



WATER LICENCE INSPECTION FORM

☒ Original
☐ Follow-Up Report

Licensee	Licensee Representative
TMAC Resources	John Roberts
Licence No. / Expiry	Representative's Title
2AM-DOH1323	VP Environment
Land / Other Authorizations	Land / Other Authorizations
77A/3-1-2	2BE-HOP1222
Date of Inspection	Inspector
October 10-11 2017	Eva Paul
Activities Inspected	
<input checked="" type="checkbox"/> Camp	<input type="checkbox"/> Drilling
<input checked="" type="checkbox"/> Roads/Hauling	<input type="checkbox"/> Other:
<input checked="" type="checkbox"/> Mining	<input checked="" type="checkbox"/> Construction
	<input type="checkbox"/> Reclamation
	<input checked="" type="checkbox"/> Fuel Storage
	<input type="checkbox"/> Other:

Conditions:	A- Acceptable	U-Unacceptable	C-Concern	NI-Not Inspected	NA- Not applicable	
PART:				Item No.*	Condition	Observation No.*
A: SCOPE, DEFINITIONS AND ENFORCEMENT					A	
B: GENERAL CONDITIONS					A	
C: CONDITIONS APPLYING TO SECURITY					NI	
D: CONDITIONS APPLYING TO CONSTRUCTION AND OPERATIONS				11	C	1
D: CONDITIONS APPLYING TO CONSTRUCTION AND OPERATIONS				24,27	U	2
E: CONDITIONS APPLYING TO USE OF WATER					A	
F: CONDITIONS APPLYING TO WATER MANAGEMENT				2	C	3
G: CONDITIONS APPLYING TO WASTE MANAGEMENT / PLANS				11	U	4
G: CONDITIONS APPLYING TO WASTE MANAGEMENT / PLANS				13	C	5
G: CONDITIONS APPLYING TO WASTE MANAGEMENT / PLANS				27(k)	C	6
H: CONDITIONS APPLYING TO MODIFICATIONS					A	
I: CONDITIONS APPLYING TO CONTINGENCY PLANNING					A	
J: CONDITIONS APPLYING TO GENERAL AND AQUATIC EFFECTS MONITORING					A	
K: CONDITIONS APPLYING TO GENERAL / AQUATIC EFFECTS MON. PLANS					A	
L: CONDITIONS APPLYING TO ABANDONMENT, RECLAMATION AND CLOSURE					A	
2BE-HOP1222					A	7
77A/3-1-2					A	
*The item number corresponds with specific conditions within the licence and the observation number corresponds with specific comments provided below.						
Samples taken by Inspector:		Location(s):				
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						

SECTION 1	<input checked="" type="checkbox"/> Comments (s.1)	<input checked="" type="checkbox"/> Non-Compliance with Act or Licence (s.2)	<input checked="" type="checkbox"/> Action Required (s.3)
<p>An inspection was conducted October 10-11 2017 at TMAC's Doris North Project. I was accompanied by John Roberts, VP of Environment for TMAC. The facilities inspected included: Roberts Bay Fuel Farm, waste management area, and jetty; the airstrip, apron, and new pad construction; the laydown area, landfarm, burn pan, and quarry; Doris North camp, mill pad, waste rock and ore piles, and water management structures; the TIA, TIA road, reagent pad, tailings line and discharge; the road to Windy Lake and the water intake.</p> <p>The few changes at site since my last inspection include: minor work done on the TIA to accommodate high water levels from freshet (a temporary road at the south end of the TIA and the raising of the reclaim pump and spur road at the north end), the reagent pad was completed, and the new burn pan put into operation. Work on the de-icing apron continues.</p> <p>Comments specific to items identified above:</p> <ol style="list-style-type: none">The single 5-million L tank at Roberts Bay (the 'Miramar Tank') has not been in service for several years and that berm has in the interim been used for storage of oils and hazardous waste. Due to an incident this summer, some of those products were moved to the Roberts Bay tank farm. As per item D.11 of the licence, the facility must be operated according to the CCME <i>Environmental Code of Practice...</i> (PN 1326), which does not allow for the storage of other products.As was discussed in the July inspection, the waste rock from Pad T was encroaching on the Diversion Berm to the extent that runoff could feasibly run over the diversion berm to the 'non-contact' side. This issue was addressed by moving material back from the berm and by setting up a barrier on the waste rock pad to indicate that no further material was to be added to the North side of the pile. This fix was apparently temporary. Recent activities on the waste rock pile have resulted in waste rock again encroaching well onto the diversion berm.As discussed in July, the inspection of the water management structures should be critically assessing not only whether the structure is working as designed, but whether it is being used as intended. The Diversion Berm must ensure a clean division between the contact area of the mine-site and the non-contact area for water management purposes.Several open totes of contaminated oil/hazardous waste were noted in the 5ML 'Miramar' tank berm contrary to the			



Hazardous Waste Management Plan, which specifies that ..."container and package lids are secured tightly at all times and boxes are taped shut.". A review of this plan reveals that while TMAC is a registered Hazardous Waste Storage Facility with the Government of Nunavut, there is no purpose-built dedicated area for handling and storage of hazardous waste. The Miramar tank berm has been used opportunistically to this point but once operational that will no longer be permissible. An alternate solution is required, with a focus on transporting waste more quickly off-site. TMAC committed in 2016 to begin waste backhaul in 2017, but I have seen only one reported backhaul of waste in 2017 (April, 36 barrels), and none went on the summer sealift. I have been informed that this will now be budgeted for in 2018.

5. The materials placed in the landfarm have not been handled in several years. While there is no imminent risk due to the lack of follow-up, active management is required in order to implement the Landfarm Management Plan, and the facility should be available for use if and when it is needed.
6. Following the July inspection, TMAC committed to preventing contamination of non-cyanide materials and areas from the detox tailings. This included the use of a dedicated bucket for the excavator that would not be used for other site purposes. This did not come to pass, and no alternative strategy was proposed or implemented.
7. John has indicated that Windy Camp will be removed in 2018.

SECTION 2

☐ Comments

☒ Non-Compliance with Act or Licence

☐ Action Required

D.11: The Licensee shall construct and operate the Fuel Storage and Containment Facility(s) to meet, at a minimum, all applicable legislation and industry standards that include the following:

- a. Environmental Code of Practice for Aboveground Storage Tank Systems Containing Petroleum Products, 2003; CCME, PN 1326

CCME Environmental Code of Practice... (PN 1326) S.8.13.1: *In an aboveground storage tank system, the space created by secondary containment shall not be used for storage purposes.*

D.24: The Licensee shall construct and maintain all containment and runoff control structures to prevent non-permitted releases of Wastes to the terrestrial environment or groundwater systems.

D.27: The Licensee shall direct all runoff and seepage from the Temporary Ore and Waste Rock Pads to the Pollution Control Ponds for collection and transfer to the Tailings Impoundment Area.

G.11: The Licensee shall backhaul and dispose of all hazardous Wastes, and non-combustible Waste generated through the course of the operation at a licensed Waste disposal site.

SECTION 3

☐ Comments

☐ Non-Compliance with Act or Licence

☒ Action Required

- A. Please ensure that usage of the fuel farm berms is consistent with CCME Code of Practice as per Part D item 11a.
- B. The waste rock pile is to be wholly contained within the diversion berm, and all runoff from Pad T must report as intended to the Pollution Control Pond.
- C. Hazardous waste is to be handled and stored in a manner that prevents any further contamination and is consistent with the HWMP. Removal from site in a timely fashion is required.
- D. Implementation of the Landfarm Management Plan should be undertaken in 2018.
- E. Please provide an alternate plan to demonstrate that the equipment used to manage detoxified tailings is not used for any purposes that may contaminate non-contact materials or areas.

Licensee or Representative	Inspector's Name
John Roberts	Eva Paul
Signature	Signature
Date	Date
Oct 13/2018	October 12, 2017

Office Use Only: Follow-up report to be issued by Inspector

☐ Yes ☒ No

CC: Licensing Department, NWB
Kitikmeot Inuit Association
Erik Allain, Director of Lands, INAC