



Gunnar Mine and Mill Site

The former Gunnar Mine and Mill Site is located on the north shore of Lake Athabasca, approximately 25 kilometres southwest of Uranium City.

The mine operated from 1955-1963 and officially closed in 1964 with little to no decommissioning. During operation, the Gunnar Site consisted of:

- ▶ An open pit mine (over 100 m deep, 250 m x 300 m in size)
- ▶ An underground mine (600 m deep)
- ▶ A uranium mill (capacity of 2000 tonnes/day)
- ▶ Two acid plants
- ▶ Uranium processing buildings
- ▶ A community (including a number of residential, public, administrative and technical buildings)
- ▶ Approximately 4.4 million tonnes of tailings
- ▶ Approximately 2.2 to 2.7 million tonnes of waste rock

When the mine closed, a narrow trench was blasted in the rock between the pit and Lake Athabasca to flood the pit and the underground workings. In 1966, the channel was filled with waste rock as a barrier between the pit and the lake.

The Saskatchewan Research Council (SRC) began demolition work at the site in the fall of 2010, which was successfully completed in 2012. Demolition activities included significant asbestos abatement of the buildings, followed by demolition of all residential and production structures, cleaning up site debris and constructing a barrier around the open pit.

Gunnar Remediation Project Update

The 2022 construction season was full of accomplishments for the Gunnar Remediation Project. SRC continued to cover areas with local borrow material to reduce radiation hazards.

All hazardous waste was placed in Landfill B, which was then sealed off with a layer of compacted clay and a thick layer of material to protect the waste from frost and erosion. This completes Landfill B construction and the disposal of all legacy hazardous waste on site

Non-hazardous legacy debris around the site continued to be collected and placed in Landfill A. There was also substantial progress on re-establishing the historic drainage channel through the waste rock piles. Seeding occurred in the fall on all areas where cover was completed.

The completed tailings covers were inspected during Summer 2022 and are performing as anticipated: the vegetation established well and there is little sign of erosion on the covers' surface. SRC is developing a transitional monitoring plan and will continue monitoring the tailings cover performance in the long term.