Environment and Climate Change Canada | Environnement et Changement climatique Canada

Environmental Protection Operations
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June 10, 2016

EC file: 6100 000 010 034
NWB file: 2AM-DOH1323

Sonia Aredes
Technical Advisor,
Nunavut Water Board,
P.O. Box 119,
Gjoa Haven,
Nunavut, X0B 1J0

Via email to licensing@nwb-oen.ca

RE: TMAC-Doris North Project - Technical Comments regarding Wastewater Treatment Management Plan under Water Licence 2AM-DOH1323

Attention: Ms. Aredes,

Environment Canada and Climate Change Canada (ECCC) has reviewed the above-mentioned management plan and is submitting comments in the attached table. ECCC's specialist advice is provided in context of the *Canadian Environmental Protection Act, 1999*, and the pollution prevention provisions of the *Fisheries Act*.

Should you have any questions regarding the foregoing please contact Mark Dahl at (204) 983-4815 or via email at mark.dahl@canada.ca.

Sincerely,

François Huppé
A/Manager, Environmental Assessment and Marine Programs
Prairie and Northern Region

cc: Wade Romanko, Head, Environmental Assessment North (NT and NU).
Mark Dahl, Environmental Assessment Coordinator, PNR.
ECCC Review Team

Attachment: ECCC Comment Table

ECCC Comments Regarding TMAC's Doris North Project - Wastewater Treatment Management Plan Under Water Licence 2AM-DOH1323			
Comment Number	**Reference**	**Comment**	**Recommendation**
1	Section 2.4.1 Section 4, Table 3, EC 29 A 2.2.2	Several methods for the disposal of sewage cake from the water treatment plant are proposed in the Plan. Contrary to TMAC's response to EC 29 (Table 3) the proposed sewage sludge management options outlined in section A2.2.2 of the revised Plan still includes incineration. ECCC is of the opinion that incineration should not be included as a sewage cake disposal option unless the incinerator is specifically rated for incinerating sewage sludge.	ECCC reiterates comment EC 29 (Table 3 pg 9) by recommending that the proponent dispose of sewage cake by means other than incineration. In the event that incineration is to be used the proponent should demonstrate that the incinerator is capable of consistently meeting the design emissions ratings when processing sewage cake before sewage cake is added to the incineration waste stream.
2	Section 4, Table 3, EC 31	In EC 31 the Department recommended that the proponent adopt the best practices of confirming that the waste water treatment plant effluent meets the discharge criteria prior to release to the receiving environment. The proponent responded that it would not be feasible to store effluent in monthly quantities.	ECCC recommends that wastewater be directed to the TIA, once able to do so, in order to have further control over the effluent quality that is released to the receiving environment.
3	Section 3 Contingencies Section 3.1 Treatment Option Contingency	In section 3.1 the Plan indicates that "During Hope Bay Project operations, if a WTP becomes inoperable TMAC will use multiple bladders and holding tanks available onsite to hold untreated wastewater". While ECCC is encouraged that contingencies will be in place to manage wastewater in the event of a plant failure the Plan currently contains insufficient detail to determine if the proposed mitigation is adequate.	ECCC recommends that TMAC provide more detail regarding the available storage volume and the storage format to be used in the event of a WWT plant failure. ECCC also recommends that TMAC provide an estimate of how long the alternative management option (storage) could be maintained if the proposed water use reduction strategies are implemented.
4	Section 4 Responses to Comments Table 3	ECCC is of the opinion that clarification of the response to EC #31 regarding "Wastewater Treatment Plant monitoring and reporting" is required. The response to EC 31 states that "If effluent quality is suspect, tundra discharge is stopped until the cause can be identified, corrected and compliant laboratory results received"; and Section 2.3.1 of the Plan	ECCC recommends that TMAC clarify: what criteria/indicators will be used to identify suspect effluent; what procedures will be available to the operator to rectify the problems; how long it will take for confirmatory laboratory results to be obtained and how the suspect effluent will be managed while waiting for those test results.

		states that suspected issues with the WTP effluent quality are to be identified and addressed based on the daily monitoring conducted by the WTP operator. However, it is unclear what indicators or critical parameters would be used to detect suspect effluent or if procedures will be in place for the WTP operator to use to address issues.	
5	Section A2.2.1 Effluent Discharge	When reviewing the Plan ECCC noted that Figure A2 is referred to in the text but it is not included in the report.	Figure A2 should be added to the Plan