

PROJECT:

Tank Cleaning, Iqaluit Nunavut



SANEXEN

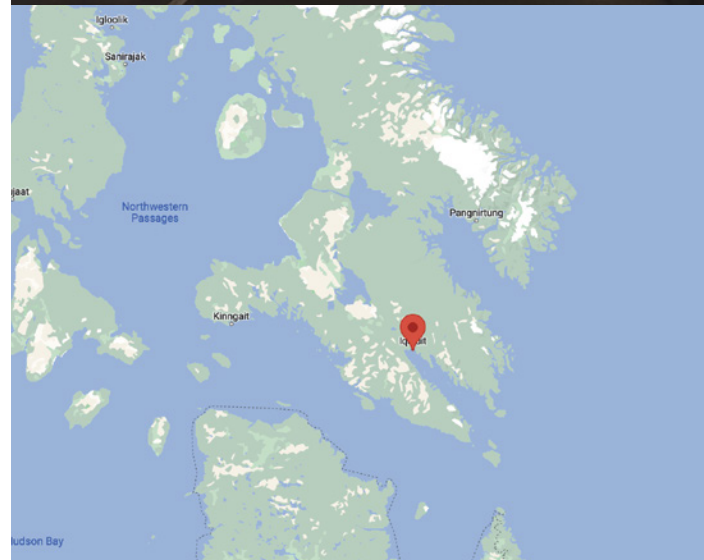
CHALLENGES

Cleaning the inside of large petroleum product storage tanks was a complex project from a health and safety point of view as well as a logistical challenge. There are no sealifts at that time of year, making the logistics for the mobilization of all the required tools, PPE and equipment more complicated.

The work site was a confined space with an additional danger due to the presence of petroleum product fumes. Additional precautions were implemented to ensure the health and safety of all workers. QE had an extremely tight timeline to do this work as the first tank had to be cleaned before the arrival of the first fuel resupply ship.

BACKGROUND

Every few years, the petroleum product storage tanks in Iqaluit's tank farm, managed by Uqsuq Corporation, must be emptied, cleaned and inspected to ensure the soldered joints, the materials and their structures are in good condition. The objective of these inspections is to ensure there will be no contaminants in the product before being used in aircraft, vehicles, etc. Because of the COVID-19 pandemic, some tanks had not been cleaned since 2018.



SITE MANAGEMENT

Project location: Iqaluit, Nunavut

Quantity of waste liquid petroleum product and sludge disposed: + 51,000 litres

Project date: 2022

SOLUTION DEVELOPED

QE first formed a team comprised of environmental technicians and a tank-cleaning subcontractor. QE mobilized to the site in the early summer of 2022.

To be able to inspect a tank, the air must be constantly monitored, the tank must be ventilated, emptied and cleaned. The tanks are ventilated by creating a venturi effect. To do so, all access holes at the bottom and one at the top are opened. Ventilators are then installed at the bottom to push air inside the tank, and a chimney is installed on the top, connected to a compressor, to exhaust the fumes through the chimney.

To empty the tank, a vacuum trailer system was used to remove the liquid and sludge and anti-sparking tools were used to remove the ice. The PHC-impacted liquids and solids were packaged into drums and labelled according to IMDG regulations in preparation for shipment and disposal at an accredited southern disposal facility.

For the cleaning, a heated pressure washer was used on the walls and the base of the tank, to remove the accumulated dirt and residue. Again, the vacuum trailer system was used to vacuum all the liquid and sludge.

The inspector was very impressed at the quality of QE's work and was able to complete his inspections. The quality and implementation of the health and safety program ensured that the work was completed without incident.

QE successfully cleaned:

- Two 20-million L capacity tanks of P50 diesel;
- Two 1.5-million L capacity tanks of gasoline;
- Two 1.5-million L capacity tanks of Jet-A fuel.

QE successfully disposed of:

- Over 51,000 litres (250 drums) of waste liquid petroleum product and sludge.

CONTACT



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