

Executive Summary

The former Ennadai Lake Weather Station is located in southwestern Nunavut in the Kivalliq Region (61°07'51" N, 100°53'14" W). It is on Crown and Inuit Owned Land and is located approximately 380 km west of Arviat and 500 km southwest of Rankin Inlet.

The site was operational from 1949 to 1979, and was abandoned in the late 1980s to early 1990s. Remediation took place between 2014 and 2015 and included the construction of a non-hazardous waste landfill (NHWL), demolition and disposal of on-site structures and clean-up of hazardous waste and contaminated soil.

The NHWL was constructed in 2014 and was designed to contain non-hazardous materials only. It is approximately 240 m east of the site and occupies a footprint of approximately 1,500 m² (38 m x 40 m).

The Ennadai Lake Long Term Monitoring plan was implemented in 2016 and includes visual inspection, groundwater sampling, soil sampling (if required), and natural environmental monitoring. The first monitoring event took place in 2016 and the next event will take place in 2018 (year 3). Future monitoring is scheduled for 2020, 2022, 2025, 2030, 2035, and 2040.

The Indigenous and Northern Affairs Canada Contaminated Sites Division is submitting an application to amend Water Licence 1BR-ELR1419 to reduce the scope of work from remediation to monitoring activities. A renewal for a term of 23 years was also requested to conduct the remainder of the 25-year long term monitoring program to ensure that the NHWL is performing as designed and that potential impacts to the environment are sufficiently mitigated.