



March 21, 2018

Stephanie Autut  
Executive Director  
Nunavut Water Board  
P.O. Box 119  
Gjoa Haven, NU X0B 1J0

Dear Ms. Autut,

**Re: Water Licence 1AR-NAN1419 – 2017 Annual Report**

This letter and enclosed documentation are submitted in fulfilment of Part B Item 2 of Water Licence 1AR-NAN1419 which requires the Licensee to file an Annual Report with the Nunavut Water Board (NWB). The letter is structured as per Schedule B of the Water Licence.

**Summary**

Key activities completed in 2017 included:

- Discharge of effluent from the West Twin Disposal Area;
- Geotechnical monitoring;
- Water quality monitoring;
- Finalisation of soil remediation activities in the former fuel tank farm area, including the off-site shipment of remaining waste, inspection of the soil treatment areas that were decommissioned in 2016 and demobilisation of all equipment.
- Disposal of non-hazardous waste in a newly established landfill, followed by the closure of the landfill.

There was no use of fresh water in 2017.

As per Part F of Water Licence 1AR-NAN1419, effluent quality limits were met for the effluent discharged into Twin Lakes Creek.

As per Part I of Water Licence 1AR-NAN1419, geotechnical and surface water quality monitoring was completed in 2017. The monitoring programs demonstrated stable conditions and confirmed that implemented closure and rehabilitation measures perform as expected.

**Part D – Conditions Applying to Construction and Operations**

A small landfill for the disposal of non-hazardous waste was constructed in 2017, as permitted through Water Licence 1AR-NAN1419. The landfill was used to dispose of scrap metal and other inert waste accumulated during closure, reclamation and monitoring activities. An estimated 200 m<sup>3</sup> of materials were disposed in the landfill. The landfill was closed immediately following the disposal of the waste through the placement of a dry soil cover. Further information about the landfill is available in the following report filed with the Nunavut Water Board on 31 October 2017: *Nanisivik Mine, Landfill Closure, Construction Summary Report. SRK Consulting. October 2017.*

## **Part E – Conditions Applying to Water Use and Management**

There were no uses of fresh water in 2017.

## **Part F – Conditions Applying to Waste Disposal and Management**

In 2017, effluent quality limits specified by Water Licence 1AR-NAN1419 at monitoring station 159-4 were met. Further information on surface water quality monitoring undertaken in 2017 is provided in Appendix B.

No significant amounts of waste were generated in 2017. Small quantities of sewage and domestic waste produced at the tank farm remediation site were disposed of in the Arctic Bay landfill and sewage lagoon. Hamlet authorisation to utilize the Arctic Bay landfill was received on March 30, 2015.

All wastes, consumables and equipment remaining at the soil remediation area at the former fuel farm were removed and disposed of in 2017. This included three crates of concentrate-contaminated soil which were shipped to an approved hazardous waste disposal facility in Ste-Catherine, Quebec. Further information about the decommissioning and waste management activities in the former fuel farm area is provided in the following report attached as Appendix F: *Contaminated Soil Remediation 2017 Progress Report and Waste Management Activities*.

Waste liners and other non-hazardous waste generated from the closure and reclamation activities were disposed in a small landfill, as described under Part D above.

## **Part G – Conditions Applying to Modifications**

No modifications to water uses were completed in 2017.

## **Part H – Conditions Applying to Emergency Response and Spill Contingency Planning**

No unauthorized discharges or significant spills occurred in 2017. The Spill Contingency Plan for the abandonment and reclamation of the fuel tank farm remained active and in force during the year.

## **Part I – Conditions Applying to the Monitoring Program**

Geotechnical and surface water quality monitoring conforming to the requirements of Part I and Schedule I of Water Licence 1AR-NAN1419 were completed in 2017. The results of the monitoring program are detailed in the monitoring reports appended to this letter (Appendices B, C, D and E).

## **Part J – Conditions Applying to Abandonment, Reclamation and Closure**

2017 abandonment and reclamation activities completed at the former fuel tank farm area are described in the *Contaminated Soil Remediation Progress Report and Waste Management Activities* provided in Appendix F. Treatment of petroleum hydrocarbon contaminated soil was concluded during 2016 (i.e. no treatment of contaminated soil occurred in 2017).

The remediation activities at the former fuel farm are now considered complete and there are no significant reclamation liabilities remaining for this work. Reclamation expenditures in 2017 were in the order of \$50,000.

I trust that this letter and appended documentation meet your expectations. Please do not hesitate to contact me by phone or email should you have any questions or comments.

Sincerely,



**Johan Skoglund**  
Group Manager Environment

Appendices:

- Appendix A: Inuktitut translation: Summary of this letter
- Appendix B: 2017 Annual Water Quality Monitoring Report. Stantec. March 6, 2018.
- Appendix C: Inuktitut translation: Executive Summary of 2017 Water Quality Monitoring Report.
- Appendix D: 2017 Annual Geotechnical Inspection Report. BGC Engineering. February 23, 2018.
- Appendix E: Inuktitut translation: Executive summary of 2017 Geotechnical Inspection Report.
- Appendix F: Contaminated Soil Remediation 2017 Progress Report and Waste Management Activities. SRK Consulting. March 2018.
- Appendix G: Inuktitut translation: Executive summary of Contaminated Soil Remediation 2017 Progress Report and Waste Management Activities