From:	Jennifer Hart
To:	SCHATZ Jeff * DEQ
Subject:	RE: Annual 2023 Groundwater Monitoring and LNAPL Removal Report for Terminal 4 Slip 3 Upland (ECSI 0272) and Draft DEQ Comments
Date:	Tuesday, March 19, 2024 5:54:32 AM

Hello Jeff,
Thank you for the clarification. Much appreciated.

Best,
Jennifer

From: SCHATZ Jeff * DEQ <Jeff.SCHATZ@deq.oregon.gov>
Sent: Monday, March 18, 2024 10:35 PM
To: Jennifer Hart <JHart@indecon.com>
Cc: Gail Fricano <GFricano@indecon.com>; Peter Shanahan <pshanahan@hydroanalysisinc.com>
Subject: RE: Annual 2023 Groundwater Monitoring and LNAPL Removal Report for Terminal 4 Slip 3 Upland (ECSI 0272) and Draft DEQ Comments

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Hello Jennifer-

Thank you for the feedback. I'm just now getting back to finalizing these comments, but I wanted to provide some clarifications.

1. No discrete removal volume was provided for HC-10 because no LNAPL was measured in the well and therefore it was not necessary to remove any product during the December 2023 event.
2. Due to the unexpected appearance of LNAPL in HC-5 in 2018/2019 and the detection of TPP-D at a very high concentration of 216,000 ppb in 2021, HC-5 was added to the monthly LNAPL gauging/removal program in 2019 and 2020. In 2021 and 2022, this well was gauged on a quarterly basis and for 2023, it was performed on a semi-annual basis. If LNAPL continues to not be detected it will go back to annual monitoring for LNAPL.
3. The frequency of sampling for HC-5 was increased to quarterly in 2022 and downgraded to semi-annual in 2023. So, these are short-term changes to the overall program.
4. HC-12D was sampled quarterly in 2022 and annually in 2023 out of concern about arsenic and especially manganese in that well.

Thanks again for your input. Regards,

Jeff K. Schatz, R.G.
Project Manager and Hydrogeologist
Department of Environmental Quality
Northwest Region Cleanup Program

700 NE Multnomah Street, Suite 600
Portland, OR 97232
503-863-0810
jeff.schatz@deq.oregon.gov

From: Jennifer Hart <JHart@indecon.com>
Sent: Wednesday, March 13, 2024 6:58 AM
To: SCHATZ Jeff * DEQ <Jeff.SCHATZ@deq.oregon.gov>
Cc: Gail Fricano <GFricano@indecon.com>; Peter Shanahan <pshanahan@hydroanalysisinc.com>
Subject: RE: Annual 2023 Groundwater Monitoring and LNAPL Removal Report for Terminal 4 Slip 3 Upland (ECSI 0272) and Draft DEQ Comments

Hello Jeff,
Thank you for providing an opportunity to review the *Annual 2023 Groundwater Monitoring and LNAPL Removal Report* for the Terminal 4 Slip 3 upland site and DEQ's draft comments. DEQ's draft letter is comprehensive, and we do not have any substantive comments to add; however, we did note a few potential inconsistencies in the report that might be worth clarifying.

On page 11, the report states that LNAPL monitoring and removal was performed on four wells (MW-19, MW-20, HC-10, BE-4) in December 2023. Table 1 lists discrete removal volumes for MW-19, MW-20, and BE-4 in December, but no volume is reported for HC-10. Table 1 also includes monitoring data for a different subset of wells for a June 2023 event. Further, Table 2's notes indicate that HC-5 was included in the 2023 LNAPL recovery program. Thus, there seems to be a disconnect between the report's text and tables as to whether LNAPL monitoring and removal occurred at various wells in June and December 2023.

Thanks,
Jennifer

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From: SCHATZ Jeff * DEQ <Jeff.SCHATZ@deq.oregon.gov>
Sent: Thursday, March 7, 2024 11:53 AM
To: Clark, Josie <Clark.Josie@epa.gov>; Hanna, Laura <Hanna.Laura@epa.gov>; Jennifer Hart <JHart@indecon.com>; shil@yakamafish-nsn.gov; Gail Fricano <GFricano@indecon.com>; susan.spalinger@alta-se.com; jon.munkers@alta-se.com

Cc: LACEY David J * DEQ <David.J.LACEY@deq.oregon.gov>; NELSON Heidi * DEQ <Heidi.NELSON@deq.oregon.gov>
Subject: Annual 2023 Groundwater Monitoring and LNAPL Removal Report for Terminal 4 Slip 3 Upland (ECSI 0272) and Draft DEQ Comments

Note: This email originated outside of IEc. Be cautious with any links or attachments.

Greetings-

The Department of Environmental Quality (DEQ) is forwarding the attached report titled *Annual 2023 Groundwater Monitoring and LNAPL Removal Report* for the Terminal 4 Slip 3 upland facility, which was prepared by Apex on behalf of the Port of Portland, along with DEQ's draft comments. The annual monitoring report for Slip 3 documents ongoing LNAPL removal and groundwater sampling performed in accordance with the upland Record of Decision and in support of Portland Harbor source control. DEQ is submitting this support document for source control as a courtesy and is not requesting formal input from EPA or the Tribes.

Despite meeting the requirements to suspend LNAPL removal, the Port is voluntarily continuing those activities on an annual basis. It is hoped that the pending porewater data collected form Slip 3 as part of the in-water Supplemental PDI will help inform conclusions regarding source control.

If you wish to provide feedback, please do so by March 21, 2024. Regards,

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