

Research Results: Energy and Technology Solutions

Nunavut metals management demonstration project Can a regional model for solid waste management maximize local benefits?

Key messages

- Solid waste management through Inuit Development Corporations is viable and adventageous.
- Over 900 batteries, 12 drums of oil waste, and countless mercury switches were removed from the tundra and shipped south for disposal and recycling.
- Community members hired by the municipality completed all on-site work and received over 30 days of on-site training.
- 59% of project funding stayed in the community as wages, equipment, and materials.

Project leader:

Sheldon Nimchuk, Qikiqtaaluk Business Development Corp., snimchuk@qcorp.ca



What we did

This project aimed to remove metal waste while employing and training area residents. Metal stockpiles contain old cars, snowmobiles, trucks, and appliances. Each of these contain hazardous waste. Old vehicles contain mercury switches, lead, and various liquid wastes such as oil and gasoline. Old refrigerators contain oils and ozone-depleting gases. Decreasing metal waste stops hazardous waste from contaminating the environment.

The project team protected the environment by removing hazardous materials from metal waste. They also extended the lifespan of the existing dumpsite by compacting the metals into bales. This project helps reduce the need for a larger dumpsite in the future. It also decreases the risk of environmental contamination.

This model of delivering solid waste management through Inuit Development Corporations could be applied to address the metal stockpiles that exist in all Nunavut communities. The project approach was Inuit-led and delivered.



Pitseolak Pudlaq poses near a metal baler: "It is the first time I am seeing this land without old metals all over it. It feels like progress." Over 1,000 metal bales were pro-cessed during this project.







Research Results: Energy and Technology Solutions

The project prioritized building Inuit capacity, focusing on social return on investment to deliver on the project. Community members hired through the municipality completed all onsite work. The project team delivered training on site, which was open to other community members. The municipality gained the experience and resources necessary to continue managing their metal dumpsite responsibly, without outside contractors.

Why this matters

Solid waste infrastructure in Nunavut communities is inadequate, outdated, and undersized. Limited budgets and competing priorities at all levels of government have contributed to this challenge. Legacy metal is waste that has been around since before the current regulatory and management frameworks. Most of this legacy waste is scrap metal, including old vehicles, fridges, and building materials. If left as is, the hazardous waste contained in the metal will eventually seep into the environment, pose a risk to human health, and pollute our land, water, and air.

This project showed that future agreements between the Government of Nunavut and Regional Development Corporations in the Qikiqtani, Kitikmeot, and Kivalliq Regions are possible. These agreements can address the legacy metal waste stockpiles across Nunavut while keeping money within the territory and maximizing the benefit to Inuit and communities.



Over 25 end-of-life vehicles were removed from the community core and properly depolluted. "We are pleased to see action toward not only supporting our community with cleaning up the site, but also with providing the training to enable the continued proper management of our waste." — John Hussey, Senior Administrative Officer.

Under Qikiqtaaluk Corporation management, this project:

- Hired six Inuit in Kinngait for two project seasons;
- Provided 30 days of on-site training, including:
 - safe depollution to remove hazardous waste from vehicles and fridges
 - metal baling equipment operations
 - hazardous waste packaging and shipping
 - health and safety certifications
 - ozone-depleting substances certification
- Produced and published Nunavut-specific training materials in Inuktitut and English, including:
 - a guide on removing hazardous waste from metals
 - a guide on which metals found in a typical Nunavut metal stock-pile can be baled
 - a guide on how to backhaul hazardous waste

Financial Contributions: Polar Knowledge Canada, Government of Nunavut, Qikiqtaaluk Corporation, Kakivak Association, Municipali-ty of Kinngait. In-Kind Support: Automotive Recyclers of Canada, Municipality of Kinngait, Qikiqtaaluk Business Development Corpo-ration, Government of Nunavut, plusArctic Consulting Ltd., Kudlik Construction.