

Executive Summary

The Hamlet of Gjoa Haven is responsible for the supply of potable water and disposal of sewage waste and solid waste generated from the community. These facilities are currently operating under the current Licence 3BM-GJO 1318 which remains active until Nov 12, 2018.

The buried water line sometime faces frozen issues due to crack in insulation or insufficient coverage which required replacing some of the sections of the pipe line. Water line improvement works also included replacement of two heat exchanger pumps, increase sizes of intake pumps, and SCADA monitoring system- all completed during the year 2015-2017. Raw water drawn from Swan lake by two intake pumps, transport to 3.2 km away treatment plant through buried line where water is treated by gravity pressure filtration and chlorination before truckfill for delivery. Water flow meters are included in the treatment system to address the volume of water drawn and delivery to residents using Hamlet operated water trucks.

Current engineered lagoon constructed in 2014 and in operation for raw sewage deposition and primary treatment. Decanting of effluent carried during July-August by using pump and hose to a designated point on wetland from where the effluent travels 1275 m towards Ocean through the Final Discharge point GJO-4. The old sewage lagoon was decommissioned and the A&R plan was received to the Board on July 25, 2014. Solid waste site facility had some issues over the years in terms of mixing runoff contamination within the solid waste management (SWMA) area and hazardous materials leachate mixing onto water through wetland, poor segregation in waste dumps, illegal dumping outside the facility, broken spots of fence and poor performance of facility operations. The community has fixed majority of those issues over the years with own resources and some assistance through Government initiatives including the reduction in vehicles parts, reinstalling the fallen fences, filling the broken gaps of berms and stopping the leachate runoff from free flow outside. A sampling monitoring point GJO-5 and signage established for leachate sampling. Other monitoring stations GJO-2, GJO-3, GJO-4 are remains active with GPS locations and identity signage. Monitoring of solid waste and sewage facilities continued during May-August and operators training of Environmental Awareness. Annual Reports are upto date to the Board to 2017.

CGS- GN will continue helping the Licensee in monthly monitoring and sampling program of sewage and waste effluent and testing samples at the CALA accredited Taiga lab in Yellowknife. GN- CGS also has a plan to improve or upgrade the solid waste facility and addition of contaminated soil & spill materials remediation. A study project will be starting during the FY 2018-19 to find out the facility status and cost effective upgrade or a new facility.

We confidently determined, the operational procedure and plan of monitoring, Quality Control and compliance to regulatory bodies will be helpful and in compliance with the requirement the Nunavut Water Licence for this northern community.