

Iqaluit Metal Dump Remediation and Risk Management Project
Iqaluit Airport, Iqaluit, Nunavut

Remediation Action Plan

Metal debris, scrap machinery, vehicles, drums, tanks and other building materials are found throughout the landfill area. The approximate total volume of metallic debris is estimated to be on the order of ~16,000 m³ and other miscellaneous (non-metallic) debris is on the order of 6800 m³.

Due to the difficult site access, materials could be recovered by using a truck mounted or stationary anchored crane with a magnetic attachment for metallic debris and a clam attachment for non-metallic debris. The crane would be mounted on the upper bench of the Main Landfill (AEC 3) and debris would be transported from the slope and toe of the landfill to the upper bench, where loaders would then move the debris to a temporary staging ground located in AEC 1 for sorting. Based on our research, a suitable crane is available in Iqaluit. The magnetic and clam attachments are specialized pieces of equipment which would be shipped from the south.

All the waste debris and materials would be consolidated and transported to the City of Iqaluit municipal landfill. It is our understanding that the City is currently limiting the acceptance of wastes due to over capacity issues. A significant quantity of waste material exists at the site, including relic metallic debris, appliances, municipal waste, construction debris etc. Debris would be first transported to the staging ground in AEC 1 and sorted for recyclable metallic materials and materials suitable for land filling. Any contaminated soil found on site it would be collected and sent to the landfarm at the Iqaluit airport that TC operates.

A summary of the Iqaluit Metal Dump Remediation is provided as follows:

Remediation Action Plan	Consolidate Waste and move off-site
Project Goals	Remove physical hazard by providing a permanent solution
Operating Principle	All material would be consolidated and removed from the site. Waste materials would be consolidated and transported to municipal landfill.
Protection of Human Health and the Environment	Yes
Degree of Site Disruption	Moderate to High
Confidence Level	High
Estimated Time for Implementation	1.5 months to consolidate and transport to municipal landfill
Long-term Effectiveness	Yes
Ease of Implementation	Moderate
Regulatory and Community Acceptance	Moderate
Estimated Capital Cost	\$1,628,225
Estimated Operating Cost (5 years)	\$0
Total Estimated Remediation Cost +/-	\$1.6M