



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Southwest Region Office

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Amy Sikora
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Re: Sub-Slab Soil Investigation Report Review, Third Quarter 2023 Groundwater Monitoring Results Review, and Next Steps at the Site

- **Site Name:** WA DNR Webster Nursery
- **Site Address:** 9805 Blomberg St. SW, Tumwater, Thurston County, WA 98512
- **Facility/Site No:** 8786341
- **Cleanup Site ID No.:** 3380

Dear Amy Sikora:

Thank you for submitting the Sub-Slab Soil Investigation Report (Landau, 2024a)¹ and the third quarter 2023 groundwater monitoring report (Landau, 2023a)² for review to the Department of Ecology (Ecology). Listed below are Ecology's comments and conclusions regarding these reports and the next steps needed in the cleanup process for the Site.

Third Quarter 2023 Groundwater Monitoring Report

1. The report results showed that August 2023 heptachlor epoxide (HE) concentrations were not detected above the cleanup level of 0.00481 micrograms per liter (µg/L) in either well SW-10R or -11R. Also, no other contaminant constituents were detected above laboratory reporting limits or cleanup levels in either well.
2. Ecology concurs with the conclusion of the report that the groundwater confirmational monitoring data collected to date meet the requirements in the Compliance Monitoring Plan (Landau, 2023b)³ to demonstrate that groundwater concentrations of Site

¹ Landau Associates (Landau), 2024a, Sub-Slab Soil Investigation, Webster Nursery. July 3.

² Landau, 2023a, Third Quarter 2023 Groundwater Monitoring Results, Webster Nursery Site. November.

³ Landau, 2023b, Compliance Monitoring Plan, Webster Nursery Site. April 14.

contaminants are below applicable cleanup levels. Therefore, additional groundwater monitoring is not needed at the Site and the groundwater monitoring wells may be decommissioned. However, as stated below, there will need to be a public comment period for the delisting of the Site. Ecology suggests that it may be wise to wait to decommission the wells until after the public comment period.

Sub Slab Investigation Report

1. Ecology concurs that since the investigation results did not detect concentrations of contaminants of concern at the sampling locations below the warehouse then an environmental covenant will not be required for the warehouse building footprint.
2. Thank you for providing the additional information via email regarding the question of whether or not the laboratory was reporting down to the method detection limit (MDL).⁴ Please revise the table as suggested in the email to clarify that the ARI and Eurofins laboratory results are reported down to the MDL and provide a revised investigation report to Ecology.

Next Steps in the Cleanup Process

1. Environmental Covenant: Ecology will revise the draft Environmental Covenant (EC) and provide a copy to you for review. The EC will include restrictions on land use and soil excavation. The land use restriction is necessary because the cleanup was based on the current land use. The restriction on soil excavation is necessary because excavation soil performance sample B3-F-10.5 for chlordane (2,300 micrograms per kilogram, µg/kg) exceeded the chlordane terrestrial ecological evaluation (TEE) cleanup level for soil biota of 1,000 µg/kg (Landau, 2020)⁵ at the standard point of compliance of 15 feet below ground surface. As stated in WAC 173-340-7490(4), for sites with institutional controls to prevent excavation of deeper soil, a conditional point of compliance may be set at the biologically active soil zone. This zone is assumed to extend to a depth of six feet. All performance sample results were below human health soil direct contact cleanup levels.
2. The soil cleanup levels for protection of groundwater that were established in the Cleanup Action Plan and shown in Table 1 in Landau (2020) were based on calculated values for protection of groundwater for the saturated and unsaturated (vadose) zone. The following 2018 soil excavation performance samples had detected results that exceeded the soil cleanup levels for protection of saturated groundwater (exceedance constituents shown in parenthesis): B2-A-10.5 (chlordane and HE), B3-F-10.5 (HE and

⁴ Landau, 2024b, Question about report for Job No. 410-169140-1, email from Katie Gauglitz, Landau, to Steve Teel, Ecology. July 31.

⁵ Landau, 2020, Cleanup Action Completion Report, Washington State Department of Natural Resources Webster Nursery. May 29.

heptachlor), B1-E-15 (HE), and SW2-S-8 (HE). Also, the heptachlor laboratory reporting limits for all samples exceeded the saturated zone soil cleanup level of 1.9 µg/kg.

However, WAC 173-340-747(9) provides a method for demonstrating empirically that soil concentrations measured at the site will not cause an exceedance of the applicable groundwater cleanup level. Two requirements are necessary for the empirical demonstration:

- a. The measured groundwater concentration is less than or equal to the applicable groundwater cleanup level.⁶
- b. The measured soil concentration will not cause an exceedance of the applicable groundwater cleanup level at any time in the future. Specifically, it must be demonstrated that a sufficient amount of time has elapsed for migration of hazardous substances from soil into groundwater to occur and the characteristics of the site are representative of future site conditions.⁷

As mentioned above, Ecology concurs that the groundwater confirmational monitoring data collected to date meet the requirements in the Compliance Monitoring Plan (Landau, 2023b) to demonstrate that groundwater concentrations of Site contaminants are below applicable cleanup levels. The monitoring methodology in the Compliance Monitoring Plan was designed by Ecology to also collect sufficient data to answer the question of whether residual soil concentrations would cause an exceedance of the applicable groundwater cleanup level at any time in the future. **Therefore, Ecology concludes that the empirical demonstration has demonstrated that residual soil concentrations are sufficiently protective of groundwater.**

3. Following the finalization and recording of the Environmental Covenant, Ecology will hold a public comment period for the delisting of the Site from the hazardous sites list (HSL).
4. At the conclusion of the public comment period, Ecology will review the comments that are received and then decide if delisting can proceed or if there are any concerns or issues that need to be addressed.
5. Provided that any issues or concerns identified in the comment period are resolved, Ecology will then proceed with the delisting and issue a status letter. The status letter will explain that due to the need for institutional controls (such as the EC), the Agreed Order will remain open, and Ecology will conduct periodic reviews of the cleanup status on a 5-year basis.

⁶ WAC 173-340-747(9)(b)(i).

⁷ WAC 173-340-747(9)(b)(ii).

If you have any questions, please contact me at 360-890-0059 or steve.teel@ecy.wa.gov.

Sincerely,



Steve Teel, LHG
Cleanup Project Manager/Hydrogeologist
Toxics Cleanup Program
Southwest Region Office

ST/at

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Ecology Site File