From: Becker, Sunny (ECY)
To: "Levi Fernandes"
Subject: RE: Troy Laundry Site - 2020 GW Monitoring Report
Date: Tuesday, March 23, 2021 7:13:44 PM

Hi Levi,

Thanks for submitting 2020 Groundwater Monitoring Report (Report), dated, March 3,2021.

The Report was prepared pursuant to the scope of work defined in the Prospective Purchaser Consent Decree (PPCD) 2017. It is my understanding that the PPCD is limited to evaluate groundwater condition within Troy Laundry property line, and the Agreed Order of 2009 and its Amendments of 2017 requires Touchstone to evaluate the extent of the groundwater for the entire Troy Laundry site, defined as where the contamination has come to be located, and to select cleanup action for the entire Troy site. Currently, the Troy site boundary includes groundwater within Troy Laundry property (under the PPCD), and groundwater at Boren Ave, Thomas Street, Harrison street, and Seattle Times property.

The 2020 annual groundwater report presented groundwater results from all groundwater monitoring wells, including monitoring wells located within Troy property and monitoring wells located on Boren Avenue, Thomas Street, Harrison Street and Seattle Times property. The groundwater report also stated the purpose of the report is to "… provide a statistical tread analysis assessment of chlorinated volatile organic compounds (CVOCs) in groundwater at the Site".

However, the conclusion made in the report that the plume is "stable or shrinking" is based only on the groundwater monitoring results from wells located within the property, and based on the data collected before December 2019. When the groundwater monitoring well results from monitoring well MW13, MW28, and MW29 and monitoring well MW31 (located outside Troy property boundary) and the data from the groundwater sampling events in 2020 were included, the plume appears to be "expanding" instead. No statistical trend analysis was conducted in other wells located outside the property boundary, such as MW04, MW07, MW27 and MW26.

Ecology asks Touchstone to conduct statistical trend analysis for all the monitoring wells if the annual report presents the groundwater results from all these wells.

Specific comments are as the followings:

1. The groundwater flow directions at both wet and dry seasons of 2020, July 25 and December 9, 2020, are reversed, from flowing to southeast to northwest instead. The report indicated "Construction dewatering efforts to the northwest of the Property are

influencing groundwater flow across the Site". However, no specific construction location, or specific construction dewatering activities were provided in the report. Further, the Rose Diagram shown on Fig. 5 and 6 indicates about a quarter percent, or 25 percent of the time, the groundwater flows towards northwest (the reverse), and three quarters, or 75 percent of the time, the groundwater flows to southeast. The groundwater flow reversal appears to happen more often enough that the contamination originated from Troy could flow towards northwest, not entirely or solely towards southeast to Seattle Times property.

2. At this time, no upgradient source has been identified. When 25 percent of the time, the groundwater flows to northwest, or away from Troy Property contamination source, the groundwater solvent contaminations found outside of Troy property line at Boren, Thomas, Harrison Street could be partially, if not all, from the source originated from Troy Property.

3. Ecology appreciates the major cleanup actions Touchstone conducted at Troy property. Ecology agrees that the solvent contamination underneath the Property is degrading, based on the statistical trend analysis conducted in the annual report.

4. However, Ecology would like Touchstone focus on the co-mingled plume that is located outside the Troy Property line, and would like Touchstone to conduct statistical trend analysis for all the monitoring wells that are currently being monitored, and if appropriate, to propose cleanup actions for the wells that show increase trend of solvent contamination.

5. The concentration in MW29, located at the Seattle Times property, has increased from 8.6ppb to 18ppb in the last year. There is no groundwater monitoring well located direct down gradient from MW29. MW4 and MW5, installed by the Onni, are not located direct downgradient and further away from MW29, and may not be able to detect any potential plume expansion.

Thanks,

Sunny

From: Levi Fernandes <LFernandes@soundearthinc.com>
Sent: Monday, March 15, 2021 2:35 PM
To: Becker, Sunny (ECY) <HLIN461@ECY.WA.GOV>
Subject: RE: Troy Laundry Site - 2020 GW Monitoring Report

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Sunny,

Please see response to your questions below. We have also placed the updated Troy Laundry Seattle Site 2020 Groundwater Monitoring Report at:

https://spaces.hightail.com/receive/E0Q3QDAuJk

Due to file size, we have provided the document as three separate pdf files:

- Main text, tables and figures (same as previous version)
- Attachments A (same as previous version)
- Attachment B (replaced 2019 with 2020 statistical trend analysis).

Let me know if you need anything else.

Thanks

Levi

From: Becker, Sunny (ECY) <HLIN461@ECY.WA.GOV>
Sent: Friday, March 12, 2021 7:09 PM
To: Levi Fernandes <LFernandes@soundearthinc.com>
Subject: RE: Troy Laundry Site - 2020 GW Monitoring Report

These are just questions. I will follow up with comments after the questions.

From: Levi Fernandes <LFernandes@soundearthinc.com>
Sent: Friday, March 12, 2021 2:53 PM
To: Becker, Sunny (ECY) <HLIN461@ECY.WA.GOV>
Subject: RE: Troy Laundry Site - 2020 GW Monitoring Report

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Sunny,

Thanks for your comments. We will provide a response early next week; I am checking into Appendix B statistical analysis output.

Levi

From: Becker, Sunny (ECY) <HLIN461@ECY.WA.GOV>
Sent: Thursday, March 11, 2021 12:06 PM
To: Levi Fernandes <LFernandes@soundearthinc.com>
Subject: RE: Troy Laundry Site - 2020 GW Monitoring Report

Hi Levi,

A few quick questions for the 2020 groundwater monitoring report.

1. The report said "groundwater samples collected between May 2015 and December 2020 (Table 2) were used to evaluate the stability of the plume". But when I went to Attachment B. The data used to plot the concentration trend seem to be limited to before Dec. 2019, and no data from 2020 were used for the plume stability analysis. Can you confirm?

   SoundEarth Response: See updated Att. B (per the above).

2. The only wells that were used to analyze the statistical trend that are located outside of Troy property are MW13 on Boren and MW16, or former MW28, on Thomas. Is this correct?

   SoundEarth Response: This is correct. We have also included monitoring MW31 located in Boren north of Harrison in the updated Att. B.

3. The report said "…. June 25, 2020 (Figure 2; Table 1). The groundwater contours indicated that groundwater at the Site flowed generally to the northwest with a hydraulic gradient of 0.018 feet per foot, a departure from the flow to the southeast historically observed on the Property. Construction dewatering efforts to the northwest of the Property are influencing groundwater flow across the Site." Do you know the location of the construction, and duration of the construction dewatering activities?

   SoundEarth Response: In the 2nd and 4th Quarter 2020, we observed a 180-degree change in the groundwater flow direction as results of, and we assume, construction dewatering upgradient of the Troy Site. According to the DMR database, the Block 38 site to the northwest of Troy is still dewatering as of December 2020. They renewed their discharge permit in November 2020 and the permit is valid through December 31, 2025. The Interim Action Work Plan prepared by Farallon

in December 2020 indicates the mass excavation was completed in June 2020 and construction dewatering is anticipated to continue through February 2021, with the rate of groundwater extraction gradually decreasing until the building is constructed.

Thanks.

Sunny

From: Levi Fernandes <LFernandes@soundearthinc.com>
Sent: Thursday, March 4, 2021 9:16 AM
To: Becker, Sunny (ECY) <HLIN461@ECY.WA.GOV>
Cc: Paul Klansnic <pklansnic@touchstonenw.com>; Ken Lederman <ken@mhseattle.com>; Tom Cammarata <TCammarata@soundearthinc.com>
Subject: Troy Laundry Site - 2020 GW Monitoring Report

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Sunny,

Please see the link below to access the Troy Laundry Seattle Site 2020 Groundwater Monitoring Report:

https://spaces.hightail.com/receive/iCMkn734nX

Due to file size, we have provided the document as two separate pdf files:

- Main text, tables and figures
- Attachments A and B

Let me know if you were able to download the files.

Thanks

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