



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

Your file - Vos référence
2AM-DOH1323

September 5, 2017

Our file - Notre référence
CIDM#1172629

Richard Dwyer
Licensing Administrator
Nunavut Water Board
Gjoa Haven, NU X0B 1J0

**Re: Indigenous and Northern Affairs Canada's (INAC) Review of TMAC
Resources Inc.'s updated Landfarm Management and Monitoring Plan for
Water Licence #2AM-DOH1323 – Doris North Project**

Dear Mr. Dwyer,

Thank-you for the email notice received on August 15, 2017 regarding the above mentioned management plan.

INAC Water Resources Division reviewed TMAC Resources Inc.'s updated Plan and the results of our review are presented 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 for any additional information.

Regards,

Sarah Forté
Water Management Specialist

Technical Review Memorandum

To: Richard Dwyer, Licensing Administrator, NWB

CC: John Roberts, Vice-President Environmental Affairs, TMAC Resources Inc.

From: Sarah Forté, Water Management Specialist, INAC

Date: September 5, 2017

Re: Updated Landfarm Management and Monitoring Plan for Water Licence #2AM-DOH1323

Licensee: TMAC Resources Inc.
Project: Doris North Project
Region: Kitikmeot

A. BACKGROUND

On August 15, 2017 the Nunavut Water Board provided notification to interested parties that TMAC Resources Inc. (TMAC) had submitted an updated Landfarm Management and Monitoring Plan for the Doris North Project authorized by water licence #2AM-DOH1323, and invited representations by September 4, 2017.

The Doris North project is a gold mining project with an estimated 6 year mine life. Amendment #1 to the water licence was issued in November 2016 and an updated Landfarm Management and Monitoring Plan was submitted by TMAC in February 2017. The changes to the Plan are principally re-organization of the document so that its format mirrors that of other plans, with a general section at the beginning and modules for each of the projects in the Hope Bay belt. The revised version has modules for Doris North and Boston.

B. RESULTS OF REVIEW

Indigenous and Northern Affairs Canada (INAC) has no concerns with the updated Landfarm Management and Monitoring Plan and offers the following comments:

1. Distribution of responsibilities

Reference:

- Landfarm Management and Monitoring Plan, Hope Bay, Nunavut, TMAC Resources Inc., January 2017, Table 2
- Doris North Landfarm Management and Monitoring Plan, SRK Consulting Canada Inc., March 2014, Table 3

Comment:

The January 2017 Plan re-distributes roles and responsibilities, and adds the Environmental Coordinator in the list of positions with specific responsibilities. Several responsibilities of the Environmental Manager have been assigned to the Environmental Coordinator, however there are some that are no longer in the list of assigned responsibilities including:

- Reviewing and approving any material that is to be placed in the landfarm to ensure they are appropriate for remediation (not heavy metals, glycol or heavy oils that are not able to be remediated);
- Determining when the soils have been remediated to regulatory standards; and
- Determining when and where the soil should be moved to following remediation.

The first two bullets were kept in Table 6 of the January 2017 Plan (Equivalent to Table 9 in March 2014 Plan), but it is helpful to have them stated right at the outset. The final bullet was not included.

2. Water quality sampling during discharge

Reference:

- Landfarm Management and Monitoring Plan, Hope Bay, Nunavut, TMAC Resources Inc., January 2017, Section 3.2
- Water Licence No: 2AM-DOH1323 – Amendment No. 1, Nunavut Water Board, November 4, 2016, Schedule J, Table 2

Comment:

Section 3.2 of the Plan states that water samples will be collected daily during discharge and analyzed. While this is not problematic, it is surprising because during amendment discussions TMAC presented arguments that given the relatively limited volumes that were well mixed, sampling and analyzing water quality before discharge should be sufficient. The amended version of the licence did integrate the request and requires discharge from the landfarm sump (ST-4) be sampled “Annually. Once prior to every discharge on tundra.” during operations and any time after initial deposit of tailings to the Tailings Impoundment Area. It is not clear why TMAC requested modifications to the sampling requirements in the amended licence but did not integrate them into their management plan.