

BC Crown Contaminated Sites Program Site Summary



Yankee Girl Tailings

Location: 49° 17' 09" N, 117° 12' 50" W

Status: Long-term Monitoring & Maintenance

The former Yankee Girl mine operated south of Nelson, BC, near the community of Ymir, from the late 1800s until the 1950s. Placer gold was discovered in the Ymir region in 1865 and was eventually traced upstream to the Salmo River. In 1934, a mill was constructed on the east side of the Salmo River to process ore from the Yankee Girl Mine. An estimated 245,000 tonnes of tailings were produced by the Yankee Girl mill between 1935 and 1942. Over time, tailings with elevated concentrations of heavy metals including lead, zinc, cadmium and arsenic were deposited on the banks of the Salmo River and Ymir Creek.

Environmental investigations at the site were initiated in 2004 after Fisheries and Oceans Canada issued an Inspector's Direction to the Province to stop the erosion of mine tailings into the Salmo River. Subsequent investigations found high concentrations of metals contamination and acid rock drainage that required remediation. Completed in 2009, remediation of the Yankee Girl Tailings site represented the largest physical remedial program completed by the Crown Contaminated Sites Program at that time and was the result of five years of concerted effort by the Program, its consultants and the local community.



Remedial works at the site included consolidation of approximately 15,000 m³ of mine tailings into a single area, treated with lime, and installed beneath an impermeable cover. Additionally, a flood erosion barrier was created, an engineered wetland was constructed to reduce metal concentrations through natural processes, and the entire site re-vegetated with native plant species.

Since 2009, long-term monitoring and maintenance activities have been performed to ensure the effectiveness of the remedial work. These activities included groundwater and surface water quality assessments, inspections of the erosion barrier and engineered floodplains and removal of invasive species.

In 2019, after 10 years of post remedial monitoring and continual improvement in groundwater and surface water quality across the site, the monitoring and maintenance program was changed by reducing the number of sampling locations and sampling frequency, focusing exclusively on areas with residual contamination. The Yankee Girl Tailings site continues to be used as a safe recreational area for the local community.



Yankee Girl Tailings, Ymir, BC
Post remedial view from Town of Ymir

If you have questions or would like more information, please contact the Crown Contaminated Sites Program by emailing contaminated.sites@gov.bc.ca or visit our website <https://www2.gov.bc.ca/gov/content/environment/air-land-water/site-remediation/contaminated-sites/crown-contaminated-sites-program>.