

Resolute Bay Airport – Landfarm Facility

RENEWAL – Transport Canada (TC) proposes to continue operation of its landfarm facility (LTF) at the Resolute Bay Airport, and is requesting updated Nunavut Water Board (NWB) licensing requirements.

This is a “new” project submission to the Nunavut Planning Commission (NPC)’s electronic registry, which did not exist at the time of original application submission, but is not a new project. The NWB received the NPC’s Conformity Determination for the file on May 17, 2012 and the Nunavut Impact Review Board’s (NIRB) Screening Decision for the file on June 22, 2012. The NWB provided a licence for the project, issued August 17th, 2015 (NWB Licence No. 1BR-RLF1520). This licence will expire on August 16, 2020.

In 2001, TC undertook demolition and remediation work at the former Fire Training Area (FTA) and Above-Ground Storage Tanks (ASTs) area at the Resolute Bay Airport. Approximately 5,800 m³ of Petroleum Hydrocarbon Contaminated Soil (PHC) soil was excavated from the site. 5,500 m³ from the FTA and 300 m³ from the former ASTs area. A lined Landfarm Facility was constructed and consists of two (2) Land Treatment Units (LTU 1 and LTU 2) to contain and treat the PHC soil. Transport Canada notes that there are two smaller Land Treatment Units in the same vicinity. Transport Canada is not the owner/operator of these facilities, it is our understanding that they are the responsibility of ATCO.

In accordance with the licencing requirements, TC has attempted groundwater monitoring an annual basis. However, site conditions are such that sufficient groundwater samples to complete the required analysis have not been available. These attempts and findings have been documented in the annual reports.

In 2015, TC identified that per- and poly-fluoroalkyl substances (PFAS) was also a potential Contaminant of Concern (COC) since the FFTA would have likely used firefighting foam containing PFAS. Sampling for both PHC and PFAS was undertaken and all soil samples exceeded CCME guidelines for one or more PHC parameters and exceeded interim guidelines for PFAS. TC is not aware of any technically feasible, cost-effective treatment options for PFAS in soil for this site. As such, TC has not been actively till or treating the soil for PHC’s, as an effective method to address all COCs in the soil would be required. TC continues to inspect the LTF on an annual basis and complete the monitoring required in the licence and will continue to maintain the facility until a suitable remedial option for both PFAS and PHCs can be identified.

In 2019 TC commissioned a preliminary quantitative health and ecological risk assessment to help support management decisions for the site. The report concluded that there were no human or ecological exposure pathways that required further assessment and that potential unacceptable risks are not anticipated for human or ecological receptors at the site. TC is requesting that the considerations identified above be taken into account during the NWB licence renewal and that the NWB considers a reduced sampling and reporting schedule during this LTF maintenance phase.