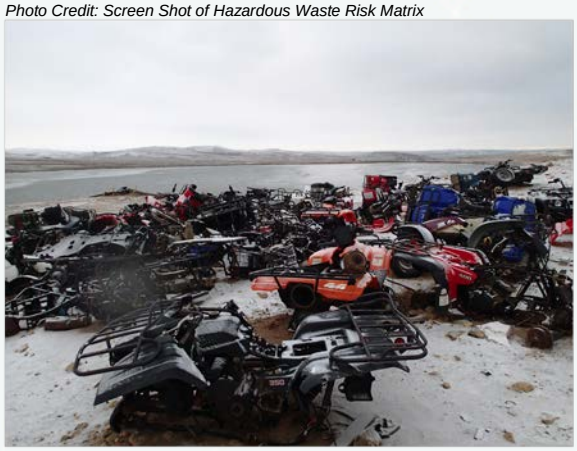
Hazardous Waste Inventory and Risk Assessment

Assessing climate change risk to municipal hazardous waste disposal sites in eight Northern NWT communities.

CONTEXT

Northern regions in the NWT are experiencing the most rapid climate warming in Canada, resulting in thawing permafrost, slumping, and coastal erosion. Permafrost thaw, coastal erosion, and slumping have accompanied this warming. These landscape changes can result in storage locations of hazardous waste (used oil, fuel, batteries, paint, and mercury) becoming unsafe and increasing the likelihood of having them released into the environment. Having a complete inventory of hazardous waste and assessment of their potential risk is important to protect communities from potential environmental threats that could arise with consistently warmer temperatures.

Photo Credit: Screen Shot of Hazardous Waste Risk Matrix



OBJECTIVE

Inventory stockpiles of hazardous waste owned by community governments in the Inuvik region, including a cost estimate for their transportation and disposal. Create a climate change risk assessment using the inventory results to prioritize management and removal options.

APPROACH

A qualified professional has visited 6 of 8 communities in the Inuvik region to collect hazardous waste inventories from municipalities. Existing information has already been used to create a draft risk assessment that interprets the results of the inventory and identifies any additional risks that climate change impacts will directly and indirectly have on the hazardous waste stockpile in those regions.

EXPECTED RESULTS

A complete inventory of hazardous waste for: Aklavik, Inuvik, Fort McPherson, Paulatuk, Sachs Harbour, Tsiigehtchich, Tuktoyaktuk, and Ulukhaktok. A risk assessment that considers that vulnerability of the individual sites to hazardous waste contamination brought on by climate change.

This project benefits communities by creating inventories that can be used to plan budgets for transportation and disposal of hazardous waste, provide opportunities for communities to develop best practices for waste disposal and learn the risks and liabilities of hazardous waste management, and advise communities on how to coordinate the transportation and disposal of current hazardous waste from sites considered most at risk due to climate change.

Significance

Climate change increases the risk of municipal hazardous waste being released into the environment. The Beaufort Delta and High Arctic are experiencing rapid climate warming resulting in thawing Permafrost, slumping, and coastal erosion.

Partners

- Community Governments
- Aboriginal Affairs and Northern Development Canada
- NWT Association of Communities
- Northwest Territories Water Board
- Gwich'in Land and Water Board
- Government of the NWT, Municipal and Community Affairs
- Government of the NWT, Environment and Natural Resources

FOR MORE INFO

Hazardous Waste Specialist
Environment and Natural Resources
Government of the NWT
PO Box 1320
Yellowknife, NT
X1A 3S8
(867) 920-8044
www.enr.gov.nt.ca

Pan-Territorial Information Notes
MAR.2015.PTAP.06
ISSN 2291-3904