

## RESOLUTE BAY LAND TREATMENT UNIT MONITORING PROJECT SUMMARY

In 2002 Transport Canada constructed two Land Treatment Units (LTUs) at the Resolute Bay Airport for the treatment of soils excavated from the Former Firefighter Training Area (FTA) and Above Ground Storage Tank (AST) area at the airport. The LTUs were lined with a 20 mil Oil Resistant Reinforced Polyethylene (OR RPE) liners. LTU 1 is approximately 70 m x 40 m and was divided into 3 zones separated by berms. Zone 1 and 2 contained heavier hydrocarbons while zone 3 contained lighter. LTU 2 is 80 m x 30 is a single cell and contains lighter hydrocarbons. The LTUs received approximately 5800 m<sup>3</sup> of soil from the FTA and an AST in 2002 and have been treated intermittently since that time, based on available funding.

Transport Canada applied for and received a Licence from the Nunavut Water Board for maintenance and decommissioning activities for the LTUs in 2015. TC then retained a qualified engineering consultant to complete soil and groundwater monitoring to understand the site conditions. The site investigation took place on September 22, 2015 and included nine test pits for sampling across the two LTUs. Analytical results from an accredited laboratory indicate that one of more the following parameters exceeded the CCME guidelines: benzene, toluene, ethylbenzene, xylenes, PHC F1 and/or PHC F2. All soil samples complied with all other parameters including metals.

Groundwater samples were also scheduled for collection; however, groundwater within all six monitoring wells located at the site was frozen and sampled could not be collected.