



Teck Cominco  
Polaris Mine

## the challenge

**Teck Cominco's Polaris Mine operated as the world's northernmost base metal mine which began production in 1981.**



The site is on Little Cornwallis Island in the Canadian High Arctic. This region experiences continuous permafrost and has a mean annual temperature of -17°C.

At the end of the Operations Phase Teck Cominco had committed to full decommissioning and restoration of the site. In order to complete the restoration, structures needed to be dismantled and removed and all residual fuels and liquids needed to be disposed of. The quantities of liquids that had accumulated over the years were in the hundreds of thousands of litres. □

## our solution

**Engineering groups had studied the mine site and developed a closure plan that recommended the purchase of a two stage liquid waste incinerator.**



Stringent regulations were imposed by the agencies involved in approvals of the decommissioning plans. As a result, the engineers involved stipulated that the equipment would need to process the liquids continually at a high rate but without compromising local air quality. These objectives needed to be met by a low-cost, dependable system. Of the four potential suppliers Eco Waste Solutions was selected. The **Liquid Waste Oxidizer** had proven performance and the added benefit of being able to handle some of the residual solids expected to be processed. □



## the results

### Cost Avoidance

The liquid wastes were destroyed on site eliminating the need to ship them south for destruction. This avoided hundreds of thousands of dollars in transportation costs. □

### Environmental Protection

The process was carried out with no adverse affects on local air quality. Concerns regarding the shipment of liquid waste over arctic waters was averted. □

## project information

**Location:** Polaris Mine, Nunavut, Canada  
**Model:** ECO 115LPH  
**Capacity:** 40 US gallons per hour  
**Waste Type:** Glycol and Diesel  
**Installation:** 2002