



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
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January 25, 2024

Bryce Robbert
Environmental Engineer
Avista
1411 East Mission Avenue
PO Box 3727 MSC-21
Spokane, WA 99220

Re: Final Third Periodic Review, Recommendations Regarding Groundwater Monitoring

Site name: Hamilton Street Bridge Site
Site address: 111 N. Erie Street, Spokane WA 99202
Facility/Site ID: 3509
Cleanup Site ID: 55763995

Dear Bryce Robbert:

As a follow-up to our November 2023 meeting Ecology is providing the following clarification to the final third periodic review report including the following recommendations regarding future groundwater monitoring at the Site:

- In a letter dated June 29, 2023, Landau Associates (Landau) presented discrepancies in the wellhead elevation data for wells MW9-20 and MW9-100 between past groundwater monitoring reports and data provided by Spokane County. There were also discrepancies in the Spokane River elevation data presented in past groundwater monitoring reports between 2015 and 2023. Based on the presented discrepancies in the wellhead elevation data for groundwater monitoring wells MW9-20 and MW9-100 and surface water data, Ecology recommends that all existing wellheads and the river surface water level be resurveyed.

- Review the 2006–2021 groundwater elevation data for well MW2-40 and present all available elevation data for this well in the next upcoming groundwater monitoring report.
- As part of the semi-annual groundwater report submittal, Ecology recommends that the PLPs include groundwater elevation data and provide groundwater contour maps in each groundwater monitoring report, one for the 20 ft-deep wells and one for the 90 to 100-ft-deep wells.
- During future groundwater monitoring events, water levels for all available shallow, intermediate, and deep Site groundwater monitoring wells should be measured using transducers or similar technology.

It is Ecology’s understanding that Avista and BNSF are addressing the last two comments above by resurveying all Site groundwater monitoring wells and are planning to present post-2006 groundwater elevation data for well MW2-40 in a future report.

Additionally, Ecology anticipates receiving future groundwater monitoring reports with attached groundwater contour maps in accordance with the third recommendation above.

Finally, the periodic review concluded that semi-annual groundwater level measurements are inadequate to properly determine groundwater compliance points throughout the year.

The last sentence in the Site Groundwater Conditions subsection states the following:

“Sampling results since compliance monitoring began show that the Site remedy seems to be protective of human health and the environment if Well MW2-40 still monitors the most downgradient portion of the Site.”

One of the conclusions in the periodic review report stated the following:

“With available data since the last periodic review in 2015, the cleanup remedy implemented at the Site appears to be protective of human health and the environment as long as the hydrogeological conditions have not changed at the Site since the cleanup implementation 2001–2006.”

Consequently, groundwater monitoring completed for the fourth periodic review should determine whether or not well MW2-40 is still within the most downgradient portion of the Site at all times and that hydrogeological conditions have not changed at the Site since 2006. In the comments on the draft periodic review report presented in a letter dated December 1, 2022, Landau acknowledged that semi-annual groundwater level measurements do not represent “average” conditions. The last sentence of Landau’s comment no 15 stated the following:

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“Ecology should remove all assumptions and conclusions in the report that are based on a presumption that semi-annual water levels represent average conditions.”

Ecology concurs with Landau that more frequent groundwater level measurements are required at the Site. Groundwater level measurements at the Site must be frequent enough to be able to:

1. Confirm that well MW2-40 is or is not the most downgradient well at the Site at all times throughout the whole year.
2. Confirm that the Site hydrogeological conditions and consequently, the original 2005 Site conceptual model has not changed over time.

Ecology’s preference would be to use down-well pressure transducers in wells to measure groundwater levels at least on a daily basis to capture all potential changes throughout the year to confirm that well MW2-40 is indeed the most downgradient well throughout the year.

However, Ecology welcomes suggestions to an alternate approach to measure groundwater elevations at the Site as long as they can confirm whether or not well MW2-40 is the most downgradient well at all times. Any proposed approach must consider the confirmed seasonal variations at the Site throughout the year.

If you have any questions, please contact me at (509) 818-7457 or e-mail me at nicholas.acklam@ecy.wa.gov.

Sincerely,



Nicholas M. Acklam
Toxics Cleanup Program, Eastern Region
Section Manager

cc: Christer Loftenius, Ecology
Ivy Anderson, Attorney General’s Office
Site project file, Ecology
Scott McDonald, BNSF (via e-mail)
Shane Kostka, Landau (via e-mail)