



Memorandum

Project: Pangnirtung Aftercare Service 2024-2025 (FRE-00232735-A6)

Subject: Summary of Work Completed Memo Report (2023-2024)

Date: February 18, 2025

To: Bhabesh Roy

From: Corey McMinniman, Eric Bell

Distribution: Hamlet of Pangnirtung, EXP Services, Bhabesh Roy

General

The purpose of this memo report is to summarize the aftercare service provided by EXP for the calendar year of 2024. Two site visits occurred during the 2024 contract period which took place in May and November. Additionally, water license documents were updated and a new headworks business case was completed.

Site visit #1 - May 2024

This was an emergency site visit since the sewage treatment plant (STP) had gone out of production in January 2024 due to the screens in the headworks uplifting and breaking the piping. This site visit was conducted by Corey McMinniman (EXP). The focus of this visit was to get the headworks piping repaired with flexible tubing so that if the screens were to lift again, the headworks would remain operational. Specific parts that were required were delivered by EXP such that this repair could be facilitated. The list of work that was completed during this site visit included:

- STP Headworks Piping Repair
- STP Membrane Recovery Cleans
- STP Startup
- Took inventory for 2024 sea lift order (at STP and Water Treatment Plant (WTP))
- Recorded list of deficiencies at STP
- Inspected Proposed Culvert Area
- Inspected Proposed Subdivision Area
- Inspected Proposed Access Road Area

Site visit #2 – November 2024

The second EXP site visit to the STP was conducted by Eric Bell. During this visit the following was achieved:

- RAS Valve repair and setup for continuous flow to RAS (with pump control) This valve was opened and allowed to drain the solids from the tank that were impossible to recycle with a damaged valve.
- UV bulb replacement and recalibration of the UV intensity measurement.
- Sampling of final effluent for toxicity testing

- Setup Lab instruments delivered in Sealift
- Confirmed inventory of delivered items in sealift 2024, including pipe delivery
- Trouble shooting network and getting Internet / PLC ethernet connections re-established.
- Identified headworks issues and pulled parts for future maintenance.
- Coordinated with Veolia for membrane health after RAS valve correction.

New Headworks Pre-Design

EXP's developed a preliminary design and business case for Headworks upgrade. The resulting business case focused on the need for a new headworks building, the conceptual design options, and high-level cost estimates from a professional cost quantity consultant (ALTUS).

Water License Document Updates

Additional scope of work was agreed on where EXP took the previously submitted water license documents and updated them to reflect any changes since the initial submission. This was in response to the Hamlet's request for assistance with preparing these documents to be submitted to the Nunavut Water Board.