

Resolute Bay Landfarm Facility

Transport Canada

March 2020

Licence Renewal Application - Summary

Nunavut Water Board (NWB) Licence No. 1BR-RLF-1520

Licence Renewal Request

Transport Canada is applying to renew Nunavut Water Board (NWB) Licence (File No.: 1BR-LF1520) for its landfarm facility (LTF) at the Resolute Bay Airport. The Licence will expire on August 16, 2020. Transport Canada submitted a renewal application to the Nunavut Planning Commission (NPC) on November 7, 2019 and replied to a request for information on January 24, 2020. The NPC stated that the conformity determination issued on May 12, 2012 still applies and that the previous screening by the Nunavut Impact Review Board (NIRB) also still applies. The NPC referred the renewal request directly to the NWB.

Transport Canada is requesting that the renewed licence suspends annual groundwater sampling during this LTF maintenance phase, until a suitable risk management or remediation option for all contaminants of concern can be applied. Transport Canada will continue to monitor the site remotely through contact with the local authorities and address any issues as they arise. The site background (below) and the preliminary quantitative health and ecological risk assessment report support this option.

Background

In 2001, Transport Canada 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, with 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 that belong to ATCO.

In 2015, Transport Canada 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 also exceeded interim guidelines for PFAS. Transport Canada is not aware of any technically feasible, cost-effective treatment options for PFAS in soil for this site. As such, Transport Canada has not been actively tilling or treating the soil for PHC's, as an effective method to address all COCs in the soil would be required. Transport Canada continued to inspect the LTF on an annual basis and complete the monitoring required in the licence. Currently, the LTF is in a maintenance phase.

In 2018, Transport Canada commissioned a preliminary quantitative health and ecological risk assessment to help support management decisions for the site. Based on the results of the problem formulation, 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.

In accordance with the licencing requirements, Transport Canada has attempted groundwater monitoring annually. However, site conditions are such that sufficient groundwater samples to complete the required analysis have rarely been available. These attempts and findings have been documented in the annual reports.

The 2019 annual report will be submitted under separate cover.

Attachments

- Stantec - Preliminary Quantitative Health & Ecological Risk Assessment (2019)
- NWB Licence Renewal Application Form