

Montana Pole and Treating Plant

History

Montana Pole and Treating Plant operated from 1946 to 1984. During operation, a solution of 5% PCP (pentachlorophenol) mixed with a carrier oil similar to diesel was applied to posts, poles and bridge timbers. The PCP solution was applied in butt vats and pressure treating vessels (retorts). The COC (contaminates of concern) for the Montana Pole site are PCP, PAHs (Poly Aromatic Hydrocarbons), and Dioxins/Furans.



Present

The current work on Montana Pole is focused two things:

First, monitoring the groundwater plume and ensuring that the WTP is containing the contamination, so the plume does not grow. This is done by conducting biannual groundwater sampling of 64 groundwater wells around the site and sampling of the discharge of the WTP every two weeks for PCP to ensure that the plant is not discharging over the cleanup level.

Second the site team is ensuring that vegetation is growing on the CAMU and site in general is growing. The healthy vegetation will prevent washout of contamination.

In 2021 the Montana Department of Environmental Quality and U.S. Environmental Protection Agency signed the Explanation of Significant Differences (ESD), which changed the remedy for soils that were treated in the LTU, but still contaminated with dioxins. These soils were put in a Corrective Action Management Unit (CAMU), a lined repository that ensures these dioxins cannot migrate off site. The CAMU construction was completed in 2022.

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Birds are photographed at the site in July 2025. Photo courtesy Tom Bowler with Tetra Tech.



A view of the discharge pond of the MT Pole Water Treatment Plant in early March 2025.

The remediation of Montana Pole took place over six phases:

Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6
Construction of land treatment unit, staging of contaminated soil and construction of water treatment plant addition	Hazardous waste, including buildings contaminated with PCP, were disposed of at off-site haz. waste facility	Soils south of Interstate 90 were excavated and treated in land treatment unit (LTU)	Continued operation of the water treatment plant (WTP) and biotreatment of contaminated soils on the LTU	Treatment of contamination source under I-90	Tear down of the LTU following onsite soil treatment

Future

The future of Montana Pole will focus on three parts. The first is to treat the contamination source under the interstate in phase 5, the current plan is to inject chemical amendments into the groundwater and oxidize the PCP. The source area sits primarily in the vadose zone, the area just above the groundwater, and most of the groundwater is held below the source by the WTP. The second is to address the last remaining pockets of dioxin contamination south of the interstate. A few parcels meet recreational standards for dioxins, but slightly exceed the industrial use standards. Depending on the future anticipated use, some of the surface soils may need to be readdressed. The third is to monitor the remedy through biannual groundwater sampling, regular inspections and five-year review process.

For more information, contact DEQ Environmental Project Officer Jacob Wheeling at (406) 444-6420 or jacob.wheeling@mt.gov. Scan the QR code with your mobile device to visit DEQ's website!

