sampled 2022 or 2023					

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW07	12/15/21	2.0	7.2	<1	<1	<0.2
	06/07/22	2.9	6.5	<1	<1	<0.02
	12/14/22	2.5	5.9	<1	<1	<0.02
	06/22/23	2.4	5.1	<1	<1	<0.02

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW19	12/17/21	<1	<0.5	<1	<1	1.5
	06/09/22	<1	<0.5	<1	<1	1.9
	12/16/22	<1	<0.5	<1	<1	1.9
	6/22/23	<1	<0.5	<1	<1	0.3

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
IW50	12/17/21	<1	<0.5	2.9	<1	0.80
	06/09/22	<1	<0.5	6.9	<1	2.4
	12/16/22	4.7	2.1	35	<1	6.4
	06/23/23	1.8	0.79	18	<1	5.8

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW34	12/16/21	<1	5.3	<1	<1	<0.2
	06/07/22	<1	5.9	<1	<1	<0.02
	12/14/22	<1	5.2	<1	<1	<0.02
	06/21/23	<1	4.8	<1	<1	<0.02

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW21	12/17/21	<1	<0.5	12	<1	1.3
	06/09/22	<1	<0.5	12	<1	1.9
	12/15/22	<1	<0.5	12	<1	1.4
	06/23/23	<1	<0.5	1.4	<1	2.0

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW24	12/17/21	<1	<0.5	46	<1	0.71
	06/09/22	<1	<0.5	74	<1	1.1
	12/16/22	<1	<0.5	64	<1	6.1
	06/23/23	<1	<0.5	<1	<1	1.5

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW22	12/17/21	<1	0.51	52	<1	1.2
	06/09/22	<1	<0.5	52	<1	1.3
	12/16/22	<1	0.52	58	<1	1.1
	06/23/23	<1	<0.5	21	<1	0.5

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW27	12/15/21	<1	28	8.2	<1	<0.2
	06/08/22	<1	16	2.7	<1	<0.02
	12/15/22	<1	16	4.6	<1	<0.02
	06/21/23	<1	15	5.3	<1	<0.02

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
IW61	12/17/21	<1	<0.5	41	<1	3.8
	06/09/22	<1	<0.5	25	<1	3.2
	12/16/22	<1	<0.5	57	<1	2.7
	06/23/23	<1	<0.5	36	<1	2.7

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW25	12/17/21	<1	0.52	13	<1	3.6
	06/09/22	1.3	1.3	9.6	<1	4.1
	12/16/22	3.2	3.8	5.9	<1	2.2
	6/23/23	2.7	3.2	2.2	<1	1.3

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
IW91	06/27/20	<1	<1	<1	<1	<0.2
	12/12/20	<1	<1	<1	<1	<0.2
	06/25/21	<1	<1	<1	<1	<0.2
	12/17/21	<1	<0.5	<1	<2	<0.2
	Well not sampled 2022 or 2023					

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW13	12/16/21	5.2	1.0	<1	<1	<0.2
	06/08/22	5.0	0.86	<1	<1	<0.02
	12/15/22	4.8	0.57	<1	<1	<0.02
	06/22/23	4.3	<0.5	<1	<1	<0.02

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW23	06/27/20	<1	<1	30	<1	0.76
	12/12/20	<1	<1	30	<1	0.85
	06/25/21	<1	<1	26	<1	0.97
	12/17/21	<1	<0.5	15	<1	3.7
	Well not sampled 2022 or 2023					

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW28	12/04/19	8.4	4.9	52	<1	0.27
	06/26/20	9.1	5.1	22	<1	<0.2
	12/11/20	8.3	4.9	19	<1	<0.2
	05/21/21	9.2	4.3	17	<1	<0.2
	06/23/21	7.0	3.5	14	<1	<0.2
	08/17/21	7.6	3.9	18	<1	<0.2
	09/21/21	7.5	3.4	15	<1	0.10
	12/16/21	5.2	2.8	17	<1	<0.2
	06/09/22	2.7	1.4	23	<1	0.082
	12/15/22	2.9	1.2	17	<1	0.067
	06/21/23	<1	<0.5	5.6	<1	<0.02

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW30	12/10/20	<1	2.4	13	<1	<0.2
	06/23/21	<1	2.0	7.4	<1	<0.2
	12/15/21	<1	2.2	5.2	<1	<0.2
	06/06/22	<1	2.3	3.5	<1	0.029
	WELL DECOMISSIONED 2022					

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW29R	08/24/23	18	11	33	<1	<0.2

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW35	08/24/23	<1	<0.5	<1	<1	<0.2

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
ONNI-MW-4	06/25/20	<1	<1	<1	<1	<0.2
	12/10/20	<1	<1	<1	<1	<0.2
	06/22/21	<1	<1	<1	<1	<0.2
	12/15/21	<1	<0.5	<1	<1	<0.2
	WELL DECOMISSIONED 2022					

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW29	12/10/20	18	13	18	<1	<0.2
	06/22/21	14	11	16	<1	<0.2
	12/15/21	15	12	14	<1	<0.2
	06/08/22	20	15	10	<1	0.13
	WELL DECOMISSIONED 2022					

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
ONNI-MW-9	12/14/21	<1	<0.5	1.3	<1	<0.2
	06/06/22	<1	<0.5	1.3	<1	<0.02
	WELL DECOMISSIONED 2022					

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
ONNI-MW-5	06/25/20	<1	<1	<1	<1	<0.2
	12/09/20	<1	<1	<1	<1	<0.2
	06/23/21	<1	<1	<1	<1	<0.2
	12/14/21	<1	<0.5	<1	<1	<0.2
	WELL DECOMISSIONED 2022					

B56/MW31
B58/MW33
B08/ MW01
MW26
B09/ MW02
B57/MW32
B10/ MW03
HARRISON STREET
IW06
IW04
B11/MW04
B15/MW07
MW17
MW18
TROY LAUNDRY PROPERTY
BOREN AVENUE NORTH
FAIRVIEW AVENUE NORTH
B31/ MW12
B13/ MW06
B28/ MW10
MW19
MW20
MW24
B30/ MW11
B26/ MW08
MW34
B49/MW15
MW27
MW25
IW50
MW21
B12/ MW05
MW22
B37/MW13
B27/ MW09
IW61
MW23
IW91
B38/ MW14
THOMAS STREET
MW28
B50/ MW16
MW29R
B54/MW29
B55/MW30
SEATTLE TIMES SITE
MW35
ONNI MW-9
ONNI MW-4
ONNI MW-5

N

0 40 80

APPROXIMATE SCALE IN FEET

LEGEND

- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- REDEVELOPMENT EXCAVATION AREA
- MW20 — MONITORING WELL
- MW-5 — MONITORING WELL (ENVIRONMENTAL PARTNERS INC)
- IW91 — INJECTION WELL CONVERTED TO MONITORING WELL
- IW61 — INJECTION WELL (SAMPLED)
- DECOMMISSIONED/ DESTROYED MONITORING WELL
- INJECTION WELL
- ANGLED INJECTION WELL
- MONUMENT AND HORIZONTAL PIPING FOR INJECTION WELL SCREEN ACCESS
- DCE — DICHLOROETHENE
- PCE — TETRACHLOROETHENE
- TCE — TRICHLOROETHENE
- MTCA — WASHINGTON STATE MODEL TOXICS CONTROL ACT
- < — NOT DETECTED AT A CONCENTRATION EXCEEDING LABORATORY REPORTING LIMIT
- RED — DENOTES CONCENTRATIONS EXCEEDING THE MTCA METHOD CLEANUP LEVEL FOR GROUNDWATER

	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MTCA Method A	5	5	16	160	0.2

SoundEarth Strategies

WWW.SOUNDEARTHINC.COM

TROY LAUNDRY SEATTLE SITE
300 BOREN AVENUE NORTH AND
399 FAIRVIEW AVENUE NORTH
SEATTLE, WASHINGTON
SOUNDEARTH PROJECT #0731-004

FIGURE 3

GROUNDWATER ANALYTICAL RESULTS FOR CHLORINATED VOLATILE ORGANIC COMPOUNDS

ATTACHMENT B

TABLE 1 – MANN-KENDALL NON-PARAMETRIC STATISTICAL TREND RESULTS

Mann-Kendall Non-Parametric Statistical Trend Results
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Well Number	PCE	TCE	trans-1,2-DCE	cis-1,2-DCE	VC	Last Sample Date	PCE	TCE	trans-1,2-DCE	cis-1,2-DCE	VC	Comments
Statistical Concentration Trend						µg/L						
On-Property												
IW04	NA	NA	NA	NA	**Stable**	06/22/23	< 1	< 1	< 1	< 1	**0.26**	Northeast corner of the Property south of the Harrison ROW
IW50	NA	NA	NA	**Undeterminable**	**Stable**	06/23/23	1.8	0.79	< 1	**18**	**0.79**	Center of the Property near original source area
IW61	NA	NA	NA	**Decreasing**	**Increasing**	06/23/23	< 1	0.25	< 1	**36**	**2.7**	South center of the Property north of the Thomas ROW and downgradient from the Boren ROW
MW18	NA	NA	NA	**Decreasing**	**Increasing**	06/22/23	< 1	< 0.5	< 1	< 1	**1.4**	Center of the Property near original source area and downgradient of the Boren ROW
MW19	NA	NA	NA	NA	**Increasing**	06/22/23	< 1	< 0.5	< 1	< 1	**0.3**	Center of the Property near original source area and downgradient of the Boren ROW
MW21	NA	NA	NA	NA	**Increasing**	06/23/23	< 1	< 0.5	< 1	1.4	**2.0**	Center of the Property near original source area and downgradient of the Boren ROW
MW22	NA	NA	NA	**Increasing**	**Increasing**	06/23/23	< 1	< 0.5	< 1	**21**	**0.5**	Center of the Property near original source area and downgradient of the Boren ROW
MW24	NA	NA	NA	NA	**Increasing**	06/23/23	< 1	< 0.5	< 1	< 1	**1.5**	Center of the Property near original source area and downgradient of the Boren ROW
MW25	NA	NA	NA	NA	**Increasing**	06/23/23	2.7	3.2	< 1	2.2	**1.3**	Center of the Property near original source area and downgradient of the Boren ROW
Boren Avenue												
MW04	NA	**Stable**	NA	NA	NA	06/22/23	< 1	**9.3**	< 1	< 1	< 0.2	Boren ROW upgradient of the Property and downgradient of yet unknown upgradient source area for TCE
MW07	NA	**Decreasing**	NA	NA	NA	06/22/23	2.4	**5.1**	< 1	< 1	< 0.2	Boren ROW upgradient of the Property and downgradient of yet unknown upgradient source area for TCE
MW27	NA	**Stable**	NA	NA	NA	06/21/23	< 1	**15**	< 1	5.3	< 0.2	Boren ROW upgradient of the Property and downgradient of yet unknown upgradient source area for TCE
Harrison Street												
MW26	NA	**Stable**	NA	NA	NA	06/22/23	0.5	**11**	< 1	< 1	< 0.2	Harrison ROW upgradient of the Property and downgradient of yet unknown upgradient source area for TCE
					MTCA Cleanup Level		**5**[(1)]	**5**[(1)]	**160**[(2)]	**16**[(2)]	**0.2**[(1)]	

Notes

PCE = tetrachlorethylene

TCE = trichloroethylene

trans-1,2-DCE = trans-1,2-dichloroethylene

cis-1,2-DCE = cis-1,2-dichloroethylene

VC = vinyl chloride

MTCA = Washington State Department of Ecology Model Toxics Control Act

ROW = right-of-way

ug/L = micrograms per liter

NA = The concentration of analyte not detected above the laboratory reporting limit or the concentration was less than the groundwater cleanup level in second quarter of 2023

[(1)]MTCA Method A Cleanup Levels, Table 720-1 of WAC 173-340-900.

[(2)]MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Groundwater, Method B, Non-Carcinogen, Standard Formula Value, CLARC Website <https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx>.

ATTACHMENT C

ECOLOGY ROW TEMPLATE LETTER

Insert regional letterhead HERE. Find at: http://teams/sites/CE/EcologyLetterhead/SitePages/Home.aspx

DATE

Addressee
Municipality
Address

Re: Notification of Remaining Contamination and Environmental Restrictions

- Site Name: XXXX
- Address: XXXX
- Facility Site ID #: XXXX
- Cleanup Site ID #: XXXX

To first and last name:

The Washington State Department of Ecology (Ecology) wants you to know that there are environmental restrictions at the site listed above (Site). While Ecology considers the cleanup finished for the Site (see included NFA letter or AO requirements met letter), there are restrictions in place to ensure the cleanup remains effective.

What are the Environmental Restrictions?
Environmental restrictions are rules about the kinds of activity that can happen at a site. Environmental restrictions are outlined in a document called an environmental covenant. The environmental covenant for this site is included with this letter. For this site, the landowner has agreed to restrictions about these types of activities:

- Soil use
- Land use
- Excavation
- etc.

If the restrictions are followed, the cleanup will protect people and the environment from contamination. If the restrictions are not followed, people or the environment could be exposed to contamination. In that case, Ecology could rescind the cleanup completion decision.

Ecology will review this site every 5 years, as resources permit, to make sure that the cleanup and environmental restrictions still protect human health and the environment.

Worker Safety
Protection of workers from contamination is very important. Before doing construction or maintenance at the Site, call your Ecology regional office at (XXX) XXX-XXXX. Ecology can help you understand the specific restrictions for the Site. The included map will also help you

understand the location of the contamination at the Site. Note that compliance costs may be recoverable from the party responsible for the contamination (copied on this letter).

Site History
Additional site history about the contamination, investigation, and cleanup is included with this letter (VCP opinion letter or the Agreed Order).

Subordination Agreement
Normally, Ecology asks anyone with a right to use a property to agree to environmental restrictions in a subordination agreement. However, this letter takes the place of that, and no subordination agreement will be required for this site.

Questions?
Please call Ecology at (XXX) XXX-XXXX or email XXXXX at XXXX if you have any questions about this letter.

Sincerely,

XXXXXXXXX
Site Manager
XXX Toxics Cleanup Program

Attachment: NFA Letter
Map of Site
Site Plan

cc: XXXX, Company
Regional Periodic Reviewer
Any other cc recipients

Additional Word accessibility activities to complete before sending to your admin for finalizing:

- Update **metadata**:
  - Click *File*.
  - Under *Properties* (right column), edit the *Title* and *Tags*.
- Add **Alt Text** to any included maps or other graphics.
  - Right click on image.
  - Click *Format Picture*
  - Click the black box with arrows 
  - Click *Alt Text*

- Leave the *Title* field blank
- Add text to the *Description* field
  - Use sentence case, with punctuation.
  - Provide the same info a sighted person would gain from looking at the picture.
    - Example:

      ✓ “Arial map showing the site northeast of the Spokane River and south of Whoville.”

      ✗ “Map of site.”