



Yukon Zinc Corporation is a privately owned mining, exploration and development company based in Vancouver, Canada. YZC's Wolverine Mine will produce copper, lead and zinc concentrates. It is located in the south-eastern Yukon near the headwaters of the Wolverine Lake watershed within the Kaska Nation traditional territory. The main industrial complex buildings include a process plant, crusher, concentrate load-out, 246 man camp, and offices. Other infrastructure includes the temporary waste rock pad, tailings facility, airstrip, access road, power plant and fuel facilities.

Reclamation and Closure

YZC, First Nations, Yukon Government and Yukoners share a common goal for mine sites: to ensure that the land is returned to a viable, self-sustaining ecosystem when activities have ceased. YZC's *Wolverine Project Reclamation and Closure Plan* (RCP) (April 2010) aims to achieve this goal in compliance with Quartz Mining Licence (QML-0006) and the Kaska Socioeconomic Participation Agreement. Approximately every two years, Government, Kaska and stakeholders have the opportunity to review the RCP. This *Information Sheet* summarizes care and maintenance activities of the site during a temporary closure and the decommissioning and reclamation of the site at final closure. The mine will operate from 2011 to 2019, followed by a three year permanent closure period.

What is the aim of Reclamation?

The overall goal of reclamation is to prepare the site so land use returns to as near as possible to that prior to mining. The objectives are to:

- provide short and long-term erosion control
- ensure land use compatible with the surrounding area
- leave area as a self-supporting ecosystem

YZC will continuously reclaim and rehabilitate disturbed land, wherever possible throughout mining operations. During operations, the waste rock pad will be decommissioned by removing the geomembrane and clay pad liners, recontouring the landscape, covering the area with stockpiled organic matter then seeding and planting.

Financial Security Deposit

The *Yukon Mine Site Reclamation and Closure Policy* (January 2006) and QML-0006 require that security be provided to ensure that there is adequate funding for reclamation and closure activities, should it be needed. The current security deposit is approximately \$8.3 M. Additional information is available through Yukon Energy and Mines' website: <http://www.emr.gov.yk.ca/mining/wolverine.html>.

Temporary Closure

If the Project is temporarily closed, YZC will:

- ensure physical and chemical stability of the site
- monitor and maintain buildings/facilities
- maintain site and main access roads
- restrict access and maintain security
- continue mine dewatering
- collect industrial complex runoff, waste rock pad runoff, and mine water
- operate and maintain water management structures and treatment facilities



Arne Clausen

Wolverine Mine Industrial Complex Area



Reclamation and Closure

Operational Trials and Research

During operations, research will be done to help refine reclamation plans and manage the site after closure including:

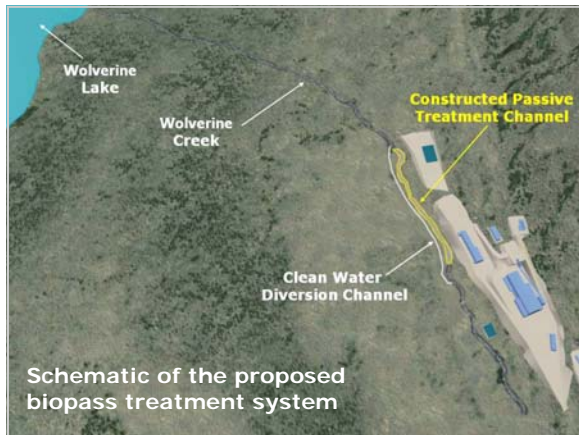
1. Reclamation Research Program

- investigating local seed sources
- establishing revegetation test plots
- testing nutrient levels in soils

2. Bypass Pilot Testing

A passive biological treatment system that will be constructed in upper Wolverine Creek to remove metals from mine-affected groundwater, should levels be elevated once the mine floods.

Lab testwork commenced in Summer 2010 to determine bypass construction and operation requirements.



Example of reclaimed tailings impoundment developing as a wetland, Snip Lake, BC



Permanent Closure Activities

All infrastructure will be removed from site at closure with the exception of the tailings facility and the airstrip. Once mining activities have ceased, the following components will be decommissioned and reclaimed:

Mine Workings

As mining progresses, mined out stopes will be backfilled with concrete, waste rock and tailings. During closure, the main ramp will be backfilled and hydraulic plugs will be installed to prevent drainage of mine-affected water. A barrier made of heavy equipment tires and riprap to prevent entry will be installed.

Industrial Complex

Decommissioning of all structures will occur in stages with the water treatment plant and power supply removed last. All material will be completely removed except concrete foundations, which will be buried in place and covered with soils and revegetated.



Access Road

Decommissioning of the access road will include:

- removing culverts and recontouring ditches
- blocking access by placing obstacles at specific locations
- removing the Bunker Creek bridge and abutments
- spreading stockpiled organics and seeding disturbed surfaces

Tailings Facility

At the cessation of operations, the following will be completed:

- 1.0 m of granular material placed over tailings
- recontour and revegetate adjacent area
- treat and monitor water

When water quality is maintained without treatment, the seepage dam, pipelines and pumps will be removed.