
EWPF¹ 2019 AMENDMENT TO NWB LICENCE #1BR-THI1722**SUMMARY**

Qikiqtaaluk Environmental Inc. (QE) was established in 2003 in Iqaluit, Nunavut. Its activities consist of managing hazardous and non-hazardous waste, PHC²-impacted water and soils. QE operates out of a $\approx 20,000 \text{ m}^2$ property, located in Iqaluit, Nunavut (the Site). In the last 2 years, QE has seen an increased demand for contaminated water and soil management from its clients. This amendment aims at expanding QE's storage volume and treatment capacity. As part of its mission and field of expertise, QE will continue to safeguard against contaminants migrating beyond the Site limits. Monitoring wells, watertight lined cells, storage in proper containment, and regular inspections will remain part of the measures taken by QE to prevent contaminants from being released into the surrounding environment.

Hazardous and non-hazardous waste will continue to be collected from various clients in Iqaluit. Waste consists of, but is not limited to, batteries, waste oils, fuels and gasoline, PHC-impacted sludges and solids (used absorbents, rags and filter media), waste glycol, asbestos-containing materials, lead-based paint and other lead-containing materials, biomedical waste, etc. These types of waste are often improperly packaged and/or in damaged/unsound containers, and are labelled by QE as "unconsolidated". QE's business consists of identifying, repackaging for marine transport, and safely storing the now "consolidated" waste. In summer, during the sealift season, the consolidated waste is shipped by maritime transport to accredited facilities in the South for final recycling and/or disposal.

PHC-impacted water is collected from spills, site remediation projects, fuel storage containers, etc. PHC-impacted water also accumulates in the lined, watertight soil holding cells. The water treatment unit consists of a series of filters and chemical additives activated by pumps. QE aims to increase its PHC-impacted water holding capacity by constructing a $\approx 400,000 \text{ L}$ lined, watertight basin. A $\approx 120,000 \text{ L}$ treated water holding tank will also be added to the process. Once a "batch" is ready, confirmatory samples will still be collected and analyzed for comparison with the discharge criteria as defined in 1BR-THI1722. Following receipt of results respecting the criteria, the treated water is released at the identified discharge location, and a second batch undergoes the treatment process.

QE will continue treating PHC-impacted soils using a combination of physical (screening and washing), chemical (oxidation), and biological (biopile and/or landfarming) techniques. Significant spills from clients were cleaned up by QE over the 2017-2018 winter season, leading to an accumulation of PHC-impacted ice/snow/soils in QE's current containment cell. During the 2018 spring freshet, it became obvious that the current holding capacity could not contain the thawing snow/ice. A lined watertight cell was constructed in June 2018, as an emergency measure, to contain the thaw from the accumulated PHC-impacted products. This amendment also aims at requesting approval for a holding capacity volume increase through the construction of a new lined, watertight cell able to contain a volume of more than $9,000 \text{ m}^3$.

In summary, this amendment does not change the nature of QE's current activities at its EWPF, licensed under 1BR-THI1722, rather its purpose is to seek approval for an increased holding volume and treatment capacity of PHC-impacted water and soils to accommodate QE's continued business growth.

1 Environmental Waste Processing Facility

2 Petroleum hydrocarbon