



MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Barofsky, Schlossberg, Brown, Carlson, and Morris

FROM: Mike Masters, Water Operations Manager; and Susan Fricke, Water Resources and Quality Assurance Supervisor

DATE: March 18, 2025

SUBJECT: Pentachlorophenol Plume Update Associated with International Paper Mill Complex

OBJECTIVE: Information

Issue

Provide the Board with the requested update concerning potential drinking water threats associated with groundwater pentachlorophenol plume adjacent to the McKenzie River. Beginning in 2026, the annual State of the Watershed Report will be rescheduled to April allowing this information to be included.

Background

For the past 29 years, the Oregon Department of Environmental Quality (DEQ) has been working with both Weyerhaeuser Company (Weyerhaeuser) and International Paper Company (IP) to address the pentachlorophenol (PCP) plume originating from the Springfield mill site at 801 North 42nd Street. Wood treatment practices using PCP occurred at the site until 1986. Weyerhaeuser discovered soil contamination at the mill site after removing their sawmill facility in 1991. Weyerhaeuser entered into Consent Order WMCSR-WR-95-09 with the DEQ on September 5th, 1995, agreeing to investigate the contamination and identify potential solutions to protect human health and the environment. To be protective of the Springfield Utility Board (SUB)/Rainbow Water District (RWD) well field, Weyerhaeuser installed a carbon filtration system in 1996 to treat water from the SUB/RWD wells should PCP be detected.

On December 3rd, 2002, DEQ approved a final Remedial Design/Remedial Action Work Plan (RD/RA) for the site and has been tracking the implementation of this plan. The RD/RA work plan requires continued monitoring and reporting on the progress and extent of the groundwater PCP plume as it migrates to the northwest and toward the SUB/RWD supply wells adjacent to the McKenzie River. IP was granted approval by DEQ in 2021 to change their progress reporting from semiannual reporting to annual reporting. Both the progress report and annual report for a given year are typically submitted to DEQ on March 15th of the following year.

Ongoing groundwater monitoring of the PCP plume is conducted by NV5 Environmental, Inc. (NV5) on behalf of IP. Prior to 2012, monitoring wells were sampled monthly. However, beginning in July 2012, sample collection was modified to semiannually for tested monitoring wells after DEQ

approved proposed monitoring changes as requested by IP. In addition, the SUB/RWD drinking water wells and the well field treatment system are sampled monthly during production for chlorinated phenolic compounds (CPCs), with one well also sampled for volatile organic compounds (VOCs).

Discussion

The following status update is based on findings in Progress Report Number 96 and the 2024 Annual Report for the RD/RA Project at the Springfield Mill, submitted to DEQ on March 17th, 2025, by NV5 on behalf of IP (see Figure 1), and made available the same day to SUB, RWD and EWEB. **No CPCs or VOCs were detected in SUB/RWD drinking water wells during the 2024 operational period**, which included sampling events on July 8th, August 5th, September 4th and October 9th (due to lab error, the only CPC analyzed was PCP on 10/9). These wells are all located downgradient of the PCP plume. The most recent PCP detection reported for any SUB/RWD well occurred on 9/8/2015, at a concentration of 0.092 micrograms per liter (ug/L). The U.S. EPA maximum contaminant level (MCL) for PCP in drinking water is 1 ug/L.

Analytical results for downgradient PCP groundwater monitoring wells sampled in 2024 (January and July) show continued non-detect or decreasing PCP concentrations at most intermediate and deep well depths. Two exceptions remain including Well MW-18d (deep well), where PCP concentrations showed a slight increasing trend between 2011 (1.9 ug/L) and 2020 (8.2 ug/L) but now appear to have stabilized with 2024 concentrations at 6.9 and 6.3 ug/L respectively, and Well MW-19d (deep well), where recent PCP concentrations (8.7 and 6.1 ug/L respectively) show some variability, although still on a decreasing trend from peak concentrations in 2010/2013 (32 ug/L). Both wells are located near the northwest edge of the property, near Highway 126. It should be noted that the July monitoring well samples encountered several issues during processing that resulted in estimated value flags being applied to all associated results, including elevated cooler temperatures and sample analysis past hold times. However, impacted data were qualified and determined to be acceptable for consideration in the report findings.

General groundwater flow patterns observed across the site in 2024 continue to remain consistent with previous findings. The long-term cleanup goal of RD/RA monitoring efforts is to see groundwater PCP concentrations naturally attenuate below 0.5 ug/L across all sites, which is expected to occur before 2040 based upon recent PCP-concentration trends and model predictions, as determined by an outside consulting firm (Integral Consulting, Inc.). According to NV5, groundwater monitoring results from 2024 are “consistent with the RD/RA Project continuing to making progress towards this cleanup goal.”

Future updates regarding the PCP plume will continue to be incorporated into the annual State of the Watershed report, although the report will now be presented to the Board in April to allow staff adequate time to incorporate findings from the previous year’s PCP monitoring activities (which again, are due in March of the following year).

Recommendation

This memo is for informational purposes only. Based on current data and information, staff do not believe the PCP groundwater plume poses a significant threat to EWEB’s drinking water quality at this time. Staff will continue to monitor the situation.

Requested Board Action

For information only, no formal action is requested at this time.

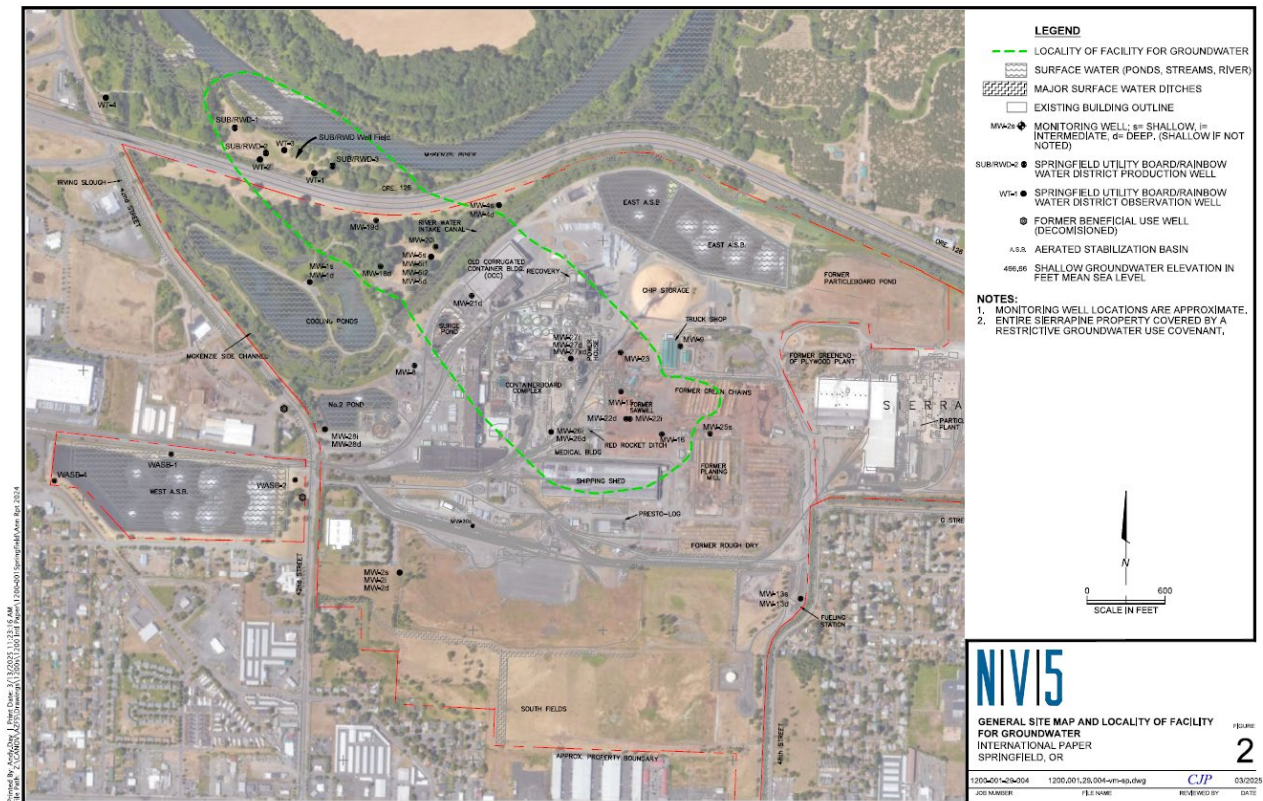


Figure 1. Map of Project Area from Progress Report Number 96 and the 2024 Annual Report for the RD/RA Project at the Springfield Mill, submitted to DEQ on March 17th, 2025 by NV5 on behalf of IP.