

Teck Sullivan: Our Commitment to Water Quality

Introduction

The Sullivan Mine site, located in Kimberley, British Columbia was a lead, zinc and silver mine that operated from 1909–2001. Teck continues to manage the Sullivan Mine site in accordance with its approved closure plan, which includes management and treatment of mine-affected water. To learn more about the history of the Sullivan go to www.teck.com/sullivan.

Historical operations impacted groundwater originating from the mine facilities. The majority of the impacted groundwater lies directly beneath the Teck Sullivan property. However, some impacted groundwater has migrated into surrounding areas and Teck is providing property owners notification of the migration.

Teck has collected, treated and monitored mine-affected water at the Sullivan for more than 40 years; monitoring and sampling results have demonstrated significant improvements in water quality over this time. Recent upgrades to the interception systems near Mark Creek have improved water quality and were recognized with a BC mine reclamation award. Teck has spent more than \$100 million executing the closure plan for the Sullivan mine, and we continue to pursue innovative projects and new best practices to improve our reclamation outcomes.

Teck is working closely with the BC Ministry of Environment and Climate Change Strategy to adapt its current groundwater management and remediation plans to ensure groundwater issues are properly managed.

Questions and Answers

Below is some additional information about the groundwater notification and Teck's commitment to water management and treatment.

1. What materials are present in the impacted groundwater?

The impacted groundwater contains variable concentrations of sulphate and other substances consistent with historical mining activities, depending on the location.

2. Are there any impacts to human health?

There is no indication of human health impacts resulting from the impacted groundwater.

The groundwater does not affect the municipal drinking water supply for Kimberley or the surrounding areas. Domestic wells outside the city are located beyond the limits of mine-influenced water.

The impacted groundwater is generally greater than five metres below the ground surface and much deeper in most areas. Direct contact with impacted water is unlikely.

3. What do I do if I encounter groundwater on my property?

If you encounter groundwater on your property during excavation or through pumping from sump pumps etc., the water should not be consumed as it has not been treated for domestic use. If you encounter groundwater on a frequent basis (e.g., pumping of sumps, daylighting on your property), and would like to have it tested, please contact 250.427.8425 and provide your name, address, and contact information for consideration for testing by Teck. Alternatively, testing can be completed by homeowners or qualified contractors independently.

4. Are there environmental considerations?

Extensive environmental controls implemented since the 1970s have steadily improved water quality and aquatic conditions in Lois Creek, Mark Creek, and the St. Mary River. Teck's seepage collection and treatment systems reduce potential impacts to fish, plants, and invertebrates living in these water bodies and to terrestrial wildlife using them for drinking water.

Comprehensive monitoring of surface and groundwater quality is ongoing at over 100 locations around Kimberley to track environmental conditions and improvements over time and the efficacy of environmental protection systems. In addition, biological monitoring programs are completed routinely as part of ecological risk assessment activities to ensure there are no unacceptable risks to aquatic life (e.g. invertebrates, fish).

5. How does Teck manage impacted groundwater?

Teck manages impacted groundwater through collection and treatment, reclamation of source areas, comprehensive monitoring programs, and completion of human health and ecological risk assessment to support development of a long-term risk management plan.

Reclamation for closure included activities to manage groundwater impacts by limiting water contact with residual waste materials and intercepting influenced water for treatment. Current water management systems include more than 25 pumps and 30 km of piping to collect water and convey it for storage and treatment. These systems are continually monitored, maintained and upgraded and research is ongoing for alternative methods to manage water for the long-term.

Between one and three Mm³ (million cubic meters) of water is treated each year. One million cubic meters is the equivalent of 400 Olympic size swimming pools. Teck pays all costs related to management of influenced water, which total approximately \$5,000,000 per year.

For more information on Teck's strategies to protect water quality, see teck.com/sullivan

6. What should landowners know?

Landowners would not encounter the impacted groundwater during everyday activities on their property as it is below the ground surface.

The impacted groundwater is not used for drinking water.

The impacted groundwater does not affect the day to day use of the property.

Teck has submitted a copy of the Notification of Likely or Actual Offsite Migration to the BC Ministry of Environment and Climate Change Strategy and we are updating our groundwater remediation plan for regulatory approval and designation of an environmental management area. The benefits of this process include identifying whom is responsible for the remediation, providing greater certainty for property owners and lenders, and ensuring proper management for the long-term.

For More Information

Teck will host online information sessions December 14–16, 2020, and is committed to providing the community with information and updates. For scheduling or other information, contact the Sullivan.



www.teck.com/sullivan



250.427.8425 to leave a message for our project team



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