

## Executive Summary of Resolute Bay Airport Sewage Lagoon Water Licence

# 3BM-YRB 1621, TYPE- B.

Resolute Bay is an Arctic waterway in the Qikiqtaaluk Region, Nunavut. This community is located in Parry Channe on the southern side of Cornwallis Island at 74042'00"N and 94050'00"W. Resolute Bay is one of the most fascinating communities in Nunavut because of the long winter night in the extreme north of Nunavut, its Inuktitut name is Qausuittuq meaning 'place with no dawn'. Resolute has evolved into a meeting place for a wide range of scientists and an eclectic mix of extreme adventurers who use the community as a gateway to the North. The airport is an important staging point for High Arctic research, tourism, and military activities. Resolute Bay Airport is a hub for charter flights throughout the rest of the High Arctic.

About 22 buildings belong to Federal Government, Territorial Government and Business organizations are located surrounded by the Airport. The Trucked drinking water delivery system is existing in this area. The wastewater produced in these buildings is regularly collected by sewage trucks and dumped into a near by sewage lagoon. This is a natural lagoon and exfiltration in nature. The initial capacity was about 600 cubic meters whereas total sewage production annually of the airport area is about 5,500 cubic meters. As a result, this lagoon overflows in winter and exfiltrates in summer. The significant part of the treatment of the effluent normally takes place withing 3km wide wetland prior to reaching the sea.

This facility has been operated under a Water Licence # 3BM-YRB 1621, Type B and the Licensee is GN-ED&T. The current licence will be expired on December 15,2021.

This facility is being maintained as required on regular basis. No major rehabilitation has been planned. A new wastewater treatment Plant is under design and anticipated to be built in the town and commissioned around 2024. Once this plant is commissioned, the trucked sewage will be redirected into this plant and this lagoon will then be considered for abandonment and restoration.

Hamlet of Resolute Bay conducts all the wastewater effluent testing through the local contractor ATCO during summer. The samples are shipped to Ottawa Caduceon accredited Lab and get tested them there. These test results are submitted to NWB along with the Annual report.

No modification or rehabilitation or alteration of this facility was taken place during the current licence lifetime. The Licensee is planning to renew this licence for the next 5 years starting from December 16,2021 to December 15,2026 on the existing terms of conditions.

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