



Water Resources Division  
Nunavut Regional Office  
Iqaluit, NU X0A 0H0

Your file - Votre référence  
2BB-BOSHIGH1727

October 31, 2017

Our file - Notre référence  
CIDM#1183687

Karén Kharatyan  
Acting Manager of Licensing  
Nunavut Water Board  
Gjoa Haven, NU X0B 1J0

**Re: 2BB-BOS1727 – Boston Advanced Exploration Project – TMAC Resources Inc. – Boston Sewage Treatment Plant Operation and Maintenance Management Plan**

Dear Mr. Kharatyan,

Thank-you for the email notice received on September 29, 2017 regarding the above mentioned Plan.

Indigenous and Northern Affairs Canada's Water Resources Division reviewed the Plan and the results of our review are provided in the enclosed memorandum for the Board's consideration. Comments have been provided pursuant to the Department's mandated responsibilities under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Department of Indian Affairs and Northern Development Act*.

Please do not hesitate to contact me at 867-975-3876 or [sarah.forte@aandc-aadnc.gc.ca](mailto:sarah.forte@aandc-aadnc.gc.ca) for any additional information.

Regards,

Sarah Forté  
Water Management Specialist

## **Technical Review Memorandum**

To: Karén Kharatyan, Acting Manager of Licensing, NWB

From: Sarah Forté, Water Management Specialist, INAC

Date: October 31, 2017

Re: Review of Sewage Treatment Plant Operation and Maintenance Management Plan for Water Licence #2BB-BOS1727

Licensee: TMAC Resources Inc.

Project: Boston Advanced Exploration Project

Region: Kitikmeot

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### **A. BACKGROUND**

On July 26, 2017 the Nunavut Water Board (Board or NWB) renewed TMAC Resources Inc.'s (TMAC or the licensee) water licence #2BB-BOS1727. The undertaking licensed is for bulk sampling and exploration at the Boston site of the Hope Bay Project in the Kitikmeot region of Nunavut.

Part E, Item 5 of the renewed licence required the licensee to submit a revised Sewage Treatment Plant Operations and Maintenance Plan sixty days prior to resuming exploration and commissioning of the Sewage Disposal Facility. The Plan reviewed was submitted to meet this requirement. The previous version of this plan was produced in October 2010.

### **B. RESULTS OF REVIEW**

On behalf of Indigenous and Northern Affairs Canada (INAC) Water Resources, the following comments and recommendations are provided for the Board's consideration.

#### **1. Location of sump for sludge disposal**

##### **Reference:**

- Boston Sewage Treatment Operations and Maintenance Management Plan, Hope Bay Project, Nunavut, TMAC Resources Inc., September 2017, Section 3.2

Comment:

Sludge from the sewage treatment plant will be disposed of in an unlined sump and a proposed location is at (441 191E, 7 504 661N). The location is not confirmed and no information is provided on how the sludge will be transported to the sump. From Figure SK4 in appendix A, the proposed location appears several hundred meters from existing infrastructure.

Recommendation:

The licensee should inform the Nunavut Water Board of the sump location once it has been determined, as well as the transport route and means.

## **2. Lined containment sump**

Reference:

- Boston Sewage Treatment Operations and Maintenance Management Plan, Hope Bay Project, Nunavut, TMAC Resources Inc., September 2017, Section 4.2
- Nunavut Water Board Water Licence #2BB-BOS1727,

Comment:

The section on Off-Specification Effluent Quality states: *“Effluent discharge will be directed to the lined containment sump until compliant results have been received by the accredited laboratory.”*

The licence renewal application material referenced only one lined containment facility on site, to collect runoff from the camp pad or water accumulating in the fuel containment area. It has been referred to as a containment pond. The effluent discharge criteria in the licence for the containment pond (BOS-2) does not include 5-day biological oxygen demand (BOD<sub>5</sub>) and Fecal Coliforms, as is included for the discharge from the sewage treatment facility (BOS-3).

Recommendation:

The licensee should clarify whether the lined containment sump for off-specification effluent is the same as the containment pond to be used from camp pad runoff.

If it is, measures need to be taken to correct the inconsistency in discharge criteria. If it is not, plans for the new facility should be provided.