

What follows are TMAC Resources Inc.'s (TMAC's) comments on existing water licence terms and conditions as well as terms and conditions, in TMAC's view, which may require reconsideration or revision in order to proceed with the proposed amendments to the activities and infrastructure associated with the Doris Mine.

This document has been prepared to clarify amendments which have been requested by TMAC, to reflect current site conditions, to reflect the jurisdiction of the Board and other regulatory authorities over various Doris Mine facilities and to reflect TMAC's feedback on specific terms and conditions that have been proposed by parties to this proceeding.

It is noted that additional submissions were provided to the Board on by Indigenous and Northern Affairs Canada (INAC), Environment and Climate Change Canada (ECCC), and the Kitikmeot Inuit Association (KIA) on the September 14, 2016 draft of this document. For the convenient reference of the Board and Board staff, TMAC has inserted those comments in this draft and provided further submissions in response.

CONDITION NO. AND CURRENT LICENCE WORDING	TMAC SUGGESTED REWORDING SEPT 14, 2016	COMMENTS FROM PARTIES ON SPECIFIC LICENCE TERMS	TMAC RATIONALE	TMAC FINAL SUGGESTED REWORDING SEPT 23, 2016
<p>Pursuant to the Nunavut Waters and Nunavut Surface Rights Tribunal Act and the Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada, the Nunavut Water Board, hereinafter referred to as the Board, hereby grants to TMAC Resources Inc. 40 King Street, Suite 2100 Toronto ON, M5H3C2 hereinafter called the Licensee, the right to alter, divert or otherwise use water or deposit waste for a period subject to restrictions and conditions contained within this Licence:</p> <p>Licence Number/Type: 2AM-DOH1323 Type A</p> <p>Water Management Area: Queen Maud Gulf Watershed No. 30</p> <p>Location: Doris North Project, Kitikmeot Region, Nunavut</p> <p>Purpose: Water Use and the Deposit of Waste</p> <p>Description: Mining and Milling Undertaking</p> <p>Quantity of Water not to be exceeded: 480,000 cubic metres per annum</p> <p>Date Licence Issuance: August 16, 2013</p> <p>Expiry of Licence: August 15, 2023</p>	<p>Pursuant to the Nunavut Waters and Nunavut Surface Rights Tribunal Act and the Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada, the Nunavut Water Board, hereinafter referred to as the Board, hereby grants to <u>TMAC Resources Inc. 95, Wellington Street West, Suite 1010, Box 44, Toronto ON, M5J2N7</u> hereinafter called the Licensee, the right to alter, divert or otherwise use <u>W</u>water or deposit <u>W</u>waste for a period subject to restrictions and conditions contained within this Licence:</p> <p>Licence Number/Type: 2AM-DOH1323 Type A</p> <p>Water Management Area: Queen Maud Gulf Watershed No. 30</p> <p>Location: Doris North Project, Kitikmeot Region, Nunavut</p> <p>Purpose: Water Use and the Deposit of Waste</p> <p>Description: Mining and Milling Undertaking</p> <p>Quantity of Water not to be exceeded: 480,000 cubic metres per annum</p> <p>Date Licence Issuance: August 16, 2013</p> <p>Expiry of Licence: August 15, 2023</p>		<p>TMAC Sept 14, 2016: Revised throughout to for consistent use of terms and capitalization as per Part M Schedule A.</p> <p>Note updated TMAC address.</p>	<p>Pursuant to the Nunavut Waters and Nunavut Surface Rights Tribunal Act and the Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada, the Nunavut Water Board, hereinafter referred to as the Board, hereby grants to <u>TMAC Resources Inc. 95, Wellington Street West, Suite 1010, Box 44, Toronto ON, M5J2N7</u> hereinafter called the Licensee, the right to alter, divert or otherwise use <u>W</u>water or deposit <u>W</u>waste for a period subject to restrictions and conditions contained within this Licence:</p> <p>Licence Number/Type: 2AM-DOH1323 Type A</p> <p>Water Management Area: Queen Maud Gulf Watershed No. 30</p> <p>Location: Doris North Project, Kitikmeot Region, Nunavut</p> <p>Purpose: Water Use and the Deposit of Waste</p> <p>Description: Mining and Milling Undertaking</p> <p>Quantity of Water not to be exceeded: 480,000 cubic metres per annum</p> <p>Date Licence Issuance: August 16, 2013</p> <p>Expiry of Licence: August 15, 2023</p>

PART A SCOPE, DEFINITIONS AND ENFORCEMENT						
1. SCOPE						
a) This Licence authorizes TMAC Resources Inc. ("TMAC" or "Licensee") to the use of waters and deposit of waste in support of a Mining and Milling Undertaking classified as per schedule 1 of the Regulations, at the Doris North Project (Project) as outlined in the Type "A" Water Licence Application (Application) submitted to the Nunavut Water Board (NWB) on August 10, 2012 and as reviewed throughout the regulatory process.			This Licence authorizes TMAC Resources Inc. ("TMAC" or "Licensee") to the use of <u>W</u> aters and deposit of <u>W</u> aste in support of a Mining and Milling Undertaking classified as per schedule 1 of the Regulations, at the Doris North Project (Project) as outlined in the Type "A" Water Licence Application (Application) submitted to the Nunavut Water Board (NWB) on August 10, 2012 and as reviewed throughout the regulatory process or as the result of <u>Modifications identified under Part H of the Licence</u> .			
The Doris North Project is located at the following general geographical coordinates:			The Doris North Project is located at the following general geographical coordinates:			
Project Extents	Latitude	Longitude	Project Extents	Latitude	Longitude	TMAC Sept 14, 2016: Note definition of Water Licence Application has been revised to enhance readability. This change has been made throughout this document. TMAC noted an error in the coordinates of the existing licence and has revised to reflect all activities permitted under this licence to include the full TIA and associated structures, and Windy Lake as a water source. For clarity, water at Windy Lake is used for domestic purposes at Doris Camp as well as other facilities associated with the Project (washrooms and lunchrooms throughout site including those at the heli pad and at Roberts Bay).
	68° 11' 05" N	106° 38' 58" W		68° 11' 13" N	106° 39' 15" W	
	68° 10' 43" N	106° 36' 31" W		68° 10' 43" N	106° 36' 31" W	
	68° 06' 34" N	106° 32' 22" W		68° 06' 56" N	106° 31' 37" W	
	68° 08' 07" N	106° 37' 44" W		68° 02' 55" N	106° 37' 0" W	
Camp	Latitude	Longitude	Camp	Latitude	Longitude	Added 'Domestic' to the definition of the Wastewater Treatment Plant, for clarity and specificity. Change made throughout this document. Revised Mining and Milling rates to reflect that applied for in the Amendment Application – alternatively request that mining rate be removed from this reference as key activity from a water use/waste perspective is milling (processing) rate. Removed reference to Tail Lake as it has now been designated a Tailings Impoundment Area. Revised Effluent discharge location to include Roberts Bay and clarify jurisdiction over marine discharge.
Camp	68° 08' 07" N	106° 36' 52.6" W	Camp	68° 08' 07" N	106° 36' 52.6" W	
The Licensee may conduct mining, milling and associated activities at the Doris North Project in the Kitikmeot Region of Nunavut (68° 09' N, 106° 36' W) including, in general, as follows:			The Licensee may conduct mining, milling and associated activities at the Doris North Project in the Kitikmeot Region of Nunavut (68° 09' N, 106° 36' W) including, in general, as follows:			
The use of <u>W</u> ater from Doris Lake for M ining and M illing processing, associated activities and domestic purposes;			The use of <u>W</u> ater from Doris Lake for M ining and M illing processing, associated activities and domestic purposes;			
The use of Waters from Windy Lake for domestic purposes at the Doris Camp ;			The use of Waters from Windy Lake for domestic purposes at the Doris Camp ;			
The quarrying of materials from specified locations;			The quarrying of materials from specified locations;			
The development and operation of site facilities;			The development and operation of site facilities;			
The construction of access and site roads, airstrip and airstrip bypass road, water crossings, and lay down areas;			The development and operation of site facilities;			
The construction of a temporary <u>W</u> aste R ock storage pads;			The construction and operation of access and site roads, airstrip and airstrip bypass road, water crossings, and lay down areas;			
The construction and operation of a <u>Domestic</u> Wastewater Treatment Plant (<u>WWTPSTP</u>);			The construction of a temporary <u>W</u> aste R ock storage pads;			
The construction and operation of a Landfill and Landfarm;			The construction and operation of a <u>Domestic</u> Wastewater Treatment Plant (<u>WWTPSTP</u>);			
The construction and operation of a <u>S</u> edimentation <u>P</u> ond and <u>P</u> ollution <u>C</u> ontrol <u>P</u> onds;			The construction and operation of a Landfill and Landfarm;			
The management and disposal of <u>W</u> astes			The construction and operation of a <u>S</u> edimentation <u>P</u> ond and <u>P</u> ollution <u>C</u> ontrol <u>P</u> onds;			
			The management and disposal of <u>W</u> astes			

<p>(STP);</p> <ul style="list-style-type: none"> • The construction and operation of a Landfill and Landfarm; • The construction and operation of a sedimentation pond and pollution control pond; • The management and disposal of wastes associated with the Wastewater Treatment Plant, sedimentation and pollution control ponds, Landfill and Landfarm, and other wastes as described in the application; • The handling and storage of petroleum products and hazardous materials including explosives, cyanide and other reagents; • The construction of dams, spillway, and shoreline erosion control needed for the operation of Tail Lake as a Tailings Impoundment Area; • The extraction of portal development rock, waste rock and ore from underground via decline; • A mining rate of 720 tonnes per day of ore; • A mill with a design milling throughput of 800 tonnes per day ore; • The deposition of tailings into the Tailings Impoundment Area (Tail Lake); • The disposal of waste rock, including potentially acid generating rock, and cyanide leach residue within the underground workings; • The use of Waste Rock from underground for construction as approved by the Board in accordance with conditions of Part G; • The Diversion of site runoff water to water management facilities, including the Tailing Impoundment Area. • The controlled discharge of Effluent from the Tailings Impoundment Area to Doris Creek; and • The progressive reclamation of on-site facilities and infrastructure. 	<p>associated with the <u>Domestic Wastewater Treatment Plant, Sedimentation and Pollution Control Ponds, Landfill and Landfarm, and other Wastes as described in the Water Licence Application;</u></p> <ul style="list-style-type: none"> • The handling and storage of petroleum products and hazardous materials including explosives, cyanide and other reagents; • The construction of dams, spillway, and shoreline erosion control needed for the operation of Tail Lake as a <u>the</u> Tailings Impoundment Area; • The extraction of portal development rock, Waste Rock and ore from underground via decline; • A mining rate of up to 720 <u>2,000</u> tonnes per day of ore <u>annual average</u>; • A mill with a design milling throughput of 800 <u>2,000</u> tonnes per day of ore <u>annual average</u>; • The deposition of tailings into the Tailings Impoundment Area (Tail Lake); • The <u>use</u> of Waste Rock, including potentially acid generating rock, and cyanide leach residue <u>as backfill</u> within the underground workings; • The use of Waste Rock from underground for construction as approved by the Board in accordance with conditions of Part G; • The Diversion of site runoff water to water management facilities, including the Tailings Impoundment Area. • The controlled discharge of Effluent from the Tailings Impoundment Area to Doris Creek <u>prior to tailings deposition and during Post-Closure, (it is noted that Effluent will otherwise be deposited to Roberts Bay in accordance with the Metal Mining Effluent Regulations and other applicable legislative requirements);</u> and • The progressive reclamation of on-site facilities and infrastructure. 			<p>Landfill and Landfarm;</p> <ul style="list-style-type: none"> • The construction and operation of a Sedimentation Pond and Pollution Control Ponds; • The management and disposal of Wastes associated with the <u>Domestic Wastewater Treatment Plant, Sedimentation and Pollution Control Ponds, Landfill and Landfarm, and other Wastes as described in the Water Licence Application;</u> • The handling and storage of petroleum products and hazardous materials including explosives, cyanide and other reagents; • The construction of dams, spillway, and shoreline erosion control needed for the operation of Tail Lake as a <u>the</u> Tailings Impoundment Area; • The extraction of portal development rock, Waste Rock and ore from underground via decline; • A mining rate of up to 720 <u>2,000</u> tonnes per day of ore <u>annual average</u>; • A mill with a design milling throughput of 800 <u>2,000</u> tonnes per day of ore <u>annual average</u>; • The deposition of tailings into the Tailings Impoundment Area (Tail Lake); • The <u>use</u> of Waste Rock, including potentially acid generating rock, and cyanide leach residue <u>as backfill</u> within the underground workings; • The use of Waste Rock from underground for construction as approved by the Board in accordance with conditions of Part G; • The Diversion of site runoff water to water management facilities, including the Tailings Impoundment Area. • The controlled discharge of Effluent from the Tailings Impoundment Area to Doris Creek <u>prior to tailings deposition and during Post-Closure, (it is noted that Effluent will otherwise be deposited to Roberts Bay in accordance with the Metal Mining Effluent Regulations and other applicable legislative requirements);</u> and • The progressive reclamation of on-site facilities and infrastructure.
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b) This Licence is issued subject to conditions contained herein with respect to the use of Waters and the deposit of Waste of any type in any Waters or in any place under any conditions where such Waste or any other Waste results from the deposits of such Waste may enter any Waters. Whenever new Regulations are made or existing Regulations are amended by the Governor in Council under the Act, or other statutes imposing more stringent conditions relating to the quantity, type or manner under which any such Waste may be so deposited, this Licence shall be deemed to be subject to such requirements.				This Licence is issued subject to conditions contained herein with respect to the use of Waters and the deposit of Waste of any type in any Waters or in any place under any conditions where such Waste or any other Waste results from the deposits of such Waste may enter any Waters. Whenever new Regulations are made or existing Regulations are amended by the Governor in Council under the Act, or other statutes imposing more stringent conditions relating to the quantity, type or manner under which any such Waste may be so deposited, this Licence shall be deemed to be subject to such requirements.
c) Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with all applicable legislation, guidelines and directives.				Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with all applicable legislation, guidelines and directives.
2. DEFINITIONS				
a) The Licensee shall refer to Schedule A for definitions of terms used in this Licence.	<p>a) The Licensee shall refer to Schedule A for definitions of terms used in this Licence. <u>For greater clarity, the Board may approve revisions to the schedules to this Licence from time to time and such revisions shall not constitute or require an amendment to this Licence.</u></p> <p><u>[NOTE: TMAC has revised its position on this item in response to party comments provided on Sept 21, 2016. Refer to table column providing TMAC Rationale]</u></p>	<p>INAC Sept 21, 2016: <i>INAC submits that the Board does not have the authority to make any changes to the text of the licence outside of an amendment process. Also, if this issue is to be addressed, Part A is not the appropriate part of the licence to address whether and how changes can be made to the schedules. INAC does not support including the additional text proposed by TMAC. Part A, 2 (a) should not be amended.</i></p> <p>KIA Sept 21, 2016: <i>KIA Supports this request for flexibility in the implementation of this licence.</i></p>	<p>TMAC Sept 14, 2016 TMAC is of the view that it is within the Board's scope of authority to revise Schedules without an Amendment. TMAC understands that this authority been expressly recognized in other Type A licences in Nunavut eg. 2AM-MRY1325</p> <p>TMAC Sept 23, 2016: <i>In order to address INAC's concern, TMAC suggests a revision to 2(a). It is noted that, should the revised definitions proposed by TMAC be adopted by the Board, it is expected that future approvals of definition changes would be minimal.</i></p> <p>TMAC appreciates KIA's support in its request for flexibility.</p>	The Licensee shall refer to Schedule A for definitions of terms used in this Licence. <u>Where such definitions refer to project facilities, the Board may from time to time approve revised definitions.</u>
3. ENFORCEMENT				
a) Failure to comply with this Licence will be a violation of the Act, subjecting the Licensee to the enforcement measures and the penalties provided for in the Act.	<u>[NOTE: Refer to table column providing TMAC Rationale]</u>	KIA Sept 21, 2016: <i>None of these provisions in Item 3 are legally necessary</i>	TMAC Sept 23, 2016: <i>TMAC agrees with KIA's comments</i>	Failure to comply with this Licence will be a violation of the Act, subjecting the Licensee to the enforcement measures and the penalties provided for in the Act

b) All inspection and enforcement services regarding this Licence will be provided by Inspectors appointed under the Act.				All inspection and enforcement services regarding this Licence will be provided by Inspectors appointed under the Act.
c) For the purpose of enforcing this Licence and with respect to the use of water and deposit of waste by the Licensee, Inspectors appointed under the Act, hold all powers, privileges and protections that are conferred upon them by the Act or by other applicable laws.	c)For the purpose of enforcing this Licence and with respect to the use of <u>W</u> water and deposit of <u>W</u> waste by the Licensee, Inspectors appointed under the Act, hold all powers, privileges and protections that are conferred upon them by the Act or by other applicable laws.			For the purpose of enforcing this Licence and with respect to the use of <u>W</u> water and deposit of <u>W</u> waste by the Licensee, Inspectors appointed under the Act, hold all powers, privileges and protections that are conferred upon them by the Act or by other applicable laws.
PART B GENERAL CONDITIONS				
1. The amount of water use fees shall be determined in accordance with Section 12(b) of the Regulations.	1.The amount of <u>W</u> water <u>U</u> se fees shall be determined in accordance with Section 12(b) of the Regulations.			The amount of <u>W</u> water <u>U</u> se fees shall be determined in accordance with Section 12(b) of the Regulations.
2. Payment of fees shall be made in accordance with Section 12(6) and 12(7) of the Regulations.				Payment of fees shall be made in accordance with Section 12(6) and 12(7) of the Regulations.
3. The Licensee shall file an Annual Report with the Board no later than March 31 in the year following the calendar year being reported. The Annual Report shall be developed in accordance with Schedule B Item 1.		INAC Aug 3, 2016: The Licensee shall file an Annual Report with the Board no later than March 31 in the year following the calendar year being reported. The Annual Report shall be developed in accordance with Schedule B Item 1.		The Licensee shall file an Annual Report with the Board no later than March 31 in the year following the calendar year being reported. The Annual Report shall be developed in accordance with Schedule B Item 1.
4. The Licensee shall, for all Plans submitted under this Licence, include a proposed timetable for implementation. Plans submitted cannot be undertaken without subsequent written Board approval and direction. The Board may alter or modify a Plan if necessary to achieve the legislative objectives and will notify the Licensee in writing of acceptance, rejection or alteration of the Plan.	<p>4.Except as otherwise reflected in this Licence, the Licensee shall, for all Plans submitted under this Licence, implement <u>Plans upon receipt of approval from the Board, or upon 45 days following Plan submission to the Board, whichever occurs first.</u> include a proposed timetable for implementation. Plans submitted cannot be undertaken without subsequent written Board approval and direction. The Board may alter or modify a Plan if necessary to achieve the legislative objectives <u>of the Nunavut Waters and Nunavut Surface Rights Tribunal Act</u> and will notify the Licensee in writing of acceptance, rejection or alteration of the Plan.</p> <p><u>[NOTE: Refer to table column providing TMAC Rationale]</u></p>	<p>INAC Sept 21, 2016: <i>INAC does not support the automatic approval of Plans submitted to the Board for approval 45 days following their submission. The recommended timeline for making approval decisions on Plans may be unreasonable because of the time required for interested parties to review submitted plans and for the Board to make approval decisions. The NWB and Licensee should maintain dialogue on the approval status of Plans to address any unnecessary delays.</i></p> <p>ECCC Sept 21, 2016: <i>ECCC disagrees with the assumption that the plans will be approved at time of licensing - ECCC notes that changes are being made and those changes will require review and approval</i></p> <p>KIA Sept 21, 2016: <i>KIA does not agree with the automatic or default approval of plans submitted by TMAC. The Board should identify those plans which require Board approval in the revised licence. Such a plan should note implemented absent Board approval. The licence should specify how far in advance submission of a plan is required. As the land</i></p>	<p>TMAC Sept 14, 2016</p> <p>Revisions in the renewed 2013 Doris Water Licence included the new requirement that the Board approve of management plans prior to their implementation. This requirement to delay implementation could have serious environmental consequences, and related risk to TMAC. This is particularly the case given the long approval times observed to date (many months to multiple years). Under the recommended wording for part B Item 4, new management plans would be provided 45 days prior to their implementation, and would be implemented following the 45 day review period unless otherwise directed by the Board. This would ensure the management of the Doris Project is being conducted effectively and adaptive management is swiftly implemented.</p>	<p><u>Except as otherwise reflected in this Licence,</u> the Licensee shall, for all Plans submitted under this Licence, implement <u>Plans upon receipt of approval from the Board, or upon 45 days following Plan submission to the Board, whichever occurs first.</u> include a proposed timetable for implementation. Plans submitted cannot be undertaken without subsequent written Board approval and direction. The Board may alter or modify a Plan if necessary to achieve the legislative objectives <u>of the Nunavut Waters and Nunavut Surface Rights Tribunal Act</u> and will notify the Licensee in writing of acceptance, rejection or alteration of the Plan.</p>

		owner and lessor KIA relies in part on NWB approval of plans to address risk to Inuit Owned Lands (IOL).	<p>The suggested change is intended to balance requirement for Board review of new plans with the Proponent's need for reliable timelines for planning and operational purposes.</p> <p>Note that the conditions set out in this Licence have been drafted on the assumption that the plans reviewed during the current Amendment process will be approved with Licence issuance, as reflected in TMAC's proposed wording throughout this draft.</p> <p>TMAC Sept 23, 2016: <i>TMAC maintains our position that: 45 days is sufficient for party review and Board approval of plans; a deemed approval clause is necessary to support timely implementation of Plans. Historically, it has been challenging to obtain Plan approval from the Board wherein extended and unpredictable timelines have followed plan submission, with no resulting approval or indication. As the company move into production, reliable timelines for Board of approval of plans is crucial.</i></p> <p><i>TMAC agrees that changes made to Plans as referred in Part B Item 6 require review and approval.</i></p>	
5. The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing.	5.The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing <u>or as otherwise approved in accordance with Part B Item 4.</u>	KIA Sept 21, 2016: <i>See KIA comment above.</i>	TMAC Sept 23, 2016: <i>See above.</i>	The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing <u>or as otherwise approved in accordance with Part B Item 4.</u>
6. The Licensee shall review the Plans referred to in this Licence, as required by changes in status of the Project, operation and/or technology, and modify the Plan accordingly. Revisions to the Plans shall be submitted in the form of an Addendum to be included with the Annual Report.	6.The Licensee shall review the Plans referred to in this Licence, as required by changes in status of the Project, operation and/or technology, and modify the Plan accordingly. Revisions to the Plans shall be submitted to the Board in the form of an Addendum to be included with the Annual Report <u>or otherwise from time to time as necessary.</u> [NOTE: Refer to TMAC response to comments on Part B Item 4.]	<p>ECCC Sept 21, 2016: <i>plan changes can be significant and should be reviewed and have board approval.</i></p> <p>KIA Sept 21, 2016: <i>See KIA comment above.</i> <i>A Plan requiring Board approval should not be materially changed or amended without Board approval. KIA as landowners and other interested parties will not be able to track plan content and requirements if this change is implemented.</i></p>	TMAC Sept 14, 2016: The suggested revisions expressly permit TMAC to submit updates at any time, not just with the Annual Report. It is noted Board approval is not required before the revised plan may be implemented but parties may have the opportunity to review and comment on the revised Plans as directed by the Board following submittal. TMAC submits that management plans	The Licensee shall review the Plans referred to in this Licence, as required by changes in status of the Project, operation and/or technology, and modify the Plan accordingly. Revisions to the Plans shall be submitted to the Board in the form of an Addendum to be included with the Annual Report <u>or otherwise from time to time as necessary.</u> For greater certainty, Part B, Item 2 is applicable to all Plan revisions.

			revisions be implemented on their submission as long as they do not contravene any water licence requirements, and in the absence of explicit direction to delay implementation from the NWB or the Inspector. TMAC Sept 23, 2016: <i>Revised for further clarity.</i>	
7. Every Plan to be carried out pursuant to the terms and conditions of this Licence shall become a part of this Licence, and any additional terms and conditions imposed upon approval of a Plan by the Board become part of this Licence. All terms and conditions of the Licence should be contemplated in the development of a Plan where appropriate.				Every Plan to be carried out pursuant to the terms and conditions of this Licence shall become a part of this Licence, and any additional terms and conditions imposed upon approval of a Plan by the Board become part of this Licence. All terms and conditions of the Licence should be contemplated in the development of a Plan where appropriate.
8. The Licensee shall retain and have a copy of this Licence available at the site of operations at all times.				The Licensee shall retain and have a copy of this Licence available at the site of operations at all times.
9. Any communication with respect to this Licence shall be made in writing to the attention of: Manager of Licensing, Nunavut Water Board P. O. Box 119 Gjoa Haven, NU X0B 1J0 Telephone: (867) 360-6338 Fax: (867) 360-6369 Email:licensing@nunavutwaterboard.org				Any communication with respect to this Licence shall be made in writing to the attention of: Manager of Licensing, Nunavut Water Board P. O. Box 119 Gjoa Haven, NU X0B 1J0 Telephone: (867) 360-6338 Fax: (867) 360-6369 Email: licensing@nunavutwaterboard.org
10. Any notice made to an Inspector shall be made in writing to the attention of: Water Resources Officer Nunavut District, Nunavut Region P.O. Box 100 Iqaluit, NU X0A 0H0 Telephone: (867) 975-4295 Fax: (867) 979-6445				Any notice made to an Inspector shall be made in writing to the attention of: Water Resources Officer Nunavut District, Nunavut Region P.O. Box 100 Iqaluit, NU X0A 0H0 Telephone: (867) 975-4295 Fax: (867) 979-6445
11. The Licensee shall submit one (1) paper copy and one (1) electronic copy of all reports, studies, and plans to the Board unless otherwise requested by the Board. Reports or studies submitted to the Board by the Licensee shall include an executive summary in English, Inuktitut, Inuinnaqtun and French.			TMAC Sept 14, 2016: Query with the NWB whether there is utility in continuing to file paper copies on a routine basis. It may be more practical to only provide paper copies where requested by Board staff.	The Licensee shall submit one (1) paper copy and one (1) electronic copy of all reports, studies, and plans to the Board unless otherwise requested by the Board. Reports or studies submitted to the Board by the Licensee shall include an executive summary in English, Inuktitut, Inuinnaqtun and French.

12. This Licence is assignable as provided in Section 44 of the Act.				This Licence is assignable as provided in Section 44 of the Act.
13. The Licensee shall confirm that all document(s) or correspondence submitted by the Licensee to the Board is received and acknowledged by the Manager of Licensing.	13. The Licensee shall <u>make reasonable efforts to</u> confirm that all document(s) or correspondence required to be submitted by the Licensee to the Board pursuant to this Licence is received and acknowledged by the Manager of Licensing <u>or designate</u> .		TMAC Sept 14, 2016: While it may be possible to independently confirm paper and electronic documents have been submitted, formal acknowledgment is not usually provided by Board staff and this is beyond TMAC's control.	The Licensee shall <u>make reasonable efforts to</u> confirm that all document(s) or correspondence required to be submitted by the Licensee to the Board pursuant to this Licence is received and acknowledged by the Manager of Licensing <u>or designate</u> .
14. The Licensee shall notify the Board of any changes in operating plans or conditions associated with this project at least sixty (60) days prior to any such change.	14. The Licensee shall notify the Board of any changes in operating plans or conditions associated with this project at least sixty (60) days prior to any such change. [NOTE: Refer to TMAC response to comments on Part B Item 4.]	KIA Sept 21, 2016: <i>KIA notes that the licence requires notice of a change or amendment to a plan and Board approval. If those conditions remain in the licence there is little scope for this provision.</i>	TMAC Sept 14, 2016: Suggest removing this condition. The requirement seems redundant given other specific notification requirements outlined in Licence terms (e.g. Modifications, Care and Maintenance, Plan submission etc.). If this term remains, TMAC suggests that the notification only apply to any changes which relate to the use of water or deposit of waste. TMAC Sept 23, 2016: <i>notes KIAs support for this request</i>	The Licensee shall notify the Board of any changes in operating plans or conditions associated with this project at least sixty (60) days prior to any such change.
15. The Licensee shall post signs in the appropriate areas to inform the public of the location of the Water Supply Facility and the Waste Disposal Facilities. All signs, must be in English, Inuktitut, Inuinnaqtun and French and shall be located and maintained to the satisfaction of an Inspector.				The Licensee shall post signs in the appropriate areas to inform the public of the location of the Water Supply Facility and the Waste Disposal Facilities. All signs, must be in English, Inuktitut, Inuinnaqtun and French and shall be located and maintained to the satisfaction of an Inspector.
16. The expiry or cancellation of this Licence does not relieve the Licensee from any obligation imposed by the Licence, or any other regulatory requirement.				The expiry or cancellation of this Licence does not relieve the Licensee from any obligation imposed by the Licence, or any other regulatory requirement.
PART C CONDITIONS APPLYING TO SECURITY				
1. The Licensee shall, within thirty (30) days following the approval of this Licence by the Minister, furnish and maintain security with the Minister in the amount of \$13.090 million dollars in the form, of the nature, subject to such terms and conditions, in accordance with, the Regulations, or that is satisfactory to the Minister	[Removed - see "TMAC FINAL SUGGESTED REWORDING, SEPT 23, 2016 COLUMN FOR NOTE]	KIA Sept 21, 2016: <i>Number to be revised to reflect agreement between TMAC and INAC at the hearing. KIA would not oppose a 60 day time period.</i>	TMAC Sept 23, 2016: <i>TMAC notes that in the initial draft Water Licence markup circulated for comment on Sept. 14, text was included at Part C of the markup that was circulated last week in error that does not indicate TMAC's intent or position with respect to how the Board should approach the issue of security, and should not be relied on by</i>	TMAC notes that in the initial draft Water Licence markup circulated for comment on Sept. 14, certain text was included in error that does not reflect TMAC's intent or position with respect to how the Board should approach the issue of security, and should not be relied on by any party to the proceedings or the Board. This was brought to INAC and KIA's attention before final submissions to the Board on security were due. For clarity, the text included in the "TMAC Suggested

			<i>any party to the proceedings or the Board. This was brought to INAC and KIA's attention before final submissions to the Board on security were due. For clarity, the text included in the "TMAC Suggested Rewording" Column on Sept. 14 does not reflect TMAC's suggested wording of the Part C clauses. For TMAC's suggested rewording of Part C as well as the final submissions of TMAC on the matter of security under the Licence, TMAC refers the Board to its submission of Sept. 23, 2016.</i>	<p>Rewording" Column on Sept. 14 does not reflect TMAC's suggested wording of the Part C clauses.</p> <p>For TMAC's suggested rewording of Part C as well as the final submissions of TMAC on the matter of security, TMAC refers the Board to its submission of Sept. 23, 2016. However, KIA notes KIA's support for a 60 day period for posting security and INAC's support for a 45 day period for posting security.</p>
	[Removed - see "TMAC FINAL SUGGESTED REWORDING, SEPT 23, 2016 COLUMN FOR NOTE]	<p>KIA Sept 21, 2016: <i>This provision may have to be removed in light of the submission of TMAC and parties on the land/water split.</i></p> <p><i>As written is limits the Board's discretion in setting quantum of security.</i></p> <p><i>(see highlight) it is not clear what is meant by the word "discount". KIA understands that security it holds should not be duplicated by security held by the Minister.</i></p>		[See TMAC note at Part C, Item 1 above]
2. The Licensee shall submit to the Board for approval, within six (6) months of the start of Operations and again following eighteen (18) months of the start of Operations, an updated estimate of the total mine closure restoration liability using the current version of RECLAIM, its equivalent or other similar method approved by the Board in writing, in accordance with principles of the INAC "Mine Site Reclamation Policy for Nunavut" (2000). Should the Project be in Care and Maintenance, an updated estimate of total mine closure restoration liability shall be submitted, as above, at least every three years from the issuance of the Licence.	<p>2.The Licensee shall submit to the Board for approval, within six (6) months prior to Closure following eighteen (18) months of the start of Operations, an updated estimate of the total mine closure restoration liability using the current version of RECLAIM, its equivalent or other similar method approved by the Board in writing, in accordance with principles of the INAC "Mine Site Reclamation Policy for Nunavut" (2000), <u>as may be revised from time to time</u>. Should the Project be in Care and Maintenance, an updated estimate of total mine closure restoration liability shall be submitted, as above, at least every three years from the issuance of the licence <u>most recent approved estimate</u>.</p> <p>[NOTE: TMAC has provided clarification on its rationale and updated its positon, in response to party comments provided on Sept 21, 2016. Refer to table column providing TMAC Rationale]</p>	<p>INAC Sept 21, 2016: <i>Six months prior to the start of Closure may not provide sufficient time to review and approve an updated closure cost estimate. INAC recommends that the licensee provide both an updated closure cost estimate and a Final Closure and Reclamation Plan to the NWB at least 12 months prior to the expected end of planned mining. In addition INAC recommends retaining the requirement to submit the updated estimate of the total mine closure restoration liability within six (6) months of the start of Operations.</i></p> <p>KIA Sept 21, 2016: <i>In KIA's view this period should be at least 12 months.</i></p>	<p>TMAC Sept 14, 2016: Revised to reflect the change in mine life. The Interim Closure and Reclamation Plan that was reviewed during the Amendment application process fully considered the Operations phase and so there is no need for an update on that basis.</p> <p>TMAC Sept 23, 2016: <i>Note that the Closure and Reclamation Plan submission timelines is dealt with in Part L item 8.</i></p> <p><i>Regarding submission of an updated cost estimate 6 months following the start of Operations, TMAC views this as unnecessary and unreasonable given that the current agreed upon estimate is very conservative and fully accounts for Operations.</i></p>	<p>The Licensee shall submit to the Board for approval, within twelve (12) months prior to Closure following eighteen (18) months of the start of Operations, an updated estimate of the total mine closure restoration liability using the current version of RECLAIM, its equivalent or other similar method approved by the Board in writing, in accordance with principles of the INAC "Mine Site Reclamation Policy for Nunavut" (2000), <u>as may be revised from time to time</u>. Should the Project be in Care and Maintenance, an updated estimate of total mine closure restoration liability shall be submitted, as above, at least every three years from the issuance of the licence <u>most recent approved estimate</u>.</p>

			Regarding submission of an updated cost estimate 6 months prior to final closure, TMAC notes that this is consistent with the current language of the licence (18 months following the start of operations is the equivalent of 6 months prior to closure given the Doris North project 2 year mine plan at the time of licence issuance). Regardless, and in response to party comments, TMAC considers it reasonable to provide an updated closure cost estimate 12 months prior to the start of Final Closure.	
3. The Licensee shall furnish and maintain such further or other amounts of security as may be required by the Board, based on the updated estimate of current mine reclamation liability under PART C, Item 2.	[Removed - see "TMAC FINAL SUGGESTED REWORDING, SEPT 23, 2016 COLUMN FOR NOTE]			For TMAC's suggested rewording of Part C as well as the final submissions of TMAC on the matter of security, TMAC refers the Board to its submission of Sept. 23, 2016
4. The Licensee may submit to the Board for approval, a request for a reduction to the amount of security. The submission shall include supporting evidence to justify the request.	[Removed - see "TMAC FINAL SUGGESTED REWORDING, SEPT 23, 2016 COLUMN FOR NOTE]			For TMAC's suggested rewording of Part C as well as the final submissions of TMAC on the matter of security, TMAC refers the Board to its submission of Sept. 23, 2016
5. The security referred to in Part C, Item 1 shall be maintained until such time as it is fully or in part refunded by the Minister pursuant to Section 76(5) of the Act. This clause shall survive the expiry of this Licence or renewals thereof and until full and final reclamation has been completed to the satisfaction of the Minister.	[Removed - see "TMAC FINAL SUGGESTED REWORDING, SEPT 23, 2016 COLUMN FOR NOTE]			For TMAC's suggested rewording of Part C as well as the final submissions of TMAC on the matter of security, TMAC refers the Board to its submission of Sept. 23, 2016
PART D CONDITIONS APPLYING TO CONSTRUCTION AND OPERATIONS				
1. The Licensee shall use fill material for construction from an approved source that shall be free of contaminants.	1.The Licensee shall use fill material for <u>C</u> onstruction from an approved source that shall be free of contaminants <u>not cause contamination to Waters or land.</u>		TMAC Sept 14, 2016: Suggestion to enhance clarity and accuracy.	The Licensee shall use fill material for <u>C</u> onstruction from an approved source that shall be free of contaminants <u>not cause contamination to Waters or land.</u>
2. The Licensee shall implement preventive and mitigation measures to prevent any chemicals, fuel or wastes associated with the undertaking to not enter any water body.	2.The Licensee shall implement preventive and mitigation measures to prevent any chemicals, fuel or W wastes associated with the undertaking to not enter <u>from entering any W</u> water body <u>except as otherwise expressly authorized in this Water Licence, the Metal Mining Effluent Regulations or other territorial or federal authorizations issued in respect of the project.</u>	INAC Aug 3, 2016: The Licensee shall implement preventive and mitigation measures to prevent any chemicals, fuel or wastes associated with the undertaking to not enter <u>from entering</u> any water body.	TMAC Sept 14, 2016: TMAC agrees with INAC's suggested revised wording, and suggests the additional wording for clarity.	The Licensee shall implement preventive and mitigation measures to prevent any chemicals, fuel or W wastes associated with the undertaking to not enter <u>from entering</u> any <u>W</u> water body <u>except as otherwise expressly authorized in this Water Licence, the Metal Mining Effluent Regulations or other territorial or federal authorizations issued in respect of the project.</u>

3. The Licensee shall locate equipment storage areas on gravel, sand or other durable land, a distance of at least thirty-one (31) metres above the ordinary High Water Mark of any water body in order to minimize impacts on surface drainage and water quality.	3.The Licensee shall locate equipment storage areas on gravel, sand or other durable land, a distance of at least thirty-one (31) metres above the ordinary High Water Mark of any W water body in order to minimize impacts on surface drainage and water quality.			The Licensee shall locate equipment storage areas on gravel, sand or other durable land, a distance of at least thirty-one (31) metres above the ordinary High Water Mark of any W water body in order to minimize impacts on surface drainage and water quality.
4. The Licensee shall implement sediment and erosion control measures prior to and maintained during the construction and operation where necessary to prevent entry of sediment into water	4.The Licensee shall implement maintain sediment and erosion control measures prior to, and maintained during the e Construction, and <u>during</u> eOperation where necessary to prevent entry of sediment into w Water. [NOTE: Refer to table column providing TMAC Rationale]	INAC Aug 3, 2016: :The Licensee shall implement maintain sediment and erosion control measures prior to, and maintained during the construction, and <u>during</u> operation where necessary to prevent entry of sediment into water. INAC Sept 21, 2016: <i>INAC recommends the following revision for simplicity: The Licensee shall implement sediment and erosion control measures <u>during all phases of the undertaking prior to and maintained during the construction and operation</u> where necessary to prevent entry of sediment into wWater.</i>	TMAC Sept 14, 2016: TMAC agrees with INAC's suggested revised wording. TMAC Sept 23, 2016: <i>The proposed revised wording is acceptable to TMAC.</i>	The Licensee shall implement sediment and erosion control measures <u>during all phases of the undertaking prior to and maintained during the construction and operation</u> where necessary to prevent entry of sediment into w Water.
5. The Licensee shall undertake appropriate corrective measures to mitigate impacts on surface drainage resulting from the Licensee's operations.				The Licensee shall undertake appropriate corrective measures to mitigate impacts on surface drainage resulting from the Licensee's operations.
6. The Licensee shall limit any in-stream activity to low water period. In-stream activity is prohibited during fish migration.	6.The Licensee shall limit any in-stream <u>construction activity</u> to the low water period unless <u>otherwise approved by the Board or the Department of Fisheries and Oceans Canada</u> . In-stream activity <u>construction</u> is prohibited during fish migration unless <u>otherwise approved by the Board or the Department of Fisheries and Oceans Canada</u> .		TMAC Sept 14, 2016: This change is intended to acknowledge certain approved activities such fish fence operation.	The Licensee shall limit any in-stream <u>construction activity</u> to the low water period unless <u>otherwise approved by the Board or the Department of Fisheries and Oceans Canada</u> . In-stream activity <u>construction</u> is prohibited during fish migration unless <u>otherwise approved by the Board or the Department of Fisheries and Oceans Canada</u> .
7. The Licensee shall conduct construction monitoring during all phases of the project.	7.The Licensee shall conduct <u>C</u> onstruction monitoring during all phases of the P project, <u>during periods where construction activities are undertaken</u> .		TMAC Sept 14, 2016: Suggestion for clarity.	The Licensee shall conduct <u>C</u> onstruction monitoring during all phases of the P project, <u>during periods where construction activities are undertaken</u>
8. The Licensee shall submit an annual Construction Monitoring Report no later than March 31 in the year following the calendar year being reported. The report shall be developed in accordance with Schedule D, Item 1.	8. <u>In years when construction has occurred</u> , tThe Licensee shall submit an annual Construction Monitoring Report no later than March 31 in the year following the calendar year being reported. The report shall be developed in accordance with Schedule D, Item 1. [NOTE: Refer to table column providing TMAC Rationale]	ECCC Sept. 21, 2016: <i>Submission: ECCC suggests that "construction" be more clearly defined.</i>	TMAC Sept 14, 2016: Suggestion for clarity. Sept 23, 2016 Clarification <i>TMAC has suggested a further revision to the definition of Construction. Please refer to Schedule A.</i>	<u>In years when construction has occurred</u> , tThe Licensee shall submit an annual Construction Monitoring Report no later than March 31 in the year following the calendar year being reported. The report shall be developed in accordance with Schedule D, Item 1.
9. The Licensee shall include, in addition to conducting Quarry Rock Construction Monitoring and	9.The Licensee shall include, in addition to conducting <u>Quarry and</u> Quarry Rock Construction Monitoring and Management in accordance with		TMAC Sept 14, 2016: Remove additional requirement a) and b; completed - see 2009	The Licensee shall include, in addition to conducting <u>Quarry and</u> Quarry Rock Construction Monitoring and Management in

<p>Management in accordance with Hope Bay Project Doris North Waste Rock and Ore Management Plan (SRK 2010) and Hope Bay Project Quarry A, B & D Management and Monitoring Plan - Revision 01 (SRK 2010a), the following:</p> <p>a) A subset of twenty (20) samples shall be subjected to Shake Flask Extraction (SFE) tests with an emphasis on near surface rock samples; and</p> <p>b) Submit to the Board for review no later than 6 months after the collection of samples, a report that presents the data collected from the Quarry Rock Construction Monitoring Program. The report shall include a discussion of the interpretation of the geochemical data.</p>	<p>Hope Bay Project Doris North Waste Rock and Ore Management Plan (SRK 2010) and the Hope Bay Project Quarry A, B & D Management and Monitoring Plan - Revision 01 (SRK 2010a), as may be revised from time to time in accordance with Part B, Item 6, the following:</p> <p>a) A subset of twenty (20) samples shall be subjected to Shake Flask Extraction (SFE) tests with an emphasis on near surface rock samples; and</p> <p>b) Submit to the Board for review no later than 6 months after the collection of samples, a report that presents the data collected from the Quarry Rock Construction Monitoring Program. The report shall include a discussion of the interpretation of the geochemical data.</p>		<p>Quarry Monitoring Report). Quarry and quarry rock monitoring to be conducted in accordance with the Quarry Management and Monitoring Plan.</p>	<p>accordance with Hope Bay Project Doris North Waste Rock and Ore Management Plan (SRK 2010) and the Hope Bay Project Quarry A, B & D Management and Monitoring Plan - Revision 01 (SRK 2010a), as may be revised from time to time in accordance with Part B, Item 6, the following:</p> <p>e) A subset of twenty (20) samples shall be subjected to Shake Flask Extraction (SFE) tests with an emphasis on near surface rock samples; and</p> <p>Submit to the Board for review no later than 6 months after the collection of samples, a report that presents the data collected from the Quarry Rock Construction Monitoring Program. The report shall include a discussion of the interpretation of the geochemical data.</p>
<p>10. The Licensee shall tag any potentially acid generating rock identified through the Quarry Rock Construction Monitoring program for removal to the Temporary Waste Rock Pile, for ultimate disposal underground.</p>	<p>10. The Licensee shall tag and manage any potentially acid generating rock identified through the Quarry Rock Construction Monitoring program in accordance with the Quarry Management Plan identified in Part D Item 9 and the Waste Rock and Ore Management Plan submitted under Part G Item 14, for removal to the Temporary Waste Rock PilePad, for ultimate disposal underground.</p>		<p>TMAC Sept 14, 2016: Specific requirement is incorporated in the Quarry Management Plan and Waste Rock and Ore Management Plan- inclusion in licence is therefore redundant.</p>	<p>The Licensee shall tag <u>and manage</u> any potentially acid generating rock identified through the Quarry Rock Construction Monitoring program <u>in accordance with the Quarry Management Plan identified in Part D Item 9 and the Waste Rock and Ore Management Plan submitted under Part G Item 14, for removal to the Temporary Waste Rock PilePad, for ultimate disposal underground.</u></p>
<p>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:</p> <p>a) Environmental Code of Practice for Aboveground Storage Tank Systems Containing Petroleum Products, 2003; CCME, PN 1326; and</p> <p>b) National Fire Code, 1995.</p>	<p><u>11.b) National Fire Code, 2010, as may be updated from time to time-1995.</u></p>		<p>TMAC Sept 14, 2016: Revised to reflect update</p>	<p>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:</p> <p>a) Environmental Code of Practice for Aboveground Storage Tank Systems Containing Petroleum Products, 2003; CCME, PN 1326; and</p> <p>b) National Fire Code, <u>2010, as may be updated from time to time-1995.</u></p>
<p>12. The Licensee shall, for the purposes of bridge construction, ensure that all activities remain outside of the natural channel width by the placement of abutments, footings or armouring above the ordinary High Water Mark so that there is no restriction to the natural channel processes.</p>				<p>The Licensee shall, for the purposes of bridge construction, ensure that all activities remain outside of the natural channel width by the placement of abutments, footings or armouring above the ordinary High Water Mark so that there is no restriction to the natural channel processes.</p>
<p>13. The Licensee shall submit to the Board for review, thirty (30) days following issuance of the Licence, updated for construction drawings of the proposed</p>	<p>13. The Licensee shall submit to the Board for review, thirty (30) days following issuance of the Licence, updated for construction drawings of the proposed all weather access road. This submission shall also</p>	<p>INAC Aug 3, 2016: Obsolete. Condition satisfied on Sept. 16, 2013.</p>	<p>TMAC Sept 14, 2016: Suggest removing. This condition has been satisfied.</p>	<p>The Licensee shall submit to the Board for review, thirty (30) days following issuance of the Licence, updated for construction drawings of the proposed all weather access</p>

all weather access road. This submission shall also include the following: a) The thickness of the various materials used at the coarse rock drain locations and for the general road fill; b) Details for the management of surface water adjacent to the access roads, including any contingency plans should coarse rock drains fail to operate and; c) Be signed and sealed by the appropriately qualified Engineer.	include the following: a) The thickness of the various materials used at the coarse rock drain locations and for the general road fill; b) Details for the management of surface water adjacent to the access roads, including any contingency plans should coarse rock drains fail to operate and; c) Be signed and sealed by the appropriately qualified Engineer.			road. This submission shall also include the following: a) The thickness of the various materials used at the coarse rock drain locations and for the general road fill; b) Details for the management of surface water adjacent to the access roads, including any contingency plans should coarse rock drains fail to operate and; c) Be signed and sealed by the appropriately qualified Engineer.
14. The Licensee shall conduct all activities, including the construction and maintenance of the all-weather roads, in such a way as to minimize impacts on surface drainage and shall immediately undertake any corrective measures in the event of pooling of water or any impacts on surface drainage.	14.The Licensee shall conduct all activities, including the construction and maintenance of the all-weather roads, in such a way as to minimize impacts on surface drainage and shall immediately undertake any corrective measures in the event <u>the Licensee causes significant</u> pooling of <u>W</u> water or any significant impacts on surface drainage.		TMAC Sept 14. 2016: Clarification intended to exclude natural caused pooling	The Licensee shall conduct all activities, including the construction and maintenance of the all-weather roads, in such a way as to minimize impacts on surface drainage and shall immediately undertake any corrective measures in the event <u>the Licensee causes significant</u> pooling of <u>W</u> water or any significant impacts on surface drainage.
15. With respect to access road, pad construction or other earthworks where direct or indirect flow into a water body is possible, the deposition of debris or sediment into or onto any water body is prohibited. These materials shall be disposed at a distance of at least thirty-one (31) metres from the ordinary High Water Mark in such a fashion that they do not enter the water.	15.With respect to access road, pad construction or other earthworks where direct or indirect flow into a <u>W</u> water body is possible, the deposition of debris or sediment into or onto any <u>W</u> water body is prohibited. These materials shall be disposed at a distance of at least thirty-one (31) metres from the ordinary High Water Mark in such a fashion that they do not enter the <u>W</u> water.			With respect to access road, pad construction or other earthworks where direct or indirect flow into a <u>W</u> water body is possible, the deposition of debris or sediment into or onto any <u>W</u> water body is prohibited. These materials shall be disposed at a distance of at least thirty-one (31) metres from the ordinary High Water Mark in such a fashion that they do not enter the <u>W</u> water.
16. The Licensee shall monitor all activities for signs of erosion and shall implement and maintain sediment and erosion control measures prior to the undertaking to prevent entry of sediment into any water body.	16.The Licensee shall monitor all activities for signs of erosion and shall implement and maintain sediment and erosion control measures prior to the undertaking to prevent entry of sediment into any <u>W</u> water body.			The Licensee shall monitor all activities for signs of erosion and shall implement and maintain sediment and erosion control measures prior to the undertaking to prevent entry of sediment into any <u>W</u> water body.
17. The Licensee shall conduct daily visual inspections for all construction activity during spring freshet and during and after remarkable rainfall events with sampling of runoff/seepage where turbidity is evident.	17.The Licensee shall conduct daily visual inspections for all construction activity during spring freshet and during and after remarkable rainfall events with sampling of runoff/seepage where turbidity is evident.		TMAC Sept 14. 2016: Remove daily because this sampling is event driven, not schedule driven. When there is water, there are inspections.	The Licensee shall conduct daily visual inspections for all construction activity during spring freshet and during and after remarkable rainfall events with sampling of runoff/seepage where turbidity is evident.

18. All surface runoff during the construction of any facilities, where flow may directly or indirectly enter a water body, shall meet the following Effluent quality limits:	<table><tr><th>Parameter</th><th>Maximum Average Concentration (mg/L)</th><th>Maximum Concentration of Any Grab Sample (mg/L)</th></tr><tr><td>Total Suspended Solids</td><td>50.0</td><td>100.0</td></tr></table>	Parameter	Maximum Average Concentration (mg/L)	Maximum Concentration of Any Grab Sample (mg/L)	Total Suspended Solids	50.0	100.0	18.All surface runoff during the construction of any facilities, where flow may directly or indirectly enter a <u>W</u> ater body, shall meet the following Effluent quality limits:	<table><tr><th>Parameter</th><th>Maximum Average Concentration (mg/L)</th><th>Maximum Concentration of Any Grab Sample (mg/L)</th></tr><tr><td>Total Suspended Solids*</td><td>50.0</td><td>100.0</td></tr></table> <p>* or equivalent turbidity concentrations, as approved by the Board.</p> <p>[NOTE: Refer to table column providing TMAC Rationale]</p>	Parameter	Maximum Average Concentration (mg/L)	Maximum Concentration of Any Grab Sample (mg/L)	Total Suspended Solids*	50.0	100.0	ECCC Sept 21, 2016: <i>ECCC notes that the relationship between Turbidity and Total suspended Solids is site-specific. ECCC agrees that Turbidity is a useful management tool but a site specific relationship must be developed before it can replace Total Suspended Solids or otherwise be used as a regulatory tool.</i>	KIA Sept 21, 2016: <i>It is not clear what period or number of samples is to be included in the 50 mg/L average.</i>	TMAC Sept 14. 2016: The advantage of including turbidity concentrations is that results will be immediately available in the field allowing prompt corrective action or other management response if needed. TSS analysis would require offsite laboratory assistance with attendant delays.	For clarity, what is requested here is an allowance for the Board to permit TMAC to develop a TSS- Turbidity equivalency in future, not at this time.	TMAC Sept 23, 2016: <i>Acknowledged. The KIA is referred to Schedule A for the definition of Maximum Average Concentration.</i>	All surface runoff during the construction of any facilities, where flow may directly or indirectly enter a <u>W</u> ater body, shall meet the following Effluent quality limits:	<table><tr><th>Parameter</th><th>Maximum Average Concentration (mg/L)</th><th>Maximum Concentration of Any Grab Sample (mg/L)</th></tr><tr><td>Total Suspended Solids*</td><td>50.0</td><td>100.0</td></tr></table> <p>* or equivalent turbidity concentrations, as approved by the Board.</p>	Parameter	Maximum Average Concentration (mg/L)	Maximum Concentration of Any Grab Sample (mg/L)	Total Suspended Solids*	50.0	100.0
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Total Suspended Solids*	50.0	100.0																										
19. The Licensee shall operate the Wastewater Treatment Plant in accordance with conditions provided in PART G, Item 3 with compliance at monitoring station ST-8 during construction.	19.The Licensee shall operate the <u>Domestic</u> Wastewater Treatment Plant in accordance with conditions provided in PART G, Item 3 with compliance at monitoring station ST-8 during construction <u>tundra discharge</u> .			TMAC Sept 14. 2016: TMAC wishes to retain ability to discharge to tundra in other project phases as well (C&M, closure, post-closure) if discharge criteria are met.	The Licensee shall operate the <u>Domestic</u> Wastewater Treatment Plant in accordance with conditions provided in PART G, Item 3 with compliance at monitoring station ST-8 during construction <u>tundra discharge</u> .																							
20. The Licensee shall conduct a Quarry Rock Seepage Monitoring and Management program in accordance with the Hope Bay Project Doris North Waste Rock and Ore Management Plan (SRK 2010) and Hope Bay Project Quarry A, B & D Management and Monitoring Plan - Revision 01 (SRK 2010a) and in accordance with the following:	20.The Licensee shall conduct a Quarry Rock Seepage Monitoring and Management program in accordance with the <u>Quarry Management Plan identified in Part D Item 9 as may be revised from time to time in accordance with part B, Item 6 and the Waste Rock and Ore Management Plan submitted under Part G Item 14 as may be revised from time to time in accordance with Part B, Item 6</u> Hope Bay Project Doris North Waste Rock and Ore Management Plan (SRK 2010) and Hope Bay Project Quarry A, B & D Management and Monitoring Plan - Revision 01 (SRK 2010a) and in accordance with the following:	KIA Sept 21, 2016: <i>See KIA comments above.</i>	TMAC Sept 14. 2016: Suggest removing the bulleted items as they are redundant; the sampling is addressed in the identified plans.	The Licensee shall conduct a Quarry Rock Seepage Monitoring and Management program in accordance with the <u>Quarry Management Plan identified in Part D Item 9 as may be revised from time to time in accordance with part B, Item 6 and the Waste Rock and Ore Management Plan submitted under Part G Item 14 as may be revised from time to time in accordance with Part B, Item 6</u> Hope Bay Project Doris North Waste Rock and Ore Management Plan (SRK 2010) and Hope Bay Project Quarry A, B & D Management and Monitoring Plan - Revision 01 (SRK 2010a) and in accordance with the following:	<div>a) The seep survey shall measure pH and Electrical Conductivity (EC) levels in the precipitation runoff and snowmelt that comes into contact with rock along the roadways, building pads and quarry sites;</div> <div>b) The seep survey shall measure pH and EC levels at several reference points on the tundra not subject to mine influences;</div> <div>c) The quarry rock seepage program shall be conducted on any ephemeral</div>	<div>a) The seep survey shall measure pH and Electrical Conductivity (EC) levels in the precipitation runoff and snowmelt that comes into contact with rock along the roadways, building pads and quarry sites;</div> <div>b) The seep survey shall measure pH and EC levels at several reference points on the tundra not subject to mine influences;</div> <div>c) The quarry rock seepage program shall be conducted on any ephemeral seepage present at the time of the quarry rock seepage monitoring program and not at pre-determined</div>			<div>a) The seep survey shall measure pH and Electrical Conductivity (EC) levels in the precipitation runoff and snowmelt that comes into contact with rock along the roadways, building pads and quarry sites;</div> <div>b) The seep survey shall measure pH and EC levels at several reference points on the tundra not subject to mine influences;</div> <div>c) The quarry rock seepage program shall be conducted on any ephemeral</div>																			

seepage present at the time of the quarry rock seepage monitoring program and not at pre-determined seepage stations; d) A minimum of at least 10% of the total sample set shall be submitted for secondary analysis, regardless of the values of measured field pH and EC; and e) The Quarry Rock Seepage Monitoring Program shall be expanded beyond the 100 samples to include monitoring of all rock drains.	seepage stations; d) A minimum of at least 10% of the total sample set shall be submitted for secondary analysis, regardless of the values of measured field pH and EC; and e) The Quarry Rock Seepage Monitoring Program shall be expanded beyond the 100 samples to include monitoring of all rock drains.			seepage present at the time of the quarry rock seepage monitoring program and not at pre-determined seepage stations; d) A minimum of at least 10% of the total sample set shall be submitted for secondary analysis, regardless of the values of measured field pH and EC; and e) The Quarry Rock Seepage Monitoring Program shall be expanded beyond the 100 samples to include monitoring of all rock drains.
21. The Licensee shall provide a report that presents the data collected from the Quarry Rock Seepage Monitoring and Management Program conducted under PART D, Item 20. The report shall include a discussion of the interpretation of geochemical data and shall be presented to the Board for review, no later than six (6) months after the collection of samples.	21.The Licensee shall provide a report that presents the data collected from the Quarry Rock Seepage Monitoring and Management Program conducted under Part D, Item 20. The report shall include a discussion of the interpretation of geochemical data and shall be presented to the Board for review, no later than six (6) months after the collection of samples. <u>as an addendum to the Annual Report submitted in the year following data collection.</u>		TMAC Sept 14, 2016: Suggestion to harmonize timing of reporting requirements.	The Licensee shall provide a report that presents the data collected from the Quarry Rock Seepage Monitoring and Management Program conducted under Part D, Item 20. The report shall include a discussion of the interpretation of geochemical data and shall be presented to the Board for review, no later than six (6) months after the collection of samples. <u>as an addendum to the Annual Report submitted in the year following data collection.</u>
22. The Licensee shall use fill material for construction only from approved sources that have been demonstrated by appropriate geochemical analyses to not produce Acid Rock Drainage and to by Metal Leaching properties.	22.The Licensee shall use fill material for construction only from approved sources that have been demonstrated by appropriate geochemical analyses to not produce Acid Rock Drainage and <u>to be Non-Metal Leaching</u> by Metal Leaching properties	INAC Aug 3, 2016: The Licensee shall use fill material for construction only from approved sources that have been demonstrated by appropriate geochemical analyses to not produce Acid Rock Drainage and <u>to be Non-Metal Leaching and free of contaminants</u> by Metal Leaching properties.	TMAC Sept 14, 2016: TMAC generally agrees with INAC's comments but suggest that the phrase "free of contaminants" is vague.	The Licensee shall use fill material for construction only from approved sources that have been demonstrated by appropriate geochemical analyses to not produce Acid Rock Drainage and <u>to be Non-Metal Leaching</u> by Metal Leaching properties
23. The Licensee shall not use Waste Rock from underground for any purpose, including the construction of any infrastructure, unless otherwise approved by the Board under PART G, Item 19 and in accordance with the plan provided under PART G, Item 14, revised and approved accordingly.				The Licensee shall not use Waste Rock from underground for any purpose, including the construction of any infrastructure, unless otherwise approved by the Board under PART G, Item 19 and in accordance with the plan provided under PART G, Item 14, revised and approved accordingly.
24. The Licensee shall construct and maintain all containment and runoff control structures to prevent escape of wastes to the surface or groundwater systems.	24.The Licensee shall construct and maintain all containment and runoff control structures to prevent escape non-permitted releases of W wastes to the surface terrestrial environment or groundwater systems.			The Licensee shall construct and maintain all containment and runoff control structures to prevent escape non-permitted releases of W wastes to the surface terrestrial environment or groundwater systems.
25. The Licensee shall submit to the Board for review, within ninety (90) days of completion of each facility designed to contain, withhold, divert or retain waters or wastes during the construction phase, a Construction Summary Report prepared by a qualified Engineer(s) that shall include as-built drawings, documentation of	25.The Licensee shall submit to the Board for review, <u>with the Construction Monitoring Report referred to in Part D, Item 8 following</u> within ninety (90) days of completion of each facility designed to contain, withhold, divert or retain W waters or W wastes during the C eonstruction phase, a Construction Summary Report prepared by a qualified Engineer(s) that shall include as-built drawings, documentation of field		TMAC Sept 14, 2016: As noted above, this change is suggested in order to harmonize reporting requirements.	The Licensee shall submit to the Board for review, <u>with the Construction Monitoring Report referred to in Part D, Item 8 following</u> within ninety (90) days of completion of each facility designed to contain, withhold, divert or retain W waters or W wastes during the C eonstruction phase, a Construction Summary Report prepared by a qualified Engineer(s) that shall include as-built

field decisions that deviate from original plans and any data used to support these decisions.	decisions that deviate from original plans and any data used to support these decisions.			drawings, documentation of field decisions that deviate from original plans and any data used to support these decisions.
26. The Licensee shall, during the construction of all engineered structures, provide the required supervision and field checks by an appropriately qualified and experienced Engineer in such a manner that the project specification can be enforced and, where required, the quality control measures can be followed. The Licensee shall maintain all construction records of all engineered structures to be made available at the request of the Board and/or an Inspector.	26.The Licensee shall, during the construction of all engineered structures <u>designed to contain, withhold, divert or retain waters or wastes</u> , provide the required supervision and field checks by an appropriately qualified and experienced Engineer in such a manner that the Pproject specification can be enforced and, where required, the quality control measures can be followe follow the <u>Quality Control and Quality Assurance procedures as specified in the Project Specifications submitted as part of the engineering design.</u> The Licensee shall maintain all construction records relevant to such procedures of all engineered <u>structures designed to contain, withhold, divert or retain waters or wastes</u> to be made available at the request of the Board and/or an Inspector.		TMAC Sept 14, 2016: Clarification relating to scope of NWB jurisdiction under NWNSRTA and to clarify for enforcement purposes	The Licensee shall, during the construction of all engineered structures <u>designed to contain, withhold, divert or retain waters or wastes</u> , provide the required supervision and field checks by an appropriately qualified and experienced Engineer in such a manner that the Pproject specification can be enforced and, where required, the quality control measures can be followe follow the <u>Quality Control and Quality Assurance procedures as specified in the Project Specifications submitted as part of the engineering design.</u> The Licensee shall maintain all construction records relevant to such procedures of all engineered <u>structures designed to contain, withhold, divert or retain waters or wastes</u> to be made available at the request of the Board and/or an Inspector.
27. The Licensee shall direct all runoff and seepage from the Temporary Waste Rock Pad to the Pollution Control Pond for collection and transfer to the Tailings Impoundment Area.	27.The Licensee shall direct all runoff and seepage from the Temporary Waste Rock Pads to the Pollution Control Ponds for collection and transfer to the Tailings Impoundment Area.		TMAC Sept 14, 2016: Suggestion for clarity.	The Licensee shall direct all runoff and seepage from the Temporary Waste Rock Pads to the Pollution Control Ponds for collection and transfer to the Tailings Impoundment Area.
28. The Licensee shall consider the principles of adaptive management in construction and operations.	28.The Licensee shall consider the principles of A adaptive M management in C construction and O operations.			The Licensee shall consider the principles of A adaptive M management in C construction and O operations.
PART E CONDITIONS APPLYING TO WATER USE				
1. The Licensee shall obtain fresh water for domestic camp use, mining and milling and associated uses, from Doris Lake at Monitoring Station ST-7 using the Fresh Water Intake. Domestic water may also be obtained from Windy Lake at Monitoring Station ST-7a and shall not exceed 22,995 cubic metres per year. The total volume of the use of Waters from all sources and for all purposes, shall not exceed 480,000 cubic meters per year, unless otherwise approved by the Board in writing.	1.The Licensee shall may obtain fresh W water for domestic camp use, M mining and M milling and associated uses, from Doris Lake at Monitoring Station ST-7 using the Fresh Water Intake . Domestic W water may also be obtained from Windy Lake at Monitoring Station ST-7a and shall not exceed 22,995 cubic metres per year. The total volume of the use of Waters from all sources and for all purposes, shall not exceed 480,000 cubic meters per year, unless otherwise approved by the Board in writing. <u>For clarity, non-consumptive uses and diversions are permitted water uses in accordance with this Licence and are not limited by volume.</u> [NOTE: TMAC has revised its positon on this item in response to party comments provided on Sept 21, 2016. Refer to table column providing TMAC Rationale]	INAC Sept 21, 2016: <i>All uses of water need to be authorized and accounted for. There cannot be any discretion in this area a d the authorized consumption allowance cannot be changed without approval of the Minister.</i> ECCC Sept 21, 2016: <i>ECCC notes that this is not consistent with other (municipal) water licenses that use bleeder water in winter and return it to the source. Non consumptive uses should be identified and included in Licence volume limits.</i>	TMAC Sept 14, 2016: Suggested change to reflect that exploration/mine definition drilling water use may be drawn from other locations within Doris Lake than ST-7. Suggested change to reflect that water diversions and non-consumptive uses are not included in the overall volume limit under the licence. TMAC Sept 23, 2016: <i>TMAC has revised the recommended wording in response to party comments.</i>	The Licensee shall may obtain fresh W water for domestic camp use, M mining and M milling and associated uses, from Doris Lake at Monitoring Station ST-7 using the Fresh Water Intake . Domestic W water may also be obtained from Windy Lake at Monitoring Station ST-7a and shall not exceed 22,995 cubic metres per year. The total volume of the use of Waters from all sources and for all purposes, shall not exceed 480,000 cubic meters per year, unless otherwise approved by the Board in writing. <u>For clarity, diversions are permitted water uses in accordance with this Licence and are not limited by volume.</u>
2. The Licensee shall maximize to the greatest practical extent, the use of reclaim water from the Tailings Impoundment Area for use in the mill.				The Licensee shall maximize to the greatest practical extent, the use of reclaim water

				from the Tailings Impoundment Area for use in the mill.
3. The Licensee shall not use streams as a water source unless authorized and approved by the Board in writing.	3.The Licensee shall not use streams as a W water source unless authorized and approved by the Board in writing.			The Licensee shall not use streams as a W water source unless authorized and approved by the Board in writing.
4. The Licensee shall maintain the Fresh Water Intake at Doris Lake and Windy Lake to the satisfaction of the Inspector.				The Licensee shall maintain the Fresh Water Intake at Doris Lake and Windy Lake to the satisfaction of the Inspector.
5. The Licensee shall equip all water intake hoses with a screen of an appropriate mesh size to ensure that fish are not entrained and shall withdraw water at a rate such that fish do not become impinged on the screen.	5..The Licensee shall equip all water intake hoses with a screen of an appropriate mesh size to ensure that fish are not entrained and shall withdraw W water at a rate such that fish do not become impinged on the screen.			The Licensee shall equip all water intake hoses with a screen of an appropriate mesh size to ensure that fish are not entrained and shall withdraw W water at a rate such that fish do not become impinged on the screen.
6. The Licensee shall not remove any material from below the ordinary High Water Mark of any water body unless authorized.	6.The Licensee shall not remove any material from below the ordinary High Water Mark of any W water body unless authorized <u>by the Board or the Inspector</u> .		TMAC Sept 14, 2016: Suggested edit for clarity.	The Licensee shall not remove any material from below the ordinary High Water Mark of any W water body unless authorized <u>by the Board or the Inspector</u> .
7. The Licensee shall provide the controls necessary to prevent erosion to the banks of any body of water. Sediment and erosion control measures shall be implemented prior to and maintained during the operation to prevent entry of sediment into water.	7.The Licensee shall provide the controls necessary to prevent erosion <u>caused by the</u> Licensee to the banks of any body of W water. Sediment and erosion control measures shall be implemented prior to and maintained during the operation to prevent entry of sediment into W water.		TMAC Sept 14, 2016: Clarify intent to prevent Project-induced erosion (rather than natural erosion).	The Licensee shall provide the controls necessary to prevent erosion <u>caused by the</u> Licensee to the banks of any body of W water. Sediment and erosion control measures shall be implemented prior to and maintained during the operation to prevent entry of sediment into W water.
PART F CONDITIONS APPLYING TO WATER MANAGEMENT				
1. The Board has approved the Plan entitled "Doris North Project Interim Water Management Plan" dated February 2012. The Licensee shall submit to the Board for review in writing, a revised water management plan at least six (6) months prior to Operations. The revised Plan shall include to the following: a) Provide additional detail on the requirements, including frequency, for on- going monitoring and calibration of the water quality model; b) Provide additional detail on a strategy to monitor and remove, where necessary, snow accumulation in the Pollution Control Pond, roads, ditches, and drainage channels; c) The Plan shall consider the monitoring requirements set out in PART J and PART K; d) Identify and explain the significance of all drainage facilities and key water	1.The Board has approved <u>with issuance of the licence</u> the Plan entitled " Hope Bay Water Management Plan " Doris North Project Interim Water Management Plan " dated August 2016, as may be revised from time to time in accordance with Part B, Item 6 February 2012. The Licensee shall submit to the Board for review in writing, a revised water management plan at least six (6) months prior to Operations. The revised Plan shall include to the following: a) Provide additional detail on the requirements, including frequency, for on- going monitoring and calibration of the water quality model; b) Provide additional detail on a strategy to monitor and remove, where necessary, snow accumulation in the Pollution Control Pond, roads, ditches, and drainage channels; c) The Plan shall consider the monitoring requirements set out in PART J and PART K; d) Identify and explain the significance of all drainage facilities and key water bodies within the project area; e) The development of a monitoring system to	ECCC Sept. 21, 2016: <i>ECCC disagrees with the assumption that plans will be approved at time of licence issuance. Parties need the opportunity to review the final versions of the plans. ECCC's submissions at the final hearing assumed that management plans would undergo further review and revision. ECCC suggests that a written review process and Board approval are required for the plans.</i>	TMAC Sept 14, 2016: Note this suggested revision assumes plan approval at the time of licence issuance. TMAC Sept 23, 2016: <i>A revised Water Management Plan was submitted along with the Amendment Application in June 2015. In response to party comments and subsequent to the Technical Meetings a revised Water Management Plan was submitted in June 2016 and underwent party review. A further revision to the Water Management Plan, addressing further party comments, was submitted in August with TMAC's final written submission to the NWB. Further, an addendum addressing final outstanding party issues was submitted at the Public Hearing as an exhibit. This exhibit</i>	The Board has approved <u>with issuance of the licence</u> the Plan entitled " Hope Bay Water Management Plan " Doris North Project Interim Water Management Plan " dated August 2016, as may be revised from time to time in accordance with Part B, Item 6 February 2012. The Licensee shall submit to the Board for review in writing, a revised water management plan at least six (6) months prior to Operations. The revised Plan shall include to the following: a) Provide additional detail on the requirements, including frequency, for on- going monitoring and calibration of the water quality model; b) Provide additional detail on a strategy to monitor and remove, where necessary, snow accumulation in the Pollution Control Pond, roads, ditches, and drainage channels; c) The Plan shall consider the monitoring requirements set out in PART J and PART K; d) Identify and explain the significance of all drainage facilities and key water bodies

<p>bodies within the project area;</p> <p>e) The development of a monitoring system to confirm that an acceptable percentage of mine contact runoff and groundwater (underflow) are captured;</p> <p>f) Maximum water levels for all water collection facilities and associated monitoring activities should be established; and,</p> <p>g) Include mitigation measures to increase the effectiveness of the underflow capture system (e.g., French drains should be considered to ensure the collection of all potentially contaminated shallow groundwater).</p>	<p>confirm that an acceptable percentage of mine contact runoff and groundwater (underflow) are captured;</p> <p>f) Maximum water levels for all water collection facilities and associated monitoring activities should be established; and,</p> <p>g) Include mitigation measures to increase the effectiveness of the underflow capture system (e.g., French drains should be considered to ensure the collection of all potentially contaminated shallow groundwater).</p> <p>[NOTE: TMAC has clarified its position on this item in response to party comments provided on Sept 21, 2016. Refer to table column providing TMAC Rationale]</p>		<p><i>was less than 1 page in length and included changes to 1 line of text. It was understood that submission of this exhibit addressed parties remaining comments.</i></p> <p><i>It is noted that INAC has confirmed in its Sept 21 2016 that the Exhibit satisfies their concerns. Also, the KIA's submission of the same date does not object to the Board approval of the Plan.</i></p> <p><i>TMAC sees no need for this Plan to undergo further party review and requests that the Board approve this Plan with licence issuance.</i></p>	<p>within the project area;</p> <p>e) The development of a monitoring system to confirm that an acceptable percentage of mine contact runoff and groundwater (underflow) are captured;</p> <p>f) Maximum water levels for all water collection facilities and associated monitoring activities should be established; and,</p> <p>g) Include mitigation measures to increase the effectiveness of the underflow capture system (e.g., French drains should be considered to ensure the collection of all potentially contaminated shallow groundwater).</p>
<p>2. The Licensee shall carry out regular inspections of all water management structures during periods of flow (rock drains, culverts, sedimentation and pollution control ponds and associated diversion berms, reagent and cyanide storage facility sumps, and the sedimentation control berm at the overburden dump) and the records be kept for review upon request of an Inspector. More frequent inspections may be required at the request of an Inspector.</p>	<p>2.The Licensee shall carry out regular inspections of all Wwater management structures during periods of flow (rock drains, culverts, Ssedimentation and Pollution Control Ponds and associated diversion berms, reagent and cyanide storage facility sumps, and the sedimentation control berm at the overburden dump) and the records be kept for review upon request of an Inspector. More frequent inspections may be required at the request of an Inspector.</p>			<p>The Licensee shall carry out regular inspections of all Wwater management structures during periods of flow (rock drains, culverts, Ssedimentation and Pollution Control Ponds and associated diversion berms, reagent and cyanide storage facility sumps, and the sedimentation control berm at the overburden dump) and the records be kept for review upon request of an Inspector. More frequent inspections may be required at the request of an Inspector.</p>
PART G CONDITIONS APPLYING TO WASTE MANAGEMENT AND WASTE MANAGEMENT PLANS				
<p>1. The Licensee shall provide at least ten (10) days' notice to the Inspector prior to any planned discharges from any Facilities. The notice shall include the estimated volume proposed for discharge and location.</p>	<p><u>1.Unless otherwise described in this Water Licence or approved by the Inspector, T</u>he Licensee shall provide at least ten (10) days' notice to the Inspector prior to any planned discharges from any Facilities. The notice shall include the estimated volume proposed for discharge and location.</p> <p>[NOTE: TMAC has revised its position. Refer to table column providing TMAC Rationale]</p>	<p>KIA Sept. 21, 2016: <i>Replace 'described' with 'authorized'.</i></p>	<p>TMAC Sept 14, 2016: Suggestion to acknowledge Inspector's authority regarding discharges.</p> <p>TMAC Sept 23, 2016: <i>TMAC agrees with KIA 's position.</i></p>	<p><u>Unless otherwise authorized in this Water Licence or approved by the Inspector, T</u>he Licensee shall provide at least ten (10) days' notice to the Inspector prior to any planned discharges from any Facilities. The notice shall include the estimated volume proposed for discharge and location.</p>
<p>2. The Licensee shall perform all land applied discharges in a manner that prevents erosion at the point of discharge and downstream.</p>				<p>The Licensee shall perform all land applied discharges in a manner that prevents erosion at the point of discharge and downstream.</p>
<p>3. The Licensee shall operate the Wastewater Treatment Plant in accordance with the following:</p>	<p>3.The Licensee shall operate the <u>Domestic</u> Wastewater Treatment Plant in accordance with the following:</p>	<p>INAC Aug 3, 2016: c. Phase is not specified. Contradicts 3d</p>	<p>TMAC Sept 14, 2016: Revised to clarify that compliance criteria pertain to tundra</p>	<p>The Licensee shall operate the <u>Domestic</u> Wastewater Treatment Plant in accordance with the following:</p>

<p>a) All Sewage and Greywater shall be collected and treated in the Wastewater Treatment Plant;</p> <p>b) During the construction and care and maintenance phases, all Effluent discharged from the Wastewater Treatment Plant at monitoring station ST-8 shall not exceed the following Effluent quality limits:</p> <table><tr><th>Parameter</th><th>Maximum Average Concentration (mg/L)</th><th>Maximum Allowable Grab Sample Concentration (mg/L)</th></tr><tr><td>pH</td><td>6-9</td><td>9</td></tr><tr><td>Total Suspended Solids (TSS)</td><td>100</td><td>100</td></tr><tr><td>BOD5</td><td>80</td><td>80</td></tr><tr><td>Fecal Coliforms</td><td>10,000 CFU/</td><td>10,000 CFU/ 100mL</td></tr><tr><td>Total Oil and Grease</td><td>5 and no visible sheen</td><td>10 and no visible sheen</td></tr></table>	Parameter	Maximum Average Concentration (mg/L)	Maximum Allowable Grab Sample Concentration (mg/L)	pH	6-9	9	Total Suspended Solids (TSS)	100	100	BOD5	80	80	Fecal Coliforms	10,000 CFU/	10,000 CFU/ 100mL	Total Oil and Grease	5 and no visible sheen	10 and no visible sheen	<p>a) All Sewage and Greywater shall be collected and treated in the Domestic Wastewater Treatment Plant;</p> <p>b) During the Construction and Care and Maintenance phases, aAll Effluent discharged from the <u>Domestic</u> Wastewater Treatment Plant <u>to tundra</u> at monitoring station ST-8 shall not exceed the following Effluent quality limits:</p> <table><tr><th>Parameter</th><th>Maximum Average Concentration (mg/L)</th><th>Maximum Allowable Grab Sample Concentration (mg/L)</th></tr><tr><td>Ph</td><td>6-9</td><td>9</td></tr><tr><td>Total Suspended Solids (TSS)</td><td>100</td><td>100</td></tr><tr><td>BOD5</td><td>80</td><td>80</td></tr><tr><td>Fecal Coliforms</td><td>10,000 CFU <u>or</u> MPN/ 100mL</td><td>10,000 CFU <u>or</u> MPN / 100mL</td></tr><tr><td>Total Oil and Grease</td><td>5 and no visible sheen</td><td>nd no visible sheen</td></tr></table> <p>c)All Effluent from the <u>Domestic</u> Wastewater Treatment Plant shall be <u>discharged approximately west of the facility laydown areas</u>;</p> <p>d) During Operations, Effluent from the <u>Domestic</u> Wastewater Treatment Plant shall be discharged to the Tailings Impoundment Area, or as required, to the tundra as per Item 3(c) <u>provided the criteria set out in Item 3 are met upon providing notification to an Inspector; and</u></p> <p>e)The Licensee shall notify an Inspector at least ten (10) days prior to start up of the Domestic Wastewater Treatment Plant and subsequent discharge from the facility, indicating the discharge location.</p> <p><u>[NOTE: TMAC has provided clarification and revised its positon in response to party comments. Refer to table column providing TMAC Rationale]</u></p>	Parameter	Maximum Average Concentration (mg/L)	Maximum Allowable Grab Sample Concentration (mg/L)	Ph	6-9	9	Total Suspended Solids (TSS)	100	100	BOD5	80	80	Fecal Coliforms	10,000 CFU <u>or</u> MPN/ 100mL	10,000 CFU <u>or</u> MPN / 100mL	Total Oil and Grease	5 and no visible sheen	nd no visible sheen	<p>INAC Sept. 21, 2016: <i>INAC recommends that the Licensee notify an Inspector at least 10 days prior to changing the discharge location for Domestic Wastewater Treatment Plant effluent from the Tailings Impoundment Area to the tundra.</i></p> <p>ECCC Sept. 21, 2016: <i>3b ECCC notes a typo "nd" in the table under "Maximum Allowable Grab sample Concentration for Total oil and Grease"</i></p> <p><i>3c For clarification ECCC suggests the following revision to the proposed wording: "For tundra discharge all effluent from the Domestic Wastewater Treatment Plant shall be discharged approximately west of the facility laydown areas."</i></p> <p>KIA Sept. 21, 2016: <i>What if facility laydown area is moved?</i></p>	<p>discharge, which may occur during any Project phase.</p> <p>Revise to reflect alternate equivalent analytical methodologies.</p> <p>Suggested revision to reflect discharge location as described during amendment (note the discharge location is west of the camp pad)</p> <p>This license can clearly confirm permission to discharge</p> <p>The Domestic Wastewater Treatment Plant will be in continuous operation during the operation of the camp. Therefore no need for this provision.</p> <p>TMAC Sept 23, 2016: <i>To clarify: for tundra discharge, we plan to continue to discharge west of the laydown area. Otherwise, will discharge to the TIA.</i></p> <p><i>TMAC proposes revised wording in response to party comments.</i></p> <p><i>TMAC agrees with party comments pertaining to notification prior to tundra discharge.</i></p>	<p>a) All Sewage and Greywater shall be collected and treated in the Domestic Wastewater Treatment Plant;</p> <p>b) During the Construction and Care and Maintenance phases, aAll Effluent discharged from the <u>Domestic</u> Wastewater Treatment Plant <u>to tundra</u> at monitoring station ST-8 shall not exceed the following Effluent quality limits:</p> <table><tr><th>Parameter</th><th>Maximum Average Concentration (mg/L)</th><th>Maximum Allowable Grab Sample Concentration (mg/L)</th></tr><tr><td>Ph</td><td>6-9</td><td>9</td></tr><tr><td>Total Suspended Solids (TSS)</td><td>100</td><td>100</td></tr><tr><td>BOD5</td><td>80</td><td>80</td></tr><tr><td>Fecal Coliforms</td><td>10,000 CFU <u>or</u> MPN/ 100mL</td><td>10,000 CFU <u>or</u> MPN / 100mL</td></tr><tr><td>Total Oil and Grease</td><td>5 and no visible sheen</td><td>10 and no visible sheen</td></tr></table> <p>c) All Effluent from the <u>Domestic</u> Wastewater Treatment Plant shall be <u>discharged approximately west of the facility laydown areas, or as approved by the Board</u>;</p> <p>d) During Operations, Effluent from the <u>Domestic</u> Wastewater Treatment Plant shall be discharged to the Tailings Impoundment Area, or as required, to the tundra as per Item 3(c) <u>provided the criteria set out in Item 3 are met upon providing notification to an Inspector; and</u></p> <p>e) The Licensee shall notify an Inspector at least ten (10) days prior to start up of the Domestic Wastewater Treatment Plant and subsequent discharge from the facility, indicating the discharge location .</p>	Parameter	Maximum Average Concentration (mg/L)	Maximum Allowable Grab Sample Concentration (mg/L)	Ph	6-9	9	Total Suspended Solids (TSS)	100	100	BOD5	80	80	Fecal Coliforms	10,000 CFU <u>or</u> MPN/ 100mL	10,000 CFU <u>or</u> MPN / 100mL	Total Oil and Grease	5 and no visible sheen	10 and no visible sheen
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<p>4. The Board has approved the plan "Hope Bay Mining Ltd. Wastewater Treatment Management Plan, October 2012 (Rev 3)". The Licensee shall submit a revised Plan to the Board for review, sixty (60) days prior to re-commissioning of the Wastewater Treatment Plant, that takes into consideration the following:</p> <p>a) Operation, maintenance and sludge</p>	<p>4.The Board has approved <u>with issuance of the licence the plan "Domestic Hope Bay Mining Ltd. Wastewater Treatment Management Plan, Doris Project, Nunavut, April 2016, as may be revised from time to time in accordance with Part B, Item 6 October 2012 (Rev 3)". The Licensee shall submit a revised Plan to the Board for review, sixty (60) days prior to re-commissioning of the Wastewater Treatment Plant, that takes into consideration the following:</u></p>	<p>INAC Aug 3, 2016: Obsolete. This condition can be removed. The Wastewater Treatment Plant was already in use at the time 2013 licence issuance.</p> <p>ECCC Sept. 21, 2016: <i>ECCC disagrees with the assumption that the plans will be approved at time of licensing - ECCC notes that changes are</i></p>	<p>TMAC Sept 14, 2016: The suggested revision assumes plan approval at the time of licence issuance.</p> <p>TMAC Sept 23, 2016: <i>An update to this plan was submitted on April 25, 2016 after which it was distributed for 30 day party review. Parties submitted</i></p>	<p>The Board has approved <u>with issuance of the licence the plan "Domestic Hope Bay Mining Ltd. Wastewater Treatment Management Plan, Doris Project, Nunavut, April 2016, as may be revised from time to time in accordance with Part B, Item 6 October 2012 (Rev 3)". The Licensee shall submit a revised Plan to the Board for review, sixty (60) days prior to re-commissioning of the Wastewater Treatment Plant, that takes into consideration the following:</u></p>																																																						

<p>management; and</p> <p>b) Comments received during the review of the March 2012 (Rev 2) of the Plan as well as the technical review comments provided on the October 2012 (Rev 3) Plan through the renewal application process.</p>	<p>a) Operation, maintenance and sludge management; and b) Comments received during the review of the March 2012 (Rev 2) of the Plan as well as the technical review comments provided on the October 2012 (Rev 3) Plan through the renewal application process.</p> <p>[NOTE: TMAC has provided clarification. Refer to table column providing TMAC Rationale]</p>	<p><i>being made and those changes will require review and approval. ECCC suggests that timelines for review and approval to the next iteration of plans should also be provided.</i></p>	<p><i>comments by June 16, 2016. In its notice to TMAC and direction parties, the NWB stated "At the end of the review period the NWB will review all submissions and you will be contacted should concerns arise or should additional information be needed."</i></p> <p><i>Thus far, TMAC has received no further direction on this matter from the NWB. Given this, it is understood that there are no concerns or further information needs.</i></p> <p><i>Accordingly, TMAC recommends the Board approve this plan with licence issuance.</i></p>	<p>a) Operation, maintenance and sludge management; and b) Comments received during the review of the March 2012 (Rev 2) of the Plan as well as the technical review comments provided on the October 2012 (Rev 3) Plan through the renewal application process.</p>
<p>5. The Licensee shall dispose of all food waste in an incinerator designed for this purpose and meets the requirements of the Canada-Wide Standards for Dioxins and Furans and Canada-Wide Standards for Mercury emissions or other standards as they become available.</p>	<p>5.The Licensee shall dispose of all food Wwaste in an incinerator designed for this purpose and meets the requirements of the Canada-Wide Standards for Dioxins and Furans and Canada-Wide Standards for Mercury emissions as amended from time to time..</p> <p>[NOTE: Refer to table column providing TMAC Rationale]</p>	<p>ECCC Sept. 21, 2016: <i>ECCC notes that while the Canada-Wide Standards are not likely to be amended, other standards may be developed.</i></p>	<p>TMAC Sept 14, 2016: Revision to enhance clarity.</p> <p>TMAC Sept 23, 2016: <i>Acknowledged. The Board should consider whether removal of this term is appropriate as air emissions s may be outside the jurisdiction of the NWB.</i></p> <p><i>Refer to INAC's comment in Part G Item 6.</i></p>	<p>The Licensee shall dispose of all food Wwaste in an incinerator designed for this purpose and meets the requirements of the Canada-Wide Standards for Dioxins and Furans and Canada-Wide Standards for Mercury emissions.</p>
<p>6. The Licensee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood to prevent the deposition of waste materials of incomplete combustion and/or leachate from contaminated ash residual, from impacting any surrounding waters, unless otherwise approved by the Board in writing</p>	<p>6.The Licensee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood <u>in order</u> to prevent the deposition of Wwaste materials (i.e products of incomplete combustion, and/or leachate from contaminated ash residual), from impacting any surrounding Wwaters, unless otherwise approved by the Board in writing.</p> <p>[NOTE: TMAC has revised its positon in response to party comments. Refer to table column providing TMAC Rationale]</p>	<p>INAC Sept. 21, 2016: <i>INAC does not believe that regulating open burning of wastes is within the NWB's jurisdiction and that this term and condition should be removed from the Licence. If the NWB decides that this term and condition should remain in the licence, INAC recommends the following highlighted revision:</i></p> <p><i>The Licensee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood <u>in order</u> to prevent the deposition of Wwaste materials (e.g. products of incomplete combustion, and/or leachate from contaminated ash residueat, etc.) from impacting any surrounding Wwaters, unless otherwise approved by the Board in writing.</i></p>	<p>TMAC Sept 14, 2016: Adopted INAC's suggested wording and added defined terms</p> <p>TMAC Sept 23, 2016: <i>Acknowledged and agreed that this provision should be removed.</i></p> <p><i>Refer to INAC's comment in Part G Item 6.</i></p>	<p>The Licensee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood to prevent the deposition of waste materials of incomplete combustion and/or leachate from contaminated ash residual, from impacting any surrounding waters, unless otherwise approved by the Board in writing</p>
<p>7. The Board has approved, with the issuance of the licence, the Hope Bay</p>	<p>7.The Board has approved, with the issuance of the licence, the Hope Bay Mining Ltd., the Incinerator</p>	<p>ECCC Sept. 21, 2016:</p>	<p>TMAC Sept 14, 2016:</p>	<p>.The Board has approved, with the issuance of the licence, the Hope Bay Mining Ltd., the</p>

<p>Mining Ltd., Incinerator Management Plan, March 2012 (Rev 1.1). The Licensee shall, three (3) months prior to Operations, revise and submit to the Board for review, in writing, an updated Incineration Management Plan, prepared in conjunction with Part G, Item 8, with respect to the Landfill Management Plan.</p>	<p>Management Plan, Hope Bay, Nunavut, April 2016., as may be revised from time to time in accordance with Part B, Item 6 Incinerator Management Plan, March 2012 (Rev 1.1). The Licensee shall, three (3) months prior to Operations, revise and submit to the Board for review, in writing, an updated Incineration Management Plan, prepared in conjunction with Part G, Item 8, with respect to the Landfill Management Plan.</p> <p>[NOTE: TMAC has provided clarification. Refer to table column providing TMAC Rationale]</p>	<p><i>ECCC disagrees with the assumption that the plans will be approved at time of licensing.</i></p>	<p>The suggested revision assumes plan approval at the time of licence issuance.</p> <p>TMAC Sept 23, 2016: <i>An update to this plan was submitted on April 25, 2016 after which parties were notified of the submission. It is noted that the Plan was not distributed for comment, while other plans submitted alongside this one were</i></p> <p><i>Thus far, TMAC has received no further direction on this matter from the NWB. Given this, it is understood that there are no concerns or further information needs.</i></p> <p><i>Accordingly, TMAC recommends the Board approve this plan with licence issuance.</i></p>	<p>Incinerator Management Plan, Hope Bay, Nunavut, April 2016., as may be revised from time to time in accordance with Part B, Item 6 Incinerator Management Plan, March 2012 (Rev 1.1). The Licensee shall, three (3) months prior to Operations, revise and submit to the Board for review, in writing, an updated Incineration Management Plan, prepared in conjunction with Part G, Item 8, with respect to the Landfill Management Plan.</p>
<p>8. The Licensee shall submit to the Board for approval in writing, six (6) months prior to use of the Landfill, a revised Landfill Management Plan. The Plan shall consider the following:</p> <p>a) Recycling/segregation waste program; b) Incineration technology selected; c) Waste audit – amount and types of wastes to be incinerated or otherwise disposed; d) Consolidation of wastes; e) Operational and maintenance records; f) Operator Training; g) Emission measurements; h) Incinerator Ash disposal; i) Consideration for disposal of used oil and waste fuel; and j) Monitoring, characterization, and disposal of incinerator ash.</p>	<p>8.The Licensee shall submit to the Board for approval in writing, six (6) months prior to use of the Landfill, a revised Landfill Management Plan. The Plan shall consider the following:</p> <p>a) Recycling/segregation Wwaste program; b) Incineration technology selected; c) Waste audit – amount and types of Wwastes to be incinerated or otherwise disposed; d) Consolidation of Wwastes; e) Operational and maintenance records; f) Operator Training; g) Emission measurements; h) Incinerator Ash disposal; i) Consideration for disposal of used oil and Wwaste fuel; and j) Monitoring, characterization, and disposal of incinerator ash.</p>		<p>TMAC Sept 14, 2016: Revisions made to reflect the fact that selected items are addressed in other plans already required under this Licence. Remaining items will be addressed in the Landfill Management Plan.</p>	<p>The Licensee shall submit to the Board for approval in writing, six (6) months prior to use of the Landfill, a revised Landfill Management Plan. The Plan shall consider the following:</p> <p>a) Recycling/segregation Wwaste program; b) Incineration technology selected; c) Waste audit – amount and types of Wwastes to be incinerated or otherwise disposed; d) Consolidation of Wwastes; e) Operational and maintenance records; f) Operator Training; g) Emission measurements; h) Incinerator Ash disposal; i) Consideration for disposal of used oil and Wwaste fuel; and j) Monitoring, characterization, and disposal of incinerator ash.</p>
<p>9. The Licensee is authorized to dispose of and contain all non-hazardous solid wastes at the Landfill, or as otherwise approved by the Board in writing.</p>	<p>9.The Licensee is authorized to dispose of and contain all non-hazardous solid Wwastes at the Landfill, or as otherwise approved by the Board in writing.</p>			<p>The Licensee is authorized to dispose of and contain all non-hazardous solid Wwastes at the Landfill, or as otherwise approved by the Board in writing.</p>
<p>10. The Board has approved the Hope Bay Mining Ltd., Hazardous Waste Management Plan, March 2012 (Rev 1.1) for use during Care and Maintenance. The Licensee shall submit to the Board for review, three</p>	<p>10.The Board has approved the Hope Bay Mining Ltd., Hazardous Waste Management Plan, September 2016March 2012 (Rev 1.1) as may be revised from time to time in accordance with Part B, Item 6 for use during Care and Maintenance. The Licensee shall submit to the Board for review, three</p>	<p>INAC Aug 3, 2016: It is recommended that the deadline for providing updated plans and notification prior to commencing Operations be consistent.</p>	<p>TMAC Sept 14, 2016: Note the Hazardous Waste Management Plan revision described in this condition will be submitted mid-September 2016.</p>	<p>The Board has approved the Hope Bay Mining Ltd., Hazardous Waste Management Plan <u>Hope Bay Project Hazardous Waste Management Plan, September 2016</u>March 2012 (Rev 1.1) as may be revised from time to time in accordance with Part B, Item 6 for use</p>

(3) months prior to Operations, a revised Plan, which shall include a review of all hazardous materials used and hazardous wastes produced at the Project.	(3) months prior to Operations, a revised Plan, which shall include a review of all hazardous materials used and hazardous <u>W</u> wastes produced at the Project. <u>[NOTE: TMAC has provided clarification. Refer to table column providing TMAC Rationale]</u>	ECCC Sept. 21, 2016: <i>ECCC disagrees with the assumption that the plans will be approved at time of licencing. ECCC notes that the September 2016 plan has yet to be submitted and the approval is not included in the revised term. ECCC suggests that term #10 be revised to avoid the assumption that the existing plan has been approved and to include Board approval.</i>	TMAC Sept 23, 2016: <i>The Hope Bay Project Hazardous Waste Management Plan, September 2016, was submitted in accordance with the current wording of Part G Item 10, on September 15, 2016.</i> <i>With reference to TMAC's rationale provided in Part B Item 4. A 45 day review period is appropriate. It is expected that the 45 days review period will terminate around the time of the licence issuance, so it reasonable to request that this plan be approved with licence issuance.</i>	during Care and Maintenance . The Licensee shall submit to the Board for review, three (3) months prior to Operations, a revised Plan, which shall include a review of all hazardous materials used and hazardous <u>W</u> wastes produced at the Project.
11. The Licensee shall backhaul and dispose of all hazardous wastes, waste oil and non- combustible waste generated through the course of the operation at a licensed waste disposal site.	11.The Licensee shall backhaul and dispose of all hazardous <u>W</u> wastes, oil and non- combustible <u>W</u> waste generated through the course of the operation at a licensed <u>W</u> waste disposal site.		TMAC Sept 14, 2016: Revised to reflect disposal of non-combustible non-hazardous waste in the Landfill. Note that as the project has a waste oil burner, there is no need to require backhaul.	The Licensee shall backhaul and dispose of all hazardous <u>W</u> wastes, oil and non- combustible <u>W</u> waste generated through the course of the operation at a licensed <u>W</u> waste disposal site.
12. The Licensee shall maintain records of all waste backhauled and records of confirmation of proper disposal of backhauled waste. These records shall be made available to an Inspector upon request.	12.The Licensee shall maintain records of all <u>W</u> waste backhauled and records of confirmation of proper disposal of backhauled <u>W</u> waste. These records shall be made available to an Inspector upon request.			The Licensee shall maintain records of all <u>W</u> waste backhauled and records of confirmation of proper disposal of backhauled <u>W</u> waste. These records shall be made available to an Inspector upon request.
13. The Licensee shall submit to the Board for review, three (3) months prior to commissioning of the Landfarm, a revision to the Hope Bay Project, Doris North Landfarm Management and Monitoring Plan. The Plan shall include updates to the following: a) Operation and maintenance considerations including the methods of characterization, segregation and treatment; b) Confirmation of the Soil Quality Remediation Objectives (SQROs) and distinction between where parkland versus industrial standards will be applied; c) Contingency measure for contaminated soils that do not meet the SQROs; d) As-built drawings signed and stamped by an Engineer; and e) Any proposed future uses.	13.The Licensee shall <u>operate the Landfarm as outlined in the</u> Doris North Landfarm Management and Monitoring Plan, <u>March 2014, approved with the issuance of this Licence and as may be revised from time to time in accordance with Part B, Item 6 of this Licence.</u> The Plan shall include updates to the following: a) Operation and maintenance considerations including the methods of characterization, segregation and treatment; b) Confirmation of the Soil Quality Remediation Objectives (SQROs) and distinction between where parkland versus industrial standards will be applied; c) Contingency measure for contaminated soils that do not meet the SQROs; d) As built drawings signed and stamped by an Engineer; and e) Any proposed future uses.	INAC Aug 3, 2016: Obsolete. This condition can be removed. The Landfarm was already in use at the time 2013 licence issuance.	TMAC Sept 14, 2016: TMAC agrees with INAC's comment and also seeks approval of this management plan with issuance of the Water Licence.	The Licensee shall <u>operate the Landfarm as outlined in the</u> Doris North Landfarm Management and Monitoring Plan, <u>March 2014, approved with the issuance of this Licence and as may be revised from time to time in accordance with Part B, Item 6 of this Licence.</u> The Plan shall include updates to the following: a) Operation and maintenance considerations including the methods of characterization, segregation and treatment; b) Confirmation of the Soil Quality Remediation Objectives (SQROs) and distinction between where parkland versus industrial standards will be applied; c) Contingency measure for contaminated soils that do not meet the SQROs; d) As built drawings signed and stamped by an Engineer; and e) Any proposed future uses.

<p>14. The Board has approved the plan entitled "Hope Bay Project Doris North Waste Rock and Ore Management Plan", dated December 2012. The Licensee shall submit to the Board for review, a revised Plan six (6) months following the start of Operations.</p>	<p>14. The Board has approved, <u>with issuance of this licence, the plan entitled "TMAC Resources' Waste Rock and Ore Management Plan. Hope Bay Project, Nunavut, August 2016,"</u> as may be revised from time to time in accordance with Part B, Item 6. Hope Bay Project Doris North Waste Rock and Ore Management Plan", dated December 2012. The Licensee shall submit to the Board for review, a revised Plan six (6) months following the start of Operations.</p> <p><u>[NOTE: TMAC has provided clarification. Refer to table column providing TMAC Rationale]</u></p>	<p>ECCC Sept. 21, 2016: <i>ECCC disagrees with the assumption that the plans will be approved at time of licensing. ECCC suggests that neither the Parties nor TMAC should assume approval of the current version of the plan.</i></p>	<p>TMAC Sept 14, 2016: The suggested revision assumes plan approval at the time of licence issuance.</p> <p>TMAC notes that in its Sept. 21 Submission, INAC states "The addendum satisfies INAC recommendation R44 (personnel for geotechnical waste rock inspections).</p> <p>TMAC Sept 23, 2016 : <i>A revised Waste Rock and Ore Management Plan was submitted along with the Amendment Application in June 2015. In response to party comments and subsequent to the Technical Meetings a revision to the Waste Rock and Ore Management Plan, addressing further party comments, was submitted in August with TMAC's final written submission to the NWB. Further, an addendum addressing final outstanding party issues was submitted at the Public Hearing as an exhibit. This exhibit was less than 1 page in length and included changes to 1 line of text. It was understood that submission of this exhibit addressed parties remaining comments.</i></p> <p><i>It is noted that INAC has confirmed in its Sept 21 2016 that the Exhibit satisfies their concerns and also that the KIA's submission of the same date does not object to the Board approval of the Plan.</i></p> <p><i>TMAC sees no need for this Plan to undergo further party review and requests that the Board approve this Plan with licence issuance.</i></p>	<p>15. The Board has approved, <u>with issuance of this licence, the plan entitled "TMAC Resources' Waste Rock and Ore Management Plan. Hope Bay Project, Nunavut, August 2016,"</u> as may be revised from time to time in accordance with Part B, Item 6. Hope Bay Project Doris North Waste Rock and Ore Management Plan", dated December 2012. The Licensee shall submit to the Board for review, a revised Plan six (6) months following the start of Operations.</p>
<p>16. The Licensee shall submit to the Board for approval in writing, at least sixty (60) days prior to planned implementation, any changes that are contemplated to the geochemical confirmatory sampling and testing program or the</p>	<p>15.The Licensee shall submit to the Board for approval in writing, at least sixty (60) days prior to planned implementation, any changes that are contemplated to the geochemical confirmatory sampling and testing program or the criteria for using non-mineralized Waste Rock for construction as</p>			<p>The Licensee shall submit to the Board for approval in writing, at least sixty (60) days prior to planned implementation, any changes that are contemplated to the geochemical confirmatory sampling and testing program or the criteria for using non-</p>

criteria for using non-mineralized Waste Rock for construction as outlined in the approved Waste Rock Management Plan, submitted as per PART G, Item 14, including a description of and justification for the change.	outlined in the approved Waste Rock <u>and Ore</u> Management Plan, submitted as per PART G, Item 14, including a description of and justification for the change.			mineralized Waste Rock for construction as outlined in the approved Waste Rock <u>and Ore</u> Management Plan, submitted as per PART G, Item 14, including a description of and justification for the change.
17. The Licensee shall clearly identify and segregate all potentially acid generating Waste Rock for storage on the Temporary Waste Rock Pad, awaiting its ultimate disposal underground.				The Licensee shall clearly identify and segregate all potentially acid generating Waste Rock for storage on the Temporary Waste Rock Pad, awaiting its ultimate disposal underground.
18. The Licensee shall submit to the Board as part of the Construction Monitoring Report referred to in PART D, Item 8, a Waste Rock and Quarry Monitoring Report. The Report shall be developed in accordance with Schedule D, Item 1(f).				The Licensee shall submit to the Board as part of the Construction Monitoring Report referred to in PART D, Item 8, a Waste Rock and Quarry Monitoring Report. The Report shall be developed in accordance with Schedule D, Item 1(f).
19. The Licensee shall store all potentially acid generating rock at the Temporary Waste Rock Pad prior to ultimate disposal underground as mine backfill, unless otherwise approved by the Board in writing.				The Licensee shall store all potentially acid generating rock at the Temporary Waste Rock Pad prior to ultimate disposal underground as mine backfill, unless otherwise approved by the Board in writing.
20. All Waste Rock brought to the surface from underground shall be managed in accordance with the approved Plan submitted under PART G, Item 14 and: a) Stored on the Temporary Waste Rock Pad; b) Stored at other locations as identified in the approved Waste Rock and Ore Management Plan, and c) Managed as otherwise approved by the Board in writing.				All Waste Rock brought to the surface from underground shall be managed in accordance with the approved Plan submitted under PART G, Item 14 and: a) Stored on the Temporary Waste Rock Pad; b) Stored at other locations as identified in the approved Waste Rock and Ore Management Plan, and c) Managed as otherwise approved by the Board in writing.
21. The Licensee shall segregate mineralized from un-mineralized Waste Rock on the Temporary Waste Rock Pad.	20. The Licensee shall segregate mineralized from un-mineralized Waste Rock on the Temporary Waste Rock Pad.		TMAC Sept 14, 2016: As this requirement is already incorporated in the approved Plan, TMAC suggests this specific term and condition be removed as it is redundant.	20. The Licensee shall segregate mineralized from un-mineralized Waste Rock on the Temporary Waste Rock Pad.
22. The Licensee shall operate the Wastewater Treatment Plant, Landfill, Landfarm, Fuel Storage and Containment Facilities, Sedimentation Pond, Pollution Control Pond, and the Reagent and Cyanide Storage Facility sumps to the satisfaction of the Inspector.	21. The Licensee shall operate the <u>Domestic</u> Wastewater Treatment Plant, Landfill, Landfarm, Fuel Storage and Containment Facilities, Sedimentation Pond, Pollution Control Ponds, and the Reagent and Cyanide Storage Facility sumps <u>to the satisfaction of the Inspector in accordance with generally accepted industry best practice.</u> [NOTE: TMAC has revised its position in response to party comments. Refer to table column providing TMAC Rationale]	INAC Aug 3, 2016: The Licensee shall operate the Wastewater Treatment Plant, Landfill, Landfarm, Fuel Storage and Containment Facilities, Sedimentation Pond, Pollution Control Pond, and the Reagent and Cyanide Storage Facility sumps and maintain all waste management facilities to the satisfaction of the Inspector. ECCC Sept. 21, 2016:	TMAC Sept 14, 2016: It is noted that but for the Domestic Wastewater Treatment Plant, each of the facilities listed is subject to an annual geotechnical inspection. The TIA is additionally inspected by ECCC and monitored in accordance with the MMR.	The Licensee shall <u>maintain and</u> operate the <u>Domestic</u> Wastewater Treatment Plant, Landfill, Landfarm, Fuel Storage and Containment Facilities, Sedimentation Pond, Pollution Control Ponds, and the Reagent and Cyanide Storage Facility sumps <u>to the satisfaction of the Inspector in accordance with this licence and generally accepted industry best practice.</u>

		<div>ECCC does not agree with the removal of "to the satisfaction of the Inspector" from condition 21. ECCC suggests that, should TMAC's additional text be adopted, the term "generally accepted best practice" should be defined. ECCC also notes that the Department does not inspect the structure of the TIA but ECCC enforcement may inspect to confirm conformity with section 36 of the Fisheries Act.</div> <div>KIA Sept. 21, 2016: KIA agrees with INAC, “industry best practice” is too vague.</div>	<div>The suggested revision provides an objective standard that the Licensee can be measured against in order to confirm compliance with the Licence, with consideration of the scope of jurisdiction of the NWB under the NWNSRTA.</div> <div>TMAC Sept 23, 2016 In response to party comments, TMAC has revised its recommended wording for this licence term.</div>																																																																															
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<div>24. 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Consider removal of clause in its entirety or alternatively (b) and (c)</div> <div><u>[NOTE: TMAC has provided clarification. Refer to table column providing TMAC Rationale]</u></div>	<div>INAC Aug 3, 2016</div> <div>c) Water from the Sedimentation Pond that is acceptable for discharge under PARTG PART G, Item 23(a), if directly discharged to the tundra, shall be discharged immediately south of the facility approximately 500m upstream of Doris Lake, or as designated by an Inspector; and</div> <div>ECCC Sept. 21, 2016: ECCC disagrees with the removal of this condition. Any effluent upstream of the marine outfall has the potential to impact fresh water and is therefore under the NWB jurisdiction. Subsequent MMER regulation of the contact water when it is discharged as effluent does not preclude upstream discharges being regulated, especially as TMAC wants to retain the option of tundra discharge.</div> <div>ECCC suggests that the Maximum Average concentration values for CN and T-Zn be revisited as CN appears high (equivalent to MMER) and the T-Zn value is below CCME.</div> <div>KIA Sept. 21, 2016: Although discharge of contact waters is subject to MMER, as TMAC state, that does not mean that the NWB can't provide for more stringent standards if warranted and they have done so here. The MMER limits are less protective than the limits that TMAC want removed from the licence. Note also that Part c states that the limits may apply to</div>	<div>TMAC Sept 14, 2016:</div> <div>Each of these waters is now considered mining and milling contact water and is therefore under the jurisdiction of the MMER. This is the prevailing regulatory treatment for these waters and as such provisions in this water license are not required.</div> <div>TMAC Sept 23, 2016:</div> <div>Discharges to tundra are dealt with elsewhere in the licence. TMAC does not agree that there should be discharge criteria for deposits to the TIA. TMAC maintains its positon on this matter.</div> <div>Note that the discharges from the Sedimentation Pond and Reagent and Cyanide Storage Facility sumps are to a facility, namely the TIA, as required by MMER's application at this site.</div> <div>Regarding the change in Zn and CN criteria, effluent discharge to the environment will comply with the MMER limits and there is no rationale presented for the Board to revisit these limits. Discharges of cyanide and zinc to internal</div>	<div>The Licensee shall operate and maintain the Sedimentation Pond and Reagent and Cyanide Storage Facility sumps in accordance with the following:</div> <div>a) Water discharged from the Sedimentation Pond and Reagent and Cyanide Storage Facility Sumps at monitoring stations ST-1 and ST-11 respectively shall not exceed the following Effluent quality limits:</div> <table><tr><th>Parameter</th><th>Maximum Average</th><th>Maximum</th></tr><tr><td>pH</td><td>Between 6.0-9.0</td><td>9.0</td></tr><tr><td>Total Suspended</td><td>15.0</td><td>30.0</td></tr><tr><td>Total Ammonia –N</td><td>2.0</td><td>4.0</td></tr><tr><td>Total CN</td><td>1.0</td><td>2.0</td></tr><tr><td>Total Oil and Grease</td><td>5 and no visible sheen</td><td>10 and no visible sheen on pond</td></tr><tr><td>Total Aluminum – T-Al</td><td>1.0</td><td>2.0</td></tr><tr><td>Total Arsenic – T-As</td><td>0.05</td><td>0.10</td></tr><tr><td>Total Copper – T-Cu</td><td>0.02</td><td>0.30</td></tr><tr><td>Total Iron – T-Fe</td><td>0.30</td><td>0.60</td></tr><tr><td>Total Lead – T-Pb</td><td>0.01</td><td>0.02</td></tr><tr><td>Total Nickel – T-Ni</td><td>0.05</td><td>0.10</td></tr><tr><td>Total Zinc – T-Zn</td><td>0.01</td><td>0.02</td></tr></table> <div>b) The Licensee shall establish compliance with the Effluent quality limits prior to discharge;</div> <div>c) Water from the Sedimentation Pond that is acceptable for discharge under PARTG PART G, Item 23(a), if directly discharged to the tundra, shall be discharged immediately south of the facility approximately 500m upstream of</div>	Parameter	Maximum Average	Maximum	pH	Between 6.0-9.0	9.0	Total Suspended	15.0	30.0	Total Ammonia –N	2.0	4.0	Total CN	1.0	2.0	Total Oil and Grease	5 and no visible sheen	10 and no visible sheen on pond	Total Aluminum – T-Al	1.0	2.0	Total Arsenic – T-As	0.05	0.10	Total Copper – T-Cu	0.02	0.30	Total Iron – T-Fe	0.30	0.60	Total Lead – T-Pb	0.01	0.02	Total Nickel – T-Ni	0.05	0.10	Total Zinc – T-Zn	0.01	0.02
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<p>PART G, Item 23(a), if directly discharged to the tundra, shall be discharged immediately south of the facility approximately 500m upstream of Doris Lake, or as designated by an Inspector; and</p> <p>d) Sedimentation Pond Water that does not meet criteria in PART G, Item 23(a) shall be directed to the Tailings Impoundment Area.</p>		<p>tundra discharge not water discharge. TMAC would need to provide an analysis showing that the MMR limits are protective of the proposed receivers.</p>	<p>facilities are not regulated by the NWB or ECCC, as the compliance point is at the discharge point to the environment.</p> <p>In the Doris Mine , waters are discharged to the ocean and so are not under the jurisdiction of the NWB. NWB jurisdiction over inland waters and land is acknowledged.</p>	<p>Doris Lake, or as designated by an Inspector; and</p> <p>d) Sedimentation Pond Water that does not meet criteria in PART G, Item 23(a) shall be directed to the Tailings Impoundment Area.</p>																																																																																										
<p>24.The Licensee shall operate and maintain the Sumps in accordance with the following:</p> <p>a) Water discharged from the Landfill Sump at monitoring station ST-3 shall not exceed the following Effluent quality limits:</p> <table><tr><th>Parameter</th><th>Maximum Average</th><th>Maximum Concentration</th></tr><tr><td>pH</td><td>6.0-9.0</td><td>9.0</td></tr><tr><td>Total Suspended Solids (TSS)</td><td>15.0</td><td>30.0</td></tr><tr><td>Total Ammonia –N</td><td>2.0</td><td>4.0</td></tr><tr><td>Total Cyanide (CN)</td><td>1.0</td><td>2.0</td></tr><tr><td>Total Oil and Grease</td><td>5 and no visible sheen on water surface</td><td>10 and no visible sheen on water surface</td></tr><tr><td>Total Aluminium – T - Al</td><td>1.0</td><td>2.0</td></tr><tr><td>Total Arsenic – T- As</td><td>0.05</td><td>0.10</td></tr><tr><td>Total Copper – T- Cu</td><td>0.02</td><td>0.04</td></tr><tr><td>Total Iron – T- Fe</td><td>0.3</td><td>0.6</td></tr><tr><td>Total Lead – T- Pb</td><td>0.01</td><td>0.02</td></tr><tr><td>Total Nickel – T- Ni</td><td>0.05</td><td>0.10</td></tr><tr><td>Total Zinc – T – Zn</td><td>0.01</td><td>0.02</td></tr></table> <p>b) Water from the Landfill Sump that is acceptable for discharge under PART G, Item 24(a) may be discharged to the tundra designated by an Inspector;</p> <p>c) Water discharged from the Landfarm Sump at monitoring station ST-4 shall</p>	Parameter	Maximum Average	Maximum Concentration	pH	6.0-9.0	9.0	Total Suspended Solids (TSS)	15.0	30.0	Total Ammonia –N	2.0	4.0	Total Cyanide (CN)	1.0	2.0	Total Oil and Grease	5 and no visible sheen on water surface	10 and no visible sheen on water surface	Total Aluminium – T - Al	1.0	2.0	Total Arsenic – T- As	0.05	0.10	Total Copper – T- Cu	0.02	0.04	Total Iron – T- Fe	0.3	0.6	Total Lead – T- Pb	0.01	0.02	Total Nickel – T- Ni	0.05	0.10	Total Zinc – T – Zn	0.01	0.02	<p>b) Water from the Landfill Sump that is acceptable for discharge under PART G, Item 24(a) may be discharged to the tundra <u>or as</u> designated by an Inspector;</p> <p>g) Sump Wwater from the Landfill, Landfarm and Fuel Storage and Containment Facility that does not meet the criteria in PART G, Items 24 (a),(c) and (e) respectively shall be directed to the Tailings Impoundment Area.</p>	<p>INAC Aug 3, 2016</p> <p>b) discharge under PART G, Item 24(a) may be discharged to the tundra <u>or as</u> designated by an Inspector;</p>		<p>.The Licensee shall operate and maintain the Sumps in accordance with the following:</p> <p>a) Water discharged from the Landfill Sump at monitoring station ST-3 shall not exceed the following Effluent quality limits:</p> <table><tr><th>Parameter</th><th>Maximum Average Concentration (mg/L)</th><th>Maximum Concentration in any Grab Sample (mg/L)</th></tr><tr><td>pH</td><td>6.0-9.0</td><td>9.0</td></tr><tr><td>Total Suspended Solids (TSS)</td><td>15.0</td><td>30.0</td></tr><tr><td>Total Ammonia –N</td><td>2.0</td><td>4.0</td></tr><tr><td>Total Cyanide (CN)</td><td>1.0</td><td>2.0</td></tr><tr><td>Total Oil and Grease</td><td>5 and no visible sheen on water surface</td><td>10 and no visible sheen on water surface</td></tr><tr><td>Total Aluminium – T - Al</td><td>1.0</td><td>2.0</td></tr><tr><td>Total Arsenic – T-As</td><td>0.05</td><td>0.10</td></tr><tr><td>Total Copper – T-Cu</td><td>0.02</td><td>0.04</td></tr><tr><td>Total Iron – T- Fe</td><td>0.3</td><td>0.6</td></tr><tr><td>Total Lead – T- Pb</td><td>0.01</td><td>0.02</td></tr><tr><td>Total Nickel – T- Ni</td><td>0.05</td><td>0.10</td></tr><tr><td>Total Zinc – T – Zn</td><td>0.01</td><td>0.02</td></tr></table> <p>b) Water from the Landfill Sump that is acceptable for discharge under PART G, Item 24(a) may be discharged to the tundra <u>or as</u> designated by an Inspector;</p> <p>c) Water discharged from the Landfarm Sump at monitoring station ST-4 shall not exceed the following Effluent quality limits:</p> <table><tr><th>Parameter</th><th>Maximum Average Concentration (mg/L)</th><th>Maximum Concentration in any Grab Sample (mg/L)</th></tr><tr><td>pH</td><td>Between 6.0-9.0</td><td>9.0</td></tr><tr><td>Total Suspended Solids (TSS)</td><td>15.0</td><td>30.0</td></tr><tr><td>Total Oil and Grease</td><td>5 and no visible sheen</td><td>10 and no visible sheen</td></tr></table>	Parameter	Maximum Average Concentration (mg/L)	Maximum Concentration in any Grab Sample (mg/L)	pH	6.0-9.0	9.0	Total Suspended Solids (TSS)	15.0	30.0	Total Ammonia –N	2.0	4.0	Total Cyanide (CN)	1.0	2.0	Total Oil and Grease	5 and no visible sheen on water surface	10 and no visible sheen on water surface	Total Aluminium – T - Al	1.0	2.0	Total Arsenic – T-As	0.05	0.10	Total Copper – T-Cu	0.02	0.04	Total Iron – T- Fe	0.3	0.6	Total Lead – T- Pb	0.01	0.02	Total Nickel – T- Ni	0.05	0.10	Total Zinc – T – Zn	0.01	0.02	Parameter	Maximum Average Concentration (mg/L)	Maximum Concentration in any Grab Sample (mg/L)	pH	Between 6.0-9.0	9.0	Total Suspended Solids (TSS)	15.0	30.0	Total Oil and Grease	5 and no visible sheen	10 and no visible sheen
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for review six (6) months prior to Operations, a revised Tailings Management Plan. The Plan shall include Shoreline Erosion Protection Adaptive Management strategies for monitoring and control.	<p><u>Tailings Impoundment Area as outlined in the Tailings Management Plan/ Tailings Impoundment Area Operations, Maintenance, and Surveillance Manual, August 2016, approved with the issuance of this Licence and as modified from time to time in accordance with Part B, Item 6. submit to the Board for review six (6) months prior to Operations, a revised Tailings Management Plan. The Plan shall include Shoreline Erosion Protection Adaptive Management strategies for monitoring and control.</u></p> <p>[NOTE: TMAC has provided clarification. Refer to table column providing TMAC Rationale]</p>	<p>It is recommended that the deadline for providing updated plans and notification prior to commencing Operations be consistent.</p> <p>ECCC Sept. 21, 2016: <i>ECCC notes that the suggested revision presupposes plan approval at time of licence issuance. ECCC disagrees with the assumption that the plans will be approved at time of licencing, changes are being made to plans and those changes will require review and approval.</i></p>	<p>The suggested revision assumes plan approval at the time of licence issuance.</p> <p>TMAC Sept 23, 2016: <i>The Tailings OMS Manual was submitted in June 2016, in accordance with the water licence. The Plan then underwent review, and in response to party comments a revision to the TIA OMS Manual, was submitted in August with TMAC's final written submission to the NWB. Further, an addendum addressing final outstanding party issues was submitted at the Public Hearing as an exhibit. This exhibit was less than 1 page in length and included changes to 3 lines of text. It was understood that submission of this exhibit addressed parties remaining comments.</i></p> <p><i>It is noted that INAC has confirmed in its Sept 21 2016 that the Exhibit satisfies their concerns and also that the KIA's submission of the same date does not object to the Board approval of the Plan.</i></p> <p><i>TMAC sees no need for this Plan to undergo further party review and requests that the Board approve this Plan with licence issuance.</i></p>	<p><u>Tailings Impoundment Area as outlined in the Tailings Management Plan/ Tailings Impoundment Area Operations, Maintenance, and Surveillance Manual, August 2016, approved with the issuance of this Licence and as modified from time to time in accordance with Part B, Item 6. submit to the Board for review six (6) months prior to Operations, a revised Tailings Management Plan. The Plan shall include Shoreline Erosion Protection Adaptive Management strategies for monitoring and control.</u></p>
<p>26. The Licensee shall operate and maintain the Tailings Impoundment Area (TIA) to engineering standards such that:</p> <p>a) The Licensee shall maintain a minimum freeboard limit of one (1) meter below the top of the frozen core of the North and South Dams or as recommended by a Geotechnical Engineer;</p> <p>b) Implement contingency measures where necessary to prevent overtopping of the North Dam;</p> <p>c) Implement the Shoreline Erosion Protection and Adaptive</p>	<p>26. The Licensee shall operate and maintain the Tailings Impoundment Area (TIA) <u>in accordance with the approved Tailings Impoundment Area Operations, Maintenance and Surveillance Manual as may be revised from time to time in accordance with Part B, Item 6 to engineering standards such that:</u></p> <p>a) The Licensee shall maintain a minimum freeboard limit of one (1) meter below the top of the frozen core of the North and South Dams or as recommended by a Geotechnical Engineer;</p> <p>e) The Licensee shall carry out, at a minimum, weekly inspections during any period in which the site is occupied and water is being actively managed,</p>		<p>TMAC Sept 14, 2016: As the detailed content is already included in the Tailings Impoundment Area Operations, Maintenance and Surveillance Manual, suggest removal for readability.</p> <p>If this list is included, suggest:</p> <p>(a) Remove reference to South Dam</p> <p>(e) Capitalize defined terms</p> <p>(j) should be removed</p> <p>(j) should be removed</p>	<p>The Licensee shall operate and maintain the Tailings Impoundment Area (TIA) <u>in accordance with the approved Tailings Impoundment Area Operations, Maintenance and Surveillance Manual as may be revised from time to time in accordance with Part B, Item 6 to engineering standards such that:</u></p> <p>a) The Licensee shall maintain a minimum freeboard limit of one (1) meter below the top of the frozen core of the North and South Dams or as recommended by a Geotechnical Engineer;</p> <p>b) Implement contingency measures where</p>

<p>Management strategies as required;</p> <p>d) The Licensee shall collect and return seepage from the TIA, as determined by monitoring and follow-up water quality analyses;</p> <p>e) The Licensee shall carry out, at a minimum, weekly inspections during any period in which the site is occupied and water is being actively managed, to identify and remediate where necessary, areas of concern including issues of seepage, cracking, and ponding for all structures associated with the TIA including the North and South Dams, Emergency Dump Catch Basins, pipeline(s), pumps, mill tailings discharge points and other associated structures. During Care and Maintenance, inspections shall be carried out on a monthly basis, at a minimum, weather permitting;</p> <p>f) The Licensee shall consult the Geotechnical Engineer when significant issues associated with the TIA are observed and implement the Engineer's recommendations as necessary;</p> <p>g) The solids fractions of all mill tailings (except for filtered cyanide leach residue placed underground as mine backfill) shall be deposited and permanently contained within the Tailings Impoundment Area;</p> <p>h) An annual Geotechnical inspection shall be carried out in accordance with PART J, Item 19;</p> <p>i) The Licensee shall, following the commencement of Operations and deposition of tailings, conduct a bathymetric survey of the Tailings Impoundment Area on an annual basis during open water, to facilitate tailings deposition management;</p> <p>j) The Licensee shall, during periods of active water management for construction, operations and closure, conduct a daily visual assessment of suspended sediment in the Tailings Impoundment Area;</p> <p>k) The Licensee shall perform more frequent inspections of the facilities at the request of an Inspector;</p> <p>l) The Licensee shall place all filtered cyanide leach residue underground as mine backfill to remain frozen within</p>	<p>to identify and remediate where necessary, areas of concern including issues of seepage, cracking, and ponding for all structures associated with the TIA including the North and South Dams, Emergency Dump Catch Basins, pipeline(s), pumps, mill tailings discharge points and other associated structures. 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<p>permafrost;</p> <p>m) The Licensee shall provide at least ten (10) days written notice to an Inspector prior to any planned discharges from the Tailings Impoundment Area to Doris Creek; and</p> <p>n) The Licensee shall maintain records of all inspections for the review of an Inspector upon request</p>				<p>l) The Licensee shall place all filtered cyanide leach residue underground as mine backfill to remain frozen within permafrost;</p> <p>m) The Licensee shall provide at least ten (10) days written notice to an Inspector prior to any planned discharges from the Tailings Impoundment <u>Area to Doris Creek</u>; and</p> <p>n) The Licensee shall maintain records of all inspections for the review of an Inspector upon request</p>																																																																																																																					
27. The Licensee shall implement the Tailings Water Management Strategy as outlined in the Tailings Management Plan, submitted under Part G, Item 25,	27. The Licensee shall implement the Tailings Water Management Strategy as outlined in the Tailings Management Plan, submitted under Part G, Item 25.		TMAC Sept 14, 2016: This should be removed or reference the Water Management Plan. This reference to the Water Management Strategy predates the development of any Tailings Management Plan.	The Licensee shall implement the Tailings Water Management Strategy as outlined in the Tailings Management Plan, submitted under Part G, Item 25.																																																																																																																					
28. All Water discharged from the Tailings Impoundment Area at monitoring station TL-4 shall not exceed the following Effluent quality limits:	28. All Water discharged from the Tailings Impoundment Area at monitoring station TL-1 <u>to freshwater</u> shall not exceed the following Effluent quality limits:	KIA Sept. 21, 2016: <i>The term “freshwater” is problematic. The Act applies to “inland waters” and not freshwater. KIA realizes that this is an attempt to distinguish Roberts Bay water waters, but the term freshwater creates legal confusion.</i>	TMAC Sept 14, 2016: TL-4 was formerly the end of pipe discharge to Doris Creek from the Tailings Impoundment Area. TMAC has asked for this station to be removed in consideration of the change in discharge location from Doris Creek to Roberts Bay and the related removal of the Tailings Impoundment Area water treatment plant. However, as water will be discharged from TL-1 during Post Closure, TMAC suggests that the compliance criteria be applied to the TL-1 sampling location instead.	All Water discharged from the Tailings Impoundment Area at monitoring station TL-1 <u>to inland waters</u> shall not exceed the following Effluent quality limits:																																																																																																																					
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29. The Licensee shall ensure that Effluent discharged from monitoring stations TL- 1 and TL-4 is demonstrated to be non-acutely toxic in accordance with PART J, Item 8.	29. The Licensee shall ensure that Effluent discharged from monitoring stations TL-1 and TL-4 to freshwater is demonstrated to be non-acutely toxic in accordance with PART J, Item 8.	KIA Sept. 21, 2016: <i>See comment above.</i>	TMAC Sept 14, 2016: See comment above. TMAC Sept 23, 2016: <i>TMAC supports KIA's recommendation to replace 'freshwater' with 'inland waters'</i>	The Licensee shall ensure that Effluent discharged from monitoring stations TL-1 and TL-4 to inland waters is demonstrated to be non-acutely toxic in accordance with PART J, Item 8																																																																																																
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During periods of discharge, water quality in Doris Creek at monitoring station TL- 3 shall not exceed the greater of background water quality at the time of discharge as measured at monitoring station TL-2, or the following water quality limits: <table><tr><th>Parameter</th><th>Maximum Concentration of Any Grab Sample (mg/L)</th></tr><tr><td>pH</td><td>Between 6.0-9.0</td></tr><tr><td>Total Suspended Solids (TSS)</td><td>15.0</td></tr><tr><td>Total Oil and Grease</td><td>5</td></tr><tr><td>Chloride</td><td>150</td></tr><tr><td>Free Cyanide</td><td>0.005</td></tr><tr><td>Total Cyanide</td><td>0.010</td></tr><tr><td>Total Ammonia N</td><td>1.54 at pH 7.5 and temperature of 20¹</td></tr><tr><td>Nitrate N</td><td>2.9</td></tr><tr><td>Nitrite N</td><td>0.060</td></tr><tr><td>Total Aluminum – T-Al</td><td>0.100</td></tr><tr><td>Total Arsenic – T-As</td><td>0.0050</td></tr><tr><td>Total Cadmium – T-Cd</td><td>0.000017</td></tr><tr><td>Chromium (VI)</td><td>0.0010</td></tr><tr><td>Total Copper – T-Cu</td><td>0.002</td></tr><tr><td>Total Iron – T-Fe</td><td>0.300</td></tr><tr><td>Total Mercury – T-Hg</td><td>0.000026</td></tr><tr><td>Total Molybdenum- T-Mo</td><td>0.073</td></tr><tr><td>Total Nickel – T-Ni</td><td>0.025</td></tr><tr><td>Total Lead – T-Pb</td><td>0.001</td></tr><tr><td>Total Selenium – T-Se</td><td>0.0010</td></tr><tr><td>Total Silver – T-Ag</td><td>0.0001</td></tr><tr><td>Total Thallium – T-Tl</td><td>0.0008</td></tr><tr><td>Total Zinc – T-Zn</td><td>0.030</td></tr></table> ¹ Total Ammonia concentration discharge varies with pH and temperature as per Schedule G	Parameter	Maximum Concentration of Any Grab Sample (mg/L)	pH	Between 6.0-9.0	Total Suspended Solids (TSS)	15.0	Total Oil and Grease	5	Chloride	150	Free Cyanide	0.005	Total Cyanide	0.010	Total Ammonia N	1.54 at pH 7.5 and temperature of 20 ¹	Nitrate N	2.9	Nitrite N	0.060	Total Aluminum – T-Al	0.100	Total Arsenic – T-As	0.0050	Total Cadmium – T-Cd	0.000017	Chromium (VI)	0.0010	Total Copper – T-Cu	0.002	Total Iron – T-Fe	0.300	Total Mercury – T-Hg	0.000026	Total Molybdenum- T-Mo	0.073	Total Nickel – T-Ni	0.025	Total Lead – T-Pb	0.001	Total Selenium – T-Se	0.0010	Total Silver – T-Ag	0.0001	Total Thallium – T-Tl	0.0008	Total Zinc – T-Zn	0.030	30. During periods of discharge, to freshwater of discharge, water quality in Doris Creek at monitoring station TL- 3 2 shall not exceed the greater of background <u>pre-discharge</u> water quality at the time of discharge as measured at monitoring station TL-2, or the following water quality limits:	KIA Sept. 21, 2016: <i>See comment above.</i> <i>TMAC should provide a comparison of water quality at TL-2 and TL-3 to show the validity of using one as a surrogate for the other</i>	TMAC Sept 14, 2016: As TL-3 is a dangerous location for sampling given frequent bear activity, TMAC has requested to apply TL-3 compliance criteria to TL-2 during the post closure phase. TMAC Sept 23, 2016: <i>TMAC supports KIA's recommendation to replace 'freshwater' with 'inland waters'</i> <i>With the cessation of discharge to Doris Creek, nothing changes within the creek between these stations and therefore no measurement is required.</i>	During periods of discharge, to inland waters of discharge, water quality in Doris Creek at monitoring station TL- 3 2 shall not exceed the greater of background <u>pre-discharge</u> water quality at the time of discharge as measured at monitoring station TL-2, or the following water quality limits: <table><tr><th>Parameter</th><th>Maximum Concentration of Any Grab Sample (mg/L)</th></tr><tr><td>pH</td><td>Between 6.0-9.0</td></tr><tr><td>Total Suspended Solids (TSS)</td><td>15.0</td></tr><tr><td>Total Oil and Grease</td><td>5</td></tr><tr><td>Chloride</td><td>150</td></tr><tr><td>Free Cyanide</td><td>0.005</td></tr><tr><td>Total Cyanide</td><td>0.010</td></tr><tr><td>Total Ammonia N</td><td>1.54 at pH 7.5 and temperature of 20¹</td></tr><tr><td>Nitrate N</td><td>2.9</td></tr><tr><td>Nitrite N</td><td>0.060</td></tr><tr><td>Total Aluminum – T-Al</td><td>0.100</td></tr><tr><td>Total Arsenic – T-As</td><td>0.0050</td></tr><tr><td>Total Cadmium – T-Cd</td><td>0.000017</td></tr><tr><td>Chromium (VI)</td><td>0.0010</td></tr><tr><td>Total Copper – T-Cu</td><td>0.002</td></tr><tr><td>Total Iron – T-Fe</td><td>0.300</td></tr><tr><td>Total Mercury – T-Hg</td><td>0.000026</td></tr><tr><td>Total Molybdenum- T-Mo</td><td>0.073</td></tr><tr><td>Total Nickel – T-Ni</td><td>0.025</td></tr><tr><td>Total Lead – T-Pb</td><td>0.001</td></tr><tr><td>Total Selenium – T-Se</td><td>0.0010</td></tr><tr><td>Total Silver – T-Ag</td><td>0.0001</td></tr><tr><td>Total Thallium – T-Tl</td><td>0.0008</td></tr><tr><td>Total Zinc – T-Zn</td><td>0.030</td></tr></table> ¹ Total Ammonia concentration discharge varies with pH and temperature as per Schedule G	Parameter	Maximum Concentration of Any Grab Sample (mg/L)	pH	Between 6.0-9.0	Total Suspended Solids (TSS)	15.0	Total Oil and Grease	5	Chloride	150	Free Cyanide	0.005	Total Cyanide	0.010	Total Ammonia N	1.54 at pH 7.5 and temperature of 20 ¹	Nitrate N	2.9	Nitrite N	0.060	Total Aluminum – T-Al	0.100	Total Arsenic – T-As	0.0050	Total Cadmium – T-Cd	0.000017	Chromium (VI)	0.0010	Total Copper – T-Cu	0.002	Total Iron – T-Fe	0.300	Total Mercury – T-Hg	0.000026	Total Molybdenum- T-Mo	0.073	Total Nickel – T-Ni	0.025	Total Lead – T-Pb	0.001	Total Selenium – T-Se	0.0010	Total Silver – T-Ag	0.0001	Total Thallium – T-Tl	0.0008	Total Zinc – T-Zn	0.030
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31. The Licensee shall, following the deposition of tailings, maintain water within the Tailings Impoundment Area at an elevation of least 28.3 metres above sea level such that a minimum of four (4) metres of water cover is maintained over the tailings at all times.	31. The Licensee shall, following the deposition of tailings, maintain water within the Tailings Impoundment Area at an elevation of least 28.3 metres above sea level such that a minimum of four (4) metres of water cover is maintained over the tailings at all times.		TMAC Sept 14, 2016: Remove. This Item no longer applies.	The Licensee shall, following the deposition of tailings, maintain water within the Tailings Impoundment Area at an elevation of least 28.3 metres above sea level such that a minimum of four (4) metres of water cover is maintained over the tailings at all times.																																																																																																
32. The Licensee shall ensure that the flow from the Tailings Impoundment Area into Doris Creek at monitoring station TL-4 does not exceed 10% of the background flow in Doris Creek, as measured at monitoring station TL-2 at the time of discharge.	32. The Licensee shall ensure that the flow from the Tailings Impoundment Area into Doris Creek at monitoring station TL- 4 does not exceed 10% of the background flow in Doris Creek, as measured at monitoring station TL- 2 at the time of discharge. [NOTE: TMAC has provided clarification. Refer to table column providing TMAC Rationale]	ECCC Sept. 21, 2016: <i>ECCC disagrees that this condition should be removed because it no longer applies rather ECCC suggest that the condition be modified to address closure discharge.</i>	TMAC Sept 14, 2016: Remove. This Item no longer applies. TMAC Sept 14, 2016: <i>There's no planned discharge to Doris Creek during Closure, only during post closure at which time natural discharge will occur following breaching of the dam. At that time, flows will be naturally driven by precipitation and there</i>	The Licensee shall ensure that the flow from the Tailings Impoundment Area into Doris Creek at monitoring station TL- 4 does not exceed 10% of the background flow in Doris Creek, as measured at monitoring station TL- 2 at the time of discharge.																																																																																																

			<i>will be no need for flow measurement or control.</i>	
33. The Licensee shall, on a monthly basis during Operations and tailings deposition and at a minimum, annually during Construction or Care and Maintenance, input average monthly water quality, hydrology and climate monitoring data into the water quality model and perform the following assessment: a) Compare the predicted water elevation in the Tailings Impoundment Area to the measured elevations. If the difference between predicted and measured elevations is greater than 0.1m, then the Licensee shall re-calibrate the volume rating curve; b) Compare the predicted water quality in the Tailings Impoundment Area to the measured water quality. If the difference between predicted and measured values is 20% or greater, then the cause(s) of the difference shall be identified and the water quality model shall be re-calibrated; and c) Predict the future discharge schedule and compare this prediction to the previously predicted discharge schedule. If necessary identify adaptive management strategies.	a) Compare the predicted water elevation in the Tailings Impoundment Area to the measured elevations. If the difference between predicted and measured elevations is greater than 0.1m, then the Licensee shall re-calibrate the volume rating curve; e) Predict the future discharge schedule and compare this prediction to the previously predicted discharge schedule. If necessary identify Adaptive Management strategies. Operate and manage the Tailings Impoundment Area in accordance with the Water Management Plan, the Groundwater Management Plan and the Tailings Impoundment Area Operations, Maintenance and Surveillance Manual, all as may be revised from time to time in accordance with Part B, Item 6.		TMAC Sept 14, 2016: Suggested revision to reflect content of plans and enhance readability of the Water Licence. TMAC Sept 14, 2016: <i>Remove a and c as this is not needed given a water cover is not being maintained.</i>	The Licensee shall, on a monthly basis during Operations and tailings deposition and at a minimum, annually during Construction or Care and Maintenance, input average monthly water quality, hydrology and climate monitoring data into the water quality model and perform the following assessment: a) Compare the predicted water elevation in the Tailings Impoundment Area to the measured elevations. If the difference between predicted and measured elevations is greater than 0.1m, then the Licensee shall re-calibrate the volume rating curve; b) Compare the predicted water quality in the Tailings Impoundment Area to the measured water quality. If the difference between predicted and measured values is 20% or greater, then the cause(s) of the difference shall be identified and the water quality model shall be re-calibrated; and e) Predict the future discharge schedule and compare this prediction to the previously predicted discharge schedule. If necessary identify adaptive management strategies.
34. The licensee shall submit to the Board for approval in writing, at least three (3) months prior to the anticipated use of de-icing fluid, a plan to manage aircraft de-icing fluid used at the all-weather airstrip. The Plan shall also address on-site storage and containment requirements.				The licensee shall submit to the Board for approval in writing, at least three (3) months prior to the anticipated use of de-icing fluid, a plan to manage aircraft de-icing fluid used at the all-weather airstrip. The Plan shall also address on-site storage and containment requirements.
PART H CONDITIONS APPLYING TO MODIFICATIONS				
1. The Licensee may, without written consent from the Board, carry out Modifications to the Water Supply Facilities and Waste Disposal Facilities provided that such Modifications are consistent with the terms of this Licence and the following requirements are met: a) The Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications;	1. The Licensee may, without written consent from the Board, carry out Modifications to the Water Supply Facilities and Waste Disposal Facilities provided that such Modifications are consistent with the terms of this Licence and the following requirements are met: a) The Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) <u>thirty (30)</u> days prior to beginning the Modifications; b) Such Modifications do not place the Licensee in contravention of the Licence or the Act; c) Such Modifications are consistent with NIRB	KIA Sept. 21, 2016: <i>KIA suggests notice should remain at 60 days. KIA simply needs adequate time to respond if the Board requests comments.</i>	TMAC Sept 14, 2016: Matters may not become known 60 days prior to their need, and the Board should be able to review and respond quickly to such requests. The current timing, whereby the NWB can inform a proponent that an amendment is required on day 59, is very challenging from a	The Licensee may, without written consent from the Board, carry out Modifications to the Water Supply Facilities and Waste Disposal Facilities provided that such Modifications are consistent with the terms of this Licence and the following requirements are met: a) The Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) <u>thirty (30)</u> days prior to beginning the Modifications; b) Such Modifications do not place the Licensee in contravention of the Licence

<p>b) Such Modifications do not place the Licensee in contravention of the Licence or the Act;</p> <p>c) Such Modifications are consistent with NIRB Project Certificate;</p> <p>d) The Board has not, during the sixty (60) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than sixty (60) days; and</p> <p>e) The Board has not rejected the proposed Modifications.</p>	<p>Project Certificate;</p> <p>d) The Board has not, during the sixty (60) <u>thirty (30)</u> days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than sixty (60) <u>thirty (30)</u> days; and</p> <p>e) The Board has not rejected the proposed Modifications.</p>		<p>project planning and management perspective particularly in light of the short Arctic construction season.</p> <p>TMAC Sept 14, 2016: <i>TMAC maintains its position that 30 days notice for modifications is appropriate.</i></p>	<p>or the Act;</p> <p>c) Such Modifications are consistent with NIRB Project Certificate;</p> <p>d) The Board has not, during the sixty (60) <u>thirty (30)</u> days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than sixty (60) <u>thirty (30)</u> days; and</p> <p>e) The Board has not rejected the proposed Modifications.</p>
2.Modifications for which all of the conditions referred to in Part H, Item 1 have not been met can be carried out only with written approval from the Board.				Modifications for which all of the conditions referred to in Part H, Item 1 have not been met can be carried out only with written approval from the Board.
3.The Licensee shall provide as-built plans and drawings of the Modifications referred to in this Licence within ninety (90) days of completion of the Modification. These plans and drawings shall be stamped by an Engineer.	<p>3.Where facility Modifications are of a nature that require professional engineering, tThe Licensee shall provide as-built plans and drawings of the Modifications referred to in this Licence within ninety (90) days of completion of the Modification. These plans and drawings shall be stamped by an Engineer.</p> <p>[NOTE: TMAC has provided clarification Refer to table column providing TMAC Rationale]</p>	<p>KIA Sept. 21, 2016: <i>The problem with the change is that now only modifications of engineered structures require plans an drawings. KIA would like to be advised of all modifications of structures under the licence. However, we are content if only modifications of engineered structures require stamped plans and as-built.</i></p>	<p>TMAC Sept 14, 2016: Many facility modifications do not warrant an engineers stamp or engineering-type drawings – e.g. the Domestic Waste Water Treatment Plant change out, or the Windy Lake water uptake line replacement.</p> <p>TMAC Sept 14, 2016: <i>Acknowledged. TMAC believes that Modification should continue to apply to only water supply facilities and waste disposal facilities.</i></p>	Where facility Modifications are of a nature that require professional engineering, tThe Licensee shall provide as-built plans and drawings of the Modifications referred to in this Licence within ninety (90) days of completion of the Modification. These plans and drawings shall be stamped by an Engineer.
PART I CONDITIONS APPLYING TO CONTINGENCY PLANNING				
1. The Board has approved the Plan entitled "Hope Bay Mining Ltd. Spill Contingency Plan HB-ER-ENV-MP-001 (REV 5)" dated October 2012 for use during Care and Maintenance. An updated Plan is required under the Assignment issued June 18, 2013, to reflect the change in ownership of the Project. Any change in the status of the Project and operations will require a review and resubmission as per Part B, Item 6.	<p>1.The Board has approved <u>with issuance of the Licence</u> the Plan entitled "<u>Spill Contingency Plan, Hope Bay, Nunavut, April 2016</u>" as may be revised from time to time in accordance with Part B, Item 6.Hope Bay Mining Ltd. Spill Contingency Plan HB-ER-ENV-MP-001 (REV 5)" dated October 2012 for use during Care and Maintenance. An updated Plan is required under the Assignment issued June 18, 2013, to reflect the change in ownership of the Project. Any change in the status of the Project and operations will require a review and resubmission as per Part B, Item 6.</p> <p>[NOTE: TMAC has provided clarification. Refer to table column providing TMAC Rationale]</p>	<p>ECCC Sept. 21, 2016: <i>ECCC notes that the suggested revision presupposes plan approval at the time of licence issuance. ECCC disagrees with the assumption that the plans will be approved at time of licensing, changes are being made to plans and those changes will require review and approval.</i></p>	<p>TMAC Sept 14, 2016: The suggested revision assumes plan approval at the time of licence issuance.</p> <p>TMAC Sept 23, 2016: <i>An update to this plan was submitted on April 25, 2016 after which it was distributed for 30 day party review. Parties submitted comments by June 16, 2016. In its notice to TMAC and direction parties, the NWB stated "At the end of the review period the NWB will review all submissions and you will be contacted should concerns arise or should additional information be needed."</i></p>	The Board has approved <u>with issuance of the Licence</u> the Plan entitled " <u>Spill Contingency Plan, Hope Bay, Nunavut, April 2016</u> " as may be revised from time to time in accordance with Part B, Item 6. Hope Bay Mining Ltd. Spill Contingency Plan HB-ER-ENV-MP-001 (REV 5)" dated October 2012 for use during Care and Maintenance. An updated Plan is required under the Assignment issued June 18, 2013, to reflect the change in ownership of the Project. Any change in the status of the Project and operations will require a review and resubmission as per Part B, Item 6.

			<p><i>Thus far, TMAC has received no further direction on this matter from the NWB. Given this, it is understood that there are no concerns or further information needs.</i></p> <p><i>Accordingly, TMAC recommends the Board approve this plan with licence issuance.</i></p>	
2. The Licensee shall prevent any chemicals, petroleum products or wastes associated with the project from entering water. All sumps and fuel caches shall be located at a distance of at least thirty one (31) metres from the ordinary High Water Mark of any adjacent water body and inspected on a regular basis.	2.The Licensee shall prevent any chemicals, petroleum products or <u>W</u> astes associated with the <u>P</u> roject from entering <u>W</u> ater. All sumps and fuel caches shall be located at a distance of at least thirty one (31) metres from the ordinary High Water Mark of any adjacent <u>W</u> ater body and inspected on a regular basis.			The Licensee shall prevent any chemicals, petroleum products or <u>W</u> astes associated with the <u>P</u> roject from entering <u>W</u> ater. All sumps and fuel caches shall be located at a distance of at least thirty one (31) metres from the ordinary High Water Mark of any adjacent <u>W</u> ater body and inspected on a regular basis.
3. The Licensee shall provide secondary containment for fuel and chemical storage as required by applicable standards and acceptable industry practice.				The Licensee shall provide secondary containment for fuel and chemical storage as required by applicable standards and acceptable industry practice.
4. The Licensee shall perform regular inspections of Fuel Storage and Containment Areas, Sumps, Emergency Dump Catch Basins, other fuel tanks and connectors for leaks and movement and shall keep a written log of inspections to be made available to an Inspector upon request. More frequent inspections may be required at the request of an Inspector.	4.The Licensee shall perform regular inspections of Fuel Storage and Containment <u>Facilities Areas</u> , Sumps, Emergency Dump Catch Basins, other fuel tanks and connectors for leaks and movement and shall keep a written log of inspections to be made available to an Inspector upon request. More frequent inspections may be required at the request of an Inspector.			The Licensee shall perform regular inspections of Fuel Storage and Containment <u>Facilities Areas</u> , Sumps, Emergency Dump Catch Basins, other fuel tanks and connectors for leaks and movement and shall keep a written log of inspections to be made available to an Inspector upon request. More frequent inspections may be required at the request of an Inspector.
5. If, during the period of this Licence an unauthorized discharge of waste and or Effluent occurs, or if such discharge is foreseeable, the Licensee shall: a) Employ the Spill Contingency Plan; b) Report the incident immediately via the 24-Hour Spill Reporting Line (867) 920-8130, to the Inspector at (867) 975-4295 and to the Kitikmeot Inuit Association at (867) 982-3310; and c) For each spill occurrence, submit a detailed report to the Inspector, no later than thirty (30) days after initially reporting the event, which includes the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain and clean	5.If, during the period of this Licence an unauthorized discharge of <u>W</u> aste and/or Effluent occurs, or if such discharge is foreseeable, the Licensee shall: a) Employ the Spill Contingency Plan; b) Report the incident immediately via the 24-Hour Spill Reporting Line (867) 920-8130, to the Inspector at (867) 975-4295 and to the Kitikmeot Inuit Association at (867) 982-3310 <u>if it is of a size and nature that requires reporting in accordance with the Spill Reporting Regulation</u> ; and c) For each spill occurrence <u>reported in accordance with (b)</u> , submit a detailed report to the Inspector, no later than thirty (30) days after initially reporting the event, which includes the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain and clean up the spill site.	<p>KIA Sept. 21, 2016</p> <p><i>They only want to report spills that meet criteria of the Spills Regulation as smaller spills may be "environmentally inconsequential". While I respect the Regulation, I don't; think the consequences of a spill can necessarily be determined at the time of occurrence and the analysis would be subjective. In addition, the cumulative record of spills, not matter how "inconsequential", provides a valuable record of the operator care and management practices. Recommend keeping the existing wording.</i></p>	<p>TMAC Sept 14, 2016:</p> <p>This change is consistent with legal requirements of the Spill Reporting Regulation and reduces the potential for significant administrative burden relating to environmentally inconsequential spills.</p> <p>Note that relevant and current phone numbers are maintained in the Spill Contingency Plan.</p> <p>TMAC Sept 23, 2016:</p> <p><i>TMAC is of the view that the reporting threshold under the Regulation are carefully selected</i></p>	If, during the period of this Licence an unauthorized discharge of <u>W</u> aste and/or Effluent occurs, or if such discharge is foreseeable, the Licensee shall: a) Employ the Spill Contingency Plan; b) Report the incident immediately via the 24-Hour Spill Reporting Line (867) 920-8130, to the Inspector at (867) 975-4295 and to the Kitikmeot Inuit Association at (867) 982-3310 <u>if it is of a size and nature that requires reporting in accordance with the Spill Reporting Regulation</u> ; and c) For each spill occurrence <u>reported in accordance with (b)</u> , submit a detailed report to the Inspector, no later than thirty (30) days after initially reporting the event, which includes

up the spill site.			<i>by the Government of Nunavut and are appropriate for public reporting of such events. As such we believe they should be respected.</i>	the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain and clean up the spill site.
6. The Licensee shall, in addition to Part I, Item 5, regardless of the quantity of releases of harmful substances, report to the NWT/NU Spill Line if the release is near or into a Water body.	6.The Licensee shall, in addition to Part I, Item 5, regardless of the quantity of releases of harmful substances, report to the NWT/NU Spill Line if the release is near or into a Water body or <u>adjacent to a Water body such that the spill is likely to enter a Water body.</u>	KIA Sept. 21, 2016: <i>The highlighted phrase should read... "to enter that Waterbody"</i>	TMAC Sept 23, 2016: <i>TMAC has provided a revision for clarity.</i>	The Licensee shall, in addition to Part I, Item 5, regardless of the quantity of <u>such</u> releases of harmful substances , report to the NWT/NU Spill Line if the release is near or into a Water body or <u>adjacent to a Water body such that the spill is likely to enter the Water body</u>
7. The Licensee shall, upon providing notification under PART L, Item 2, submit to the Board, an addendum to the Spill Contingency Plan, detailing the changes in operations, personnel, responsibilities, availability of equipment and access to the site for assistance.	7.The Licensee shall, upon providing notification under PART L, Item 2, submit to the Board, <u>in the Annual Report and as required by the Spill Reporting Regulation,</u> details of an addendum to the Spill Contingency Plan, detailing any changes in <u>Operations</u> , personnel, responsibilities, availability of equipment and access to the site for assistance, <u>arising from the spill.</u> Corrective action planning shall be <u>documented on site with records made available to an Inspector upon request.</u> [NOTE: TMAC has revised its position. Refer to table column providing TMAC Rationale]	INAC Sept. 21, 2016: <i>INAC recommends that the Licensee continue to provide an addendum to its Spill Contingency Plan to the NWB within 3 months of providing notification of any intent to enter into a Care and Maintenance Phase pursuant to Part L, Items 2 and 3 of the Licence. Submitting and addendum to the Plan with an annual report is considered to be an unnecessary delay.</i>	TMAC Sept 14, 2016: Revision for clarity. TMAC Sept 23, 2016: <i>TMAC acknowledges and agrees with INAC's comment.</i>	The Licensee shall, upon providing notification under PART L, Item 2, submit to the Board, an addendum to the Spill Contingency Plan, detailing the changes in <u>Operations</u> , personnel, responsibilities, availability of equipment and access to the site for assistance, <u>arising from the spill.</u> Corrective <u>action planning shall be documented on site with records made available to an Inspector upon request.</u>
PART J CONDITIONS APPLYING TO GENERAL AND AQUATIC EFFECTS MONITORING				
1. The Licensee shall install and maintain flow meters or other such devices, or implement suitable methods required for the measuring of water use and Effluent discharge volumes, to be operated and maintained to the satisfaction of an Inspector.	1.The Licensee shall install and maintain flow meters or other such devices, or implement suitable methods required for the measuring of W water U se and Effluent discharge volumes, <u>where such discharges are made to the terrestrial environment or freshwater and</u> to be operated and maintained to the satisfaction of an Inspector. [NOTE: TMAC has provided clarification. Refer to table column providing TMAC Rationale]	ECCC Sept. 21, 2016: <i>ECCC disagrees with the added text as it will still be important to understand the volume of effluent going to the marine environment for spill contingency planning.</i>	TMAC Sept 14, 2016: Change to clarify that discharges to Roberts Bay will be regulated per MMER TMAC Sept 23, 2016: <i>Effluent discharged to the marine environment from the Doris Mine operations is monitored and reported under the MMER to ECCC.</i>	The Licensee shall install and maintain flow meters or other such devices, or implement suitable methods required for the measuring of W water U se and Effluent discharge volumes, <u>where such discharges are made to lands or inland waters and</u> to be operated and maintained to the satisfaction of an Inspector.
2. The Licensee shall install appropriate instrumentation in Doris Creek at Monitoring Station TL-2, to monitor flow when ice conditions allow for such measurements to be taken, on a real time and continuous basis for any year where discharges from the Tailings Impoundment Area are planned.	2.The Licensee shall install appropriate instrumentation in Doris Lake Creek at Monitoring Station TL-2, to monitor lake levels flow when ice conditions allow for such measurements to be taken, on a real time and continuous basis for any year where mining occurs in the Doris lake talik. discharges from the Tailings Impoundment Area are planned.		TMAC Sept 14, 2016: Monitoring of Doris Creek is no longer required for quantifying allowable discharges to the creek. However, monitoring of Doris Lake water level will be adopted as a part of the Aquatic Effects Monitoring Program to evaluate potential for water level draw-down. Real time monitoring is not required for	The Licensee shall install appropriate instrumentation in Doris Lake Creek at Monitoring Station TL-2, to monitor lake levels flow when ice conditions allow for such measurements to be taken, on a real time and continuous basis for any year where mining occurs in the Doris lake talik. discharges from the Tailings Impoundment Area are planned.

			operations or environmental monitoring.	
3. The Licensee shall undertake the Water Monitoring Program detailed in the tables of Schedule J.			TMAC Sept 14, 2016: Note that TMAC has suggested revisions to Schedule J in the attached.	The Licensee shall undertake the Water Monitoring Program detailed in the tables of Schedule J.
4. The Licensee shall, during periods of discharge from the TIA: a) should water quality at Station TL-3 deviate more than 20% for any parameter listed in Part G, Item 30, from that predicted by the water quality model, investigate as to the likely cause of this deviation; b) Increase the sampling frequency to once every second day at monitoring stations TL-1, TL-2 and TL-3; should the measured concentration of any parameter listed under PART G, Item 30 at TL-3 deviate more than 20% as in item 4(a) AND the measured concentration of the same parameter is within 25% of the Effluent quality limits listed under Part G, Item 30; c) Include the results of any investigation under item 4(a) in the monthly monitoring report required under Part J, Item 21; and d) Submit to the Board and an Inspector an understanding and justification of any discrepancy should the Licensee request a reduction from the increased sampling frequency of Part J, Item 4(a).	4. The Licensee shall, during periods of discharge from the TIA: a) should water quality at Station TL-3 deviate more than 20% for any parameter listed in Part G, Item 30, from that predicted by the water quality model, investigate as to the likely cause of this deviation; b) Increase the sampling frequency to once every second day at monitoring stations TL-1, TL-2 and TL-3; should the measured concentration of any parameter listed under PART G, Item 30 at TL-3 deviate more than 20% as in item 4(a) AND the measured concentration of the same parameter is within 25% of the Effluent quality limits listed under Part G, Item 30; c) Include the results of any investigation under item 4(a) in the monthly monitoring report required under Part J, Item 21; and d) Submit to the Board and an Inspector an understanding and justification of any discrepancy should the Licensee request a reduction from the increased sampling frequency of Part J, Item 4(a).		TMAC Sept 14, 2016: As noted above these items are no longer relevant.	The Licensee shall, during periods of discharge from the TIA: a) should water quality at Station TL-3 deviate more than 20% for any parameter listed in Part G, Item 30, from that predicted by the water quality model, investigate as to the likely cause of this deviation; b) Increase the sampling frequency to once every second day at monitoring stations TL-1, TL-2 and TL-3; should the measured concentration of any parameter listed under PART G, Item 30 at TL-3 deviate more than 20% as in item 4(a) AND the measured concentration of the same parameter is within 25% of the Effluent quality limits listed under Part G, Item 30; c) Include the results of any investigation under item 4(a) in the monthly monitoring report required under Part J, Item 21; and d) Submit to the Board and an Inspector an understanding and justification of any discrepancy should the Licensee request a reduction from the increased sampling frequency of Part J, Item 4(a).
5. The Licensee, in consultation with an Inspector, shall establish the locations and GPS coordinates for all monitoring stations referred to in Schedule J.				The Licensee, in consultation with an Inspector, shall establish the locations and GPS coordinates for all monitoring stations referred to in Schedule J.
6. The Licensee shall install and maintain, to the satisfaction of an Inspector, signs that identify monitoring stations. The signs shall be posted in English, Inuktitut, Inuinnaqtun and French.				The Licensee shall install and maintain, to the satisfaction of an Inspector, signs that identify monitoring stations. The signs shall be posted in English, Inuktitut, Inuinnaqtun and French.
7. Additional monitoring may be requested by the Board or by the Inspector.	7. Additional monitoring may be requested by the Board or by the Inspector. <u>[NOTE: TMAC has revised its position. Refer to table column providing TMAC Rationale]</u>	INAC Sept. 21, 2016: <i>INAC agrees with TMAC that the Board does not have the authority to delegate the power to direct additional monitoring to the Inspector, so supports removal of that part of this term. However, the Board does itself have the authority to direct additional monitoring. INAC suggests amending this term as follows:</i>	TMAC Sept 14, 2016: Per section 70 of the NWNSRTA: "Subject to this Act and the regulations, the Board may include in a licence any conditions that it considers appropriate, including conditions relating to...monitoring programs to be undertaken..." The Act does not provide for the Board to	Additional monitoring may be requested <u>directed</u> by the Board or by the Inspector.

		<p>7. Additional monitoring may be requested directed by the Board or by the Inspector.</p> <p>ECCC Sept. 21, 2016: <i>ECCC disagrees with the deletion of this clause in its entirety however ECCC suggests that "or by the Inspector" be deleted</i></p>	<p>delegate this power to the Inspector. If the Inspector requires monitoring additional to the program set out in the Water Licence, such monitoring would require enforcement action to be taken by the Inspector in accordance with section 87 of the NWSRTA and is not broadly included in the scope of powers granted to inspectors under the Act.</p> <p>TMAC Sept 23, 2016 <i>TMAC agrees with proposed wording.</i></p>	
<p>8.The Licensee shall conduct Acute Lethality Testing, at monitoring station TL-1 and at monitoring station TL-4 as per Schedule J, Table 2, in accordance with the following test procedures:</p> <p>a) Acute lethality to Rainbow Trout, <i>Oncorhynchus mykiss</i> (in accordance with Environment Canada's Environmental Protection Series Biological Test Method EPS/1/RM/13); and</p> <p>b) Acute lethality to the crustacean, <i>Daphnia magna</i> (in accordance with Environment Canada's Environmental Protection Series Biological Test Method EPS/1/RM/14).</p>	<p>8. The Licensee shall conduct Acute Lethality Testing in accordance with and as required by the <i>Metal Mining Effluent Regulations</i>, at monitoring station TL-1 and at monitoring station TL-4 as per Schedule J, Table 2, in accordance with the following test procedures:</p> <p>a) Acute lethality to Rainbow Trout, <i>Oncorhynchus mykiss</i> (in accordance with Environment Canada's Environmental Protection Series Biological Test Method EPS/1/RM/13); and</p> <p>b) Acute lethality to the crustacean, <i>Daphnia magna</i> (in accordance with Environment Canada's Environmental Protection Series Biological Test Method EPS/1/RM/14).</p>		<p>TMAC Sept 14, 2016: Suggested revision to align Licence requirements with MMER requirements which may change over time.</p>	<p>The Licensee shall conduct Acute Lethality Testing in accordance with and as required by the <i>Metal Mining Effluent Regulations</i>, at monitoring station TL-1 and at monitoring station TL-4 as per Schedule J, Table 2, in accordance with the following test procedures:</p> <p>a) Acute lethality to Rainbow Trout, <i>Oncorhynchus mykiss</i> (in accordance with Environment Canada's Environmental Protection Series Biological Test Method EPS/1/RM/13); and</p> <p>b) Acute lethality to the crustacean, <i>Daphnia magna</i> (in accordance with Environment Canada's Environmental Protection Series Biological Test Method EPS/1/RM/14).</p>
<p>9.All analyses shall be conducted as described in the most recent edition of "Standard Methods for the Examination of Water and Wastewater" or by other such methods approved by an Analyst.</p>	<p>9. All analyses shall be conducted as described in the most recent edition of "Standard Methods for the Examination of Water and Wastewater" or by other such methods <u>approved by applicable legislation or policy</u> or a qualified Analyst.</p> <p><u>NOTE: TMAC has revised its position. Refer to table column providing TMAC Rationale]</u></p>	<p>ECCC Sept. 21, 2016: <i>ECCC disagrees with the added text as it is unclear how "applicable policy" would be defined.</i></p>	<p>TMAC Sept 23, 2016 <i>TMAC acknowledges and agrees.</i></p>	<p>All analyses shall be conducted as described in the most recent edition of "Standard Methods for the Examination of Water and Wastewater" or by other such methods <u>approved by applicable legislation</u> or a qualified Analyst</p>
<p>10.All compliance analyses shall be performed in an accredited laboratory according to ISO/IEC Standard 17025.</p>				<p>All compliance analyses shall be performed in an accredited laboratory according to ISO/IEC Standard 17025.</p>
<p>11.The Licensee shall file a letter with the Board for review confirming application for accreditation for the on-site environmental laboratory prior to Operations.</p>	<p>11.The Licensee shall file a letter with the Board for review confirming application for accreditation for the on-site environmental laboratory prior to Operations.</p>		<p>TMAC Sept 14, 2016: Remove. There will not be an environmental laboratory on site.</p>	<p>The Licensee shall file a letter with the Board for review confirming application for accreditation for the on-site environmental laboratory prior to Operations.</p>
<p>12.The Licensee shall measure and record all flow and volume measurements on a monthly basis, during Operations, and any use of Waters (unless otherwise stated):</p>	<p>a) The volume of freshwater obtained from Doris Lake for <u>domestic use potable water</u>;</p> <p>b) The volume of freshwater obtained from Windy Lake for <u>domestic use by the Project</u>;</p> <p>c) The volume of freshwater obtained from Doris</p>		<p>TMAC Sept 14, 2016: Suggestions for clarity.</p>	<p>The Licensee shall measure and record all flow and volume measurements on a monthly basis, during Operations, and any use of Waters (unless otherwise stated):</p> <p>a) The volume of freshwater obtained from</p>

<p>a) The volume of freshwater obtained from Doris Lake for potable water;</p> <p>b) The volume of freshwater obtained from Doris Lake for process water;</p> <p>c) The volume of reclaim water obtained from Tail Lake for process water at Monitoring Station TL-8;</p> <p>d) Tonnes of mineralized and un-mineralized Waste Rock stored on the Temporary Waste Rock Pad and at other locations approved by the Board in writing, during construction, operations and closure.;</p> <p>e) Tonnes of waste rock returned underground on a monthly basis during construction, operation and closure;</p> <p>f) The volume of sewage sludge removed from the Wastewater Treatment Plant and the locations or method of sewage sludge disposal during construction, operation and closure; and</p> <p>g) Following the deposition of tailings, the ice thickness in Tail Lake measured on a monthly basis during construction, operations and closure.</p>	<p>Lake for process water <u>and other uses</u>;</p> <p>de) The volume of reclaim water obtained from <u>the Tailings Impoundment Area Tail Lake</u> for process water at Monitoring Station TL-8;</p> <p>ed) Tonnes of mineralized and un-mineralized Waste Rock stored on the Temporary Waste Rock Pad and at other locations approved by the Board in writing, during <u>C</u>onstruction, <u>O</u>perations and <u>C</u>losure;</p> <p>fe) Tonnes of Waste Rock returned underground on a monthly basis during <u>C</u>onstruction, <u>O</u>perations and <u>C</u>losure; and</p> <p>gf) The volume of sewage sludge removed from the <u>Domestic</u> Wastewater Treatment Plant and the locations or method of sewage sludge disposal during <u>C</u>onstruction, <u>O</u>perations and <u>C</u>losure; and</p> <p>g) Following the deposition of tailings, the ice thickness in Tail Lake measured on a monthly basis during construction, operations and closure.</p>			<p>Doris Lake for domestic use potable water;</p> <p>b) The volume of freshwater obtained from <u>Windy Lake for domestic use by the Project</u>;</p> <p>cb) The volume of freshwater obtained from Doris Lake for process water <u>and other uses</u>;</p> <p>de) The volume of reclaim water obtained from <u>the Tailings Impoundment Area Tail Lake</u> for process water at Monitoring Station TL-8;</p> <p>ed) Tonnes of mineralized and un-mineralized Waste Rock stored on the Temporary Waste Rock Pad and at other locations approved by the Board in writing, during <u>C</u>onstruction, <u>O</u>perations and <u>C</u>losure;</p> <p>fe) Tonnes of Waste Rock returned underground on a monthly basis during <u>C</u>onstruction, <u>O</u>perations and <u>C</u>losure; and</p> <p>gf) The volume of sewage sludge removed from the <u>Domestic</u> Wastewater Treatment Plant and the locations or method of sewage sludge disposal during <u>C</u>onstruction, <u>O</u>perations and <u>C</u>losure; and</p> <p>g) Following the deposition of tailings, the ice thickness in Tail Lake measured on a monthly basis during construction, operations and closure.</p>
<p>13.The Licensee shall measure and record in tonnes (unless otherwise stated) including the location of disposal (temporary and permanent) for the following:</p> <p>a) The daily dry tonnes of combined tailings placed in the Tailings Impoundment Area;</p> <p>b) The daily dry tonnes of cyanide leach residue; and</p> <p>c) The monthly quantity of ore processed.</p>	<p>a) The daily dry tonnes of combined tailings placed in the Tailings Impoundment Area;</p> <p>b) the daily dry tonnes of cyanide leach <u>tailings placed on the waste rock pile for disposal underground</u>;</p> <p>c) The monthly quantity of ore processed.</p> <p><u>NOTE: TMAC has provided clarification. Refer to table column providing TMAC Rationale]</u></p>	<p>ECCC Sept. 21, 2016: <i>ECCC recommends retaining "c) the monthly quantity of ore processed."</i></p>	<p>TMAC Sept 14, 2016: Remove reference to "combined tailings" because cyanide destruct tailings will be placed underground</p> <p>TMAC Sept 23, 2016: <i>TMAC does not propose to remove item c and agrees to retain the current wording of this condition.</i></p>	<p>The Licensee shall measure and record in tonnes (unless otherwise stated) including the location of disposal (temporary and permanent) for the following:</p> <p>a) The daily dry tonnes of combined tailings placed in the Tailings Impoundment Area;</p> <p>b) the daily dry tonnes of cyanide leach <u>tailings placed on the waste rock pile for disposal underground</u>;</p> <p>c) The monthly quantity of ore processed.</p>
14.The Licensee shall undertake the Thermal Monitoring Program detailed in Table 3 of Schedule J.				14.The Licensee shall undertake the Thermal Monitoring Program detailed in Table 3 of Schedule J.
15.The Licensee shall continue to monitor thermistors located between the Tailings Impoundment Area and Doris Lake and between Doris Lake and the underground workings. The monitoring shall be consistent with the baseline thermal monitoring program and shall be included in Table 3 of Schedule J.				15.The Licensee shall continue to monitor thermistors located between the Tailings Impoundment Area and Doris Lake and between Doris Lake and the underground workings. The monitoring shall be consistent with the baseline thermal monitoring program and shall be included in Table 3 of Schedule J.
16.The Licensee shall install additional thermistors to monitor rock temperatures surrounding the underground mine openings, particularly in the pillar adjacent	<p>16.The Licensee shall install additional thermistors to monitor rock temperatures surrounding the underground mine openings, particularly in the pillar adjacent to the Doris Lake Talik. These thermistors</p>	<p>KIA Sept. 21, 2016: <i>Thermistors although they now intend to mine into the talik the data from the thermistors would be a valuable record of</i></p>	<p>TMAC Sept 14, 2016: TMAC request that this be removed. The original intent of this condition was to ensure that</p>	

to the Doris Lake Talik. These thermistors shall be added to Table 3 of Schedule J and shall be monitored on a monthly basis, during periods when the site is occupied, during construction, Operations, closure and during Care and Maintenance.	shall be added to Table 3 of Schedule J and shall be monitored on a monthly basis, during periods when the site is occupied, during construction, Operations, closure and during Care and Maintenance.	<i>how the activity influenced rock temperatures and if their activities changed the magnitude of the talk.</i>	mining doesn't enter the talik. The change in mine plan now includes mining in the talik, so this condition is no longer needed. This item was in place to ensure that we don't enter the talik. TMAC Sept 23, 2016: <i>TMAC believes that this adds nothing to the operation or regulation of the facility and therefore this is not require nor is it a comment suitable to the NWB process. .</i>	
17. The Licensee, in consultation with an Inspector, shall establish and confirm the locations and GPS coordinates for all monitoring stations referred to in PART J, Item 16.				The Licensee, in consultation with an Inspector, shall establish and confirm the locations and GPS coordinates for all monitoring stations referred to in PART J, Item 16.
18. The Licensee shall ensure that a geotechnical inspection is carried out annually between July and September by a Geotechnical Engineer. The inspection shall be conducted in accordance with the Canadian Dam Safety Guidelines where applicable and take into account all major earthworks, including the following: a) North and South Dams; b) Geotechnical instrumentation and associated monitoring data; c) A description of geophysical and permafrost conditions at the project site; d) Tailings Impoundment Area shoreline and erosion strip survey monitoring results; e) Emergency Dump Catch Basins; f) All weather access roads; g) Roberts Bay Jetty; h) Landfill; i) Landfarm; j) Fuel Storage and Containment Facilities at the Plant Site and Roberts Bay site; k) Sedimentation Pond; l) Pollution control Pond; m) Sumps; n) Underground mine openings; o) Groundwater conditions underground; p) Rock temperature measurements and groundwater inflow in the underground mine workings;	c) A description of geophysical and permafrost conditions at the P project site; e) Emergency Dump Catch Basins; l) Pollution C ontrol Ponds; g) Roberts Bay Jetty ;		TMAC Sept 14, 2016: Suggest removal of Jetty monitoring as this is not a water licence related facility.	19. The Licensee shall ensure that a geotechnical inspection is carried out annually between July and September by a Geotechnical Engineer. The inspection shall be conducted in accordance with the Canadian Dam Safety Guidelines where applicable and take into account all major earthworks, including the following: a) North and South Dams; b) Geotechnical instrumentation and associated monitoring data; c) A description of geophysical and permafrost conditions at the P project site;; d) Tailings Impoundment Area shoreline and erosion strip survey monitoring results; e) Emergency Dump Catch Basins; f) All weather access roads; g) Roberts Bay Jetty ; h) Landfill; i) Landfarm; j) Fuel Storage and Containment Facilities at the Plant Site and Roberts Bay site; k) Sedimentation Pond; l) Pollution C ontrol Ponds; m) Sumps; n) Underground mine openings; o) Groundwater conditions underground; p) Rock temperature measurements and groundwater inflow in the underground mine workings; q) Sedimentation control berm at the overburden dump; and r) Doris North Camp Area Diversion Berm.

q) Sedimentation control berm at the overburden dump; and r) Doris North Camp Area Diversion Berm.				
19. The Licensee shall submit to the Board, within sixty (60) days of completion of the geotechnical inspection, the Geotechnical Engineer's inspection report. The report shall include a cover letter from the Licensee outlining an implementation plan addressing each of the Geotechnical Engineer's recommendations.	19. The Licensee shall submit to the Board, within sixty (60) <u>ninety (90)</u> days of completion of the geotechnical inspection, the Geotechnical Engineer's inspection report. The report shall include a cover letter from the Licensee outlining an implementation plan addressing each of the Geotechnical Engineer's recommendations.		TMAC Sept 14, 2016: Suggested extension to standard timeline in order to provide adequate time for qualified individual to undertake inspection and prepare report.	The Licensee shall submit to the Board, within sixty (60) <u>ninety (90)</u> days of completion of the geotechnical inspection, the Geotechnical Engineer's inspection report. The report shall include a cover letter from the Licensee outlining an implementation plan addressing each of the Geotechnical Engineer's recommendations.
20. The Licensee shall visually monitor and record observations, to be made available to an Inspector upon request, on a daily basis during periods of discharge onto the tundra from: a) Landfill Sump; b) Sedimentation Pond; c) Landfarm Sump; d) Plant Site Fuel Storage and Containment Area Sump; e) Roberts Bay Fuel Storage and Containment Area Sumps; f) Wastewater Treatment Plant (during the construction phase); and h) Reagent and cyanide storage facility sumps.	20. The Licensee shall visually monitor and record observations, to be made available to an Inspector upon request, on a daily basis during periods of discharge onto the tundra from: a) Landfill Sump; b) Sedimentation Pond; c) Landfarm Sump; d) Plant Site Fuel Storage and Containment <u>Facility Area</u> Sump; e) Roberts Bay Fuel Storage and Containment <u>Facility Area</u> Sumps; f) <u>Domestic Wastewater Treatment Plant (during the construction phase)</u> ; and g) h) Reagent and <u>Cyanide Storage Facility</u> sumps. <u>The Licensee shall visually monitor and record observations, to be made available to an Inspector upon request, on a monthly basis during periods of discharge onto the tundra from the Domestic Wastewater Treatment Plant.</u> <u>NOTE: TMAC has modified its position. Refer to table column providing TMAC Rationale</u>	INAC Sept. 21, 2016: <i>INAC recommends that the Licensee visually monitor and record observations during periods of tundra discharge from the Domestic Wastewater Treatment Plan via either weekly visual inspections or monthly inspections with photographic comparison. Monitoring results should be provided in monthly monitoring reports.</i> ECCC Sept. 21, 2016: <i>ECCC disagrees that monthly monitoring is sufficient. The Doris North Project is located in a region where permafrost degrades fast when thermally challenged. Thermally induce erosion could become well established over the course of a month. Further ECCC notes that the condition lists many sources of tundra discharge water but ECCC understood that tundra discharges would be composed solely of effluent from secondary containment areas and from the Waste Water Treatment Plant.</i>	TMAC Sept 14, 2016: Daily frequency is not appropriate or useful data during periods of discharge from the Domestic Wastewater Treatment Plant because monthly monitoring would be sufficient to confirm absence of erosion. TMAC Sept 23, 2016: <i>TMAC agrees to monitor weekly during periods of discharge onto the tundra from the Domestic Wastewater Treatment Plant .</i>	The Licensee shall visually monitor and record observations, to be made available to an Inspector upon request, on a daily basis during periods of discharge onto the tundra from: a) Landfill Sump; b) Sedimentation Pond; c) Landfarm Sump; d) Plant Site Fuel Storage and Containment <u>Facility Area</u> Sump; e) Roberts Bay Fuel Storage and Containment <u>Facility Area</u> Sumps; f) <u>Domestic Wastewater Treatment Plant (during the construction phase)</u> ; and g) h) Reagent and <u>Cyanide Storage Facility</u> sumps. <u>The Licensee shall visually monitor and record observations, to be made available to an Inspector upon request, on a weekly basis during periods of discharge onto the tundra from the Domestic Wastewater Treatment Plant.</u>
21. The Licensee shall, within thirty (30) days following the month being reported, submit to the Board a monthly monitoring report in an electronic and hardcopy. The Report shall include the following: a) All data and information required by this Part and generated by the Monitoring Program in the Tables of Schedule J; b) Copies of results required by NIRB Project Certificate, Item 10; c) An assessment of data to identify areas of non-compliance with regulated discharge parameters referred to in	21. The Licensee shall, within thirty (30) days following the month being reported, submit to the Board a monthly monitoring report in an electronic <u>format and hardcopy</u> . The Report shall include the following: a) All data and information required by this Part and generated by the Monitoring Program in the Tables of Schedule J; b) Copies of results required by NIRB Project Certificate, Item 10; c) An assessment of data to identify areas of non-compliance with regulated discharge parameters referred to in PART G; d) During Operations, a summary of monthly operational assessments of the water balance and	INAC Aug 3, 2016 The Licensee shall, within thirty (30) days following the month being reported, submit to the Board a monthly monitoring report in an electronic and hardcopy <u>format</u> . The Report shall include the following:	TMAC Sept 14, 2016: TMAC suggests removal of B as this is a requirement relating to the onsite analytical laboratory which has been removed. With respect to removal of (e) given that there are no discharges from the TIA to freshwater during operations a detailed water balance and water quality model need not be maintained. Monthly observations of water quality will suffice to identify potential effects. As noted above TMAC	The Licensee shall, within thirty (30) days following the month being reported, submit to the Board a monthly monitoring report in an electronic <u>format and hardcopy</u> . The Report shall include the following: a) All data and information required by this Part and generated by the Monitoring Program in the Tables of Schedule J; b) Copies of results required by NIRB Project Certificate, Item 10; c) An assessment of data to identify areas of non-compliance with regulated discharge parameters referred to in PART G; d) During Operations, a summary of monthly operational assessments of the water

<p>PART G;</p> <p>d) During Operations, a summary of monthly operational assessments of the water balance and water quality model;</p> <p>e) Results of daily visual assessment of suspended sediment along the perimeter of the Tailings Impoundment Area shoreline during Construction, Operations, and closure and while carrying out inspections during Care and Maintenance; and</p> <p>f) Reports should document the Doris North Camp Diversion Berm's effectiveness of diverting runoff away from the camp area. As minimum, conditions during spring freshet, major rain events, and periods of sustained precipitation should be monitored. Documented information can include flow measurements, photographs and notes.</p>	<p>water quality model;</p> <p>e) Results of daily visual assessment of suspended sediment along the perimeter of the Tailings Impoundment Area shoreline during Construction, Operations, and closure and while carrying out inspections during Care and Maintenance; and</p> <p>f) Reports should document the Doris North Camp Diversion Berm's effectiveness of diverting runoff away from the camp area. As minimum, conditions during spring freshet, major rain events, and periods of sustained precipitation should be monitored. Documented information can include flow measurements, photographs and notes.</p>		<p>does not need to monitor for sediment in the TIA as sub aqueous is no longer the disposal method.</p>	<p>balance and water quality model;</p> <p>e) Results of daily visual assessment of suspended sediment along the perimeter of the Tailings Impoundment Area shoreline during Construction, Operations, and closure and while carrying out inspections during Care and Maintenance; and</p> <p>f) Reports should document the Doris North Camp Diversion Berm's effectiveness of diverting runoff away from the camp area. As minimum, conditions during spring freshet, major rain events, and periods of sustained precipitation should be monitored. Documented information can include flow measurements, photographs and notes.</p>
<p>PART K CONDITIONS APPLYING TO GENERAL AND AQUATIC EFFECTS MONITORING PLANS</p>				
<p>1. The Board is in receipt of the plan HOPE BAY MINING LTD., Quality Assurance and Quality Control Plan, 2AM-DOH0713, 2BB-BOS1217, 2BE-HOP1222, HB-QA-ENV-MP-001, November 2012 (REV 7.1) that was found to be acceptable to an Analyst by letter dated November 22, 2012.</p>				<p>The Board is in receipt of the plan HOPE BAY MINING LTD., Quality Assurance and Quality Control Plan, 2AM-DOH0713, 2BB-BOS1217, 2BE-HOP1222, HB-QA-ENV-MP-001, November 2012 (REV 7.1) that was found to be acceptable to an Analyst by letter dated November 22, 2012.</p>
<p>2. The Licensee shall submit for review of the Board, three (3) months prior to Operations, a revised Quality Assurance/ Quality Control Plan that includes field and laboratory procedures and requirements for independent third party sampling and analysis. The Plan shall include up to date sampling methods to all applicable standards, acceptable to an Accredited Laboratory as required by Part K, Item 4 and Item 5. The Plan shall include a cover letter from the accredited laboratory confirming acceptance of the Plan for analyses to be performed under this Licence. This Plan shall be developed in accordance with the 1996 Quality Assurance (QA) and Quality Control (QC) Guidelines for Use by Class "A" (INAC).</p>	<p>2. The Licensee shall submit for review of the Board, three (3) months prior to Operations, a revised <u>comply with the approved</u> Quality Assurance/ Quality Control Plan that includes field and laboratory procedures and requirements for independent third party sampling and analysis. The Plan shall include up to date sampling methods to all applicable standards, acceptable to an Accredited Laboratory as required by Part K, Item 4 and Item 5. The Plan shall include a cover letter from the accredited laboratory confirming acceptance of the Plan for analyses to be performed under this Licence. This Plan shall be developed in accordance with the 1996 Quality Assurance (QA) and Quality Control (QC) Guidelines for Use by Class "A" (INAC).</p>		<p>TMAC Sept 14, 2016: Note this Item was originally intended to support certification of the environmental laboratory on site. There will not be an environmental laboratory on site. A third party accredited laboratory will be used. Therefore, query whether this term should be removed in its entirety.</p> <p>As an alternative to a Board – approved QA-QC Plan, TMAC requests the Board consider including a reference to "Industry standard QA-QC Plan"</p>	<p>The Licensee shall submit for review of the Board, three (3) months prior to Operations, a revised <u>comply with the approved</u> Quality Assurance/ Quality Control Plan that includes field and laboratory procedures and requirements for independent third party sampling and analysis. The Plan shall include up to date sampling methods to all applicable standards, acceptable to an Accredited Laboratory as required by Part K, Item 4 and Item 5. The Plan shall include a cover letter from the accredited laboratory confirming acceptance of the Plan for analyses to be performed under this Licence. This Plan shall be developed in accordance with the 1996 Quality Assurance (QA) and Quality Control (QC) Guidelines for Use by Class "A" (INAC).</p>

3. The Licensee shall annually review the approved QA/QC Plan and modify the Plan as necessary. Proposed changes shall be submitted to an Accredited Laboratory for approval.	3. The Licensee shall annually review the approved QA/QC Plan and modify the Plan as necessary. Proposed changes shall be submitted to an Accredited Laboratory for approval.		TMAC Sept 14, 2016: Note this Item was originally intended to support certification of the environmental laboratory on site. There will not be an environmental laboratory on site. A third party accredited laboratory will be used.	The Licensee shall annually review the approved QA/QC Plan and modify the Plan as necessary. Proposed changes shall be submitted to an Accredited Laboratory for approval.
4. All analyses shall be conducted as described in the most recent edition of "Standard Methods for the Examination of Water and Wastewater" or by other such methods approved by an Accredited Laboratory.	4. All analyses shall be conducted as described in the most recent edition of "Standard Methods for the Examination of Water and Wastewater" or by other such methods approved by <u>applicable regulations or a qualified Analyst.</u>			All analyses shall be conducted as described in the most recent edition of "Standard Methods for the Examination of Water and Wastewater" or by other such methods approved by <u>applicable regulations or a qualified Analyst.</u>
5. All analyses shall be performed in a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.	5. All analyses shall be performed in a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.		TMAC Sept 14, 2016: Suggest removing. See definition of "Accredited Laboratory".	All analyses shall be performed in a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.
6. The Licensee shall confirm the absence of seepage from the Temporary Waste Pad in groundwater downstream of the Pollution Control Pond.	6. The Licensee shall confirm the absence of seepage from the Temporary Waste Pad in groundwater downstream of the Pollution Control Pond.		TMAC Sept 14, 2016: There are sumps below the PCP that are intended to deal with additional water.	The Licensee shall confirm the absence of seepage from the Temporary Waste Pad in groundwater downstream of the Pollution Control Pond.
7. The Licensee shall submit to the Board for review, six (6) months prior to Operations, a revised Doris North Gold Mind Project: Aquatic Effects Monitoring Plan (AEMP) that has been developed in consultation with Environment Canada. The revised AEMP shall consider modifications and advances in schedule which are consistent with the objectives and requirements of the MMER.	<p>7. The Board has approved with issuance of the licence the Plan entitled "Hope Bay Project Doris The Licensee shall submit to the Board for review, six (6) months prior to Operations, a revised Doris North Gold Mind Mine Project: Aquatic Effects Monitoring Plan, August 2016" as may be revised from time to time in accordance with Part B, Item 6. (AEMP) that has been developed in consultation with Environment Canada. The revised AEMP shall consider modifications and advances in schedule which are consistent with the objectives and requirements of the MMER.</p> <p><u>NOTE: TMAC has provided clarification. Refer to table column providing TMAC Rationale]</u></p>	<p>INAC Aug 3, 2016 The Licensee shall submit to the Board for review, six (6) months prior to Operations, a revised Doris North Gold Mind Mine Project: Aquatic Effects Monitoring Plan (AEMP) that has been developed in consultation with Environment Canada. The revised AEMP shall consider modifications and advances in schedule which are consistent with the objectives and requirements of the MMER.</p> <p><i>It is recommended that the deadline for providing updated plans and notification prior to commencing Operations be consistent.</i></p> <p>ECCC Aug 21, 2016 <i>ECCC notes that the suggested revisions presupposes plan approval at the time of licence issuance. ECCC disagrees with the assumption that the plan will be approved at time of licensing, changes are being made to plans and those changes will require review and approval.</i></p>	<p>TMAC Sept 14, 2016: The suggested revision assumes plan approval at the time of licence issuance.</p> <p>TMAC Sept 23, 2016: <i>A preliminary draft AEMP was submitted in March and underwent review and engagement of the Aquatic Working Group (of which ECCC is a member). In response to party commented, a revised AEMP was submitted again in June and again underwent review and engagement of the Aquatic Working Group. Subsequently, a revision to the AEMP was submitted in August with TMAC's final written submission to the NWB. Further, as a result of additional party comments that arose during the public hearing, TMAC submitted another revision of the AEMP as an exhibit prior to the closure of the public hearing. It was understood that submission of this exhibit addressed parties remaining comments.</i></p>	<p>The Board has approved with issuance of the licence the Plan entitled "Hope Bay Project Doris The Licensee shall submit to the Board for review, six (6) months prior to Operations, a revised Doris North Gold Mind Mine Project: Aquatic Effects Monitoring Plan, August 2016" as may be revised from time to time in accordance with Part B, Item 6. (AEMP) that has been developed in consultation with Environment Canada. The revised AEMP shall consider modifications and advances in schedule which are consistent with the objectives and requirements of the MMER.</p>

			<p><i>It is noted that INAC has confirmed in its Sept 21 2016 that the Exhibit satisfies their concerns and also that the KIA's submission of the same date does not object to the Board approval of the Plan.</i></p> <p><i>TMAC sees no need for this Plan to undergo further party review and requests that the Board approve this Plan with licence issuance.</i></p>	
PART L CONDITIONS APPLYING TO ABANDONMENT, RECLAMATION AND CLOSURE				
1. The Licensee shall notify the Board in writing, at least sixty (60) days prior any intent to achieve Recognized Closed Mine status.				The Licensee shall notify the Board in writing, at least sixty (60) days prior any intent to achieve Recognized Closed Mine status.
2. The Licensee shall notify the Board, a soon as practically possible, of any intent to enter into a Care and Maintenance Phase.				The Licensee shall notify the Board, a soon as practically possible, of any intent to enter into a Care and Maintenance Phase.
3. The Licensee shall, upon providing notice to the Board as per Part L, Item 2, review all operational plans and submit revised Plans to reflect the Care and Maintenance status, to the Board for approval in writing, within three (3) months of providing notice.				The Licensee shall, upon providing notice to the Board as per Part L, Item 2, review all operational plans and submit revised Plans to reflect the Care and Maintenance status, to the Board for approval in writing, within three (3) months of providing notice.
4. The Licensee shall provide to the Board, at least thirty (30) days advanced notification in writing, of the initial start or change of Operations. Notification may be provided separately or in accordance with monthly monitoring report as per PART J, Item 21.	<p>4.The Licensee shall provide to the Board, at least thirty (30) days advanced notification in writing, of the initial start or change of Operations, <u>deposition of tailings or change of Project Phase</u>. Notification may be provided separately or in accordance with monthly monitoring report as per PART J, Item 21.</p> <p><u>NOTE: TMAC has provided clarification. Refer to table column providing TMAC Rationale]</u></p>	<p>INAC Aug 3, 2016 <i>It is recommended that the deadline for providing updated plans and notification prior to commencing Operations be consistent.</i></p> <p>INAC Aug 21, 2016 <i>INAC recommends that the Licence be revised to require notification pertaining to all significant project phases or milestones, including but not limited to: construction, ore extraction, milling, tailings deposition, care and maintenance, etc.</i></p>	<p>TMAC Sept 14, 2016: Notification trigger is currently unclear, revise for clarity.</p> <p>TMAC Sept 23, 2016: <i>TMAC Maintains position, and provides a revision for clarity.</i></p>	The Licensee shall provide to the Board, at least thirty (30) days advanced notification in writing, of the initial start or change of Operations <u>(initiation of milling) or change of Project Phase</u> . Notification may be provided separately or in accordance with monthly monitoring report as per PART J, Item 21.
5. The Board has approved the "Doris North Closure and Reclamation Plan, Hope Bay Mining Ltd." prepared by SRK Consulting (Canada) Inc., 1CH008.065, August 2012. The Licensee shall submit to the Board for review, within sixty (60) days of approval of the Licence, a revised closure plan,	<p>5.The Board has approved with issuance of the licence the Plan entitled "Doris Mine Interim Closure and Reclamation Plan, Hope Bay, Nunavut, September 2016" as may be revised from time to time as otherwise expressly noted in this Licence. the "Doris North Closure and Reclamation Plan, Hope Bay Mining Ltd." prepared by SRK Consulting (Canada) Inc., 1CH008.065, August 2012. The</p>		<p>TMAC Sept 14, 2016: The suggested revision assumes plan approval at the time of licence issuance.</p> <p>TMAC Sept 23, 2016: <i>A revised ICRP was submitted along with the Amendment</i></p>	The Board has approved <u>with issuance of the licence the Plan entitled "Doris Mine Interim Closure and Reclamation Plan, Hope Bay, Nunavut, September 2016"</u> as may be revised <u>from time to time</u> as otherwise expressly noted in this Licence. the "Doris North Closure and Reclamation Plan, Hope Bay Mining Ltd." prepared by SRK Consulting (Canada) Inc.,

addressing the technical comments received and based on the response submission of the Applicant on February 14, 2013.	<p>Licensee shall submit to the Board for review, within sixty (60) days of approval of the Licence, a revised closure plan, addressing the technical comments received and based on the response submission of the Applicant on February 14, 2013.</p> <p><u>NOTE: TMAC has provided clarification. Refer to table column providing TMAC Rationale]</u></p>		<p><i>Application in June 2015. In response to party comments, subsequent to the Technical Meetings and security quantum discussions, an addendum addressing final outstanding party issues was submitted at the Public Hearing as an exhibit. This exhibit was less than 1 page in length and included addition of already agreed upon wording. It was understood that submission of this exhibit addressed parties remaining comments.</i></p> <p><i>It is noted that INAC has confirmed in its Sept 21 2016 that the Exhibit satisfies their concerns and also that the KIA's submission of the same date does not object to the Board approval of the Plan.</i></p> <p><i>TMAC sees no need for this Plan to undergo further party review and requests that the Board approve this Plan with licence issuance.</i></p>	<p>1CH008.065, August 2012. The Licensee shall submit to the Board for review, within sixty (60) days of approval of the Licence, a revised closure plan, addressing the technical comments received and based on the response submission of the Applicant on February 14, 2013.</p>
<p>6. The Licensee shall submit to the Board for approval, within six (6) months of Operations, an Interim Closure and Reclamation Plan prepared in accordance with the Mine Site Reclamation Guidelines for the Northwest Territories, 2007 and consistent with the INAC Mine Site Reclamation Policy for Nunavut, 2002. The Plan shall include the following:</p> <p>a) Detailed description, including maps and other visual representations, of the pre-construction conditions for each site, accompanied by a detailed description of the proposed final landscape, with emphasis on the reclamation of surface drainage over the restored area;</p> <p>b) A description of how progressive reclamation will be employed and monitored throughout the life of the mine, plus reclamation scheduling and coordination of activities with the overall sequence of the project; details of reclamation scheduling and</p>	<p>6. The Licensee shall submit to the Board for approval, within six (6) months of Operations, an Interim Closure and Reclamation Plan prepared in accordance with the Mine Site Reclamation Guidelines for the Northwest Territories, 2007 and consistent with the INAC Mine Site Reclamation Policy for Nunavut, 2002. The Plan shall include the following:</p> <p>a) Detailed description, including maps and other visual representations, of the pre-construction conditions for each site, accompanied by a detailed description of the proposed final landscape, with emphasis on the reclamation of surface drainage over the restored area;</p> <p>b) A description of how progressive reclamation will be employed and monitored throughout the life of the mine, plus reclamation scheduling and coordination of activities with the overall sequence of the project; details of reclamation scheduling and procedures for coordinating reclamation activities within the overall mining sequence and materials balance;</p> <p>c) Implications of water quality model re-calibration results on the Tailings Impoundment Area discharge strategy and any adaptive</p>	<p>INAC Aug 3, 2016</p> <p>It is recommended that the deadline for providing updated plans and notification prior to commencing Operations be consistent.</p>	<p>TMAC Sept 14, 2016:</p> <p>Suggest removing. This item is satisfied by the preceding Item. Suggest removing this.</p>	<p>The Licensee shall submit to the Board for approval, within six (6) months of Operations, an Interim Closure and Reclamation Plan prepared in accordance with the Mine Site Reclamation Guidelines for the Northwest Territories, 2007 and consistent with the INAC Mine Site Reclamation Policy for Nunavut, 2002. The Plan shall include the following:</p> <p>a) Detailed description, including maps and other visual representations, of the pre-construction conditions for each site, accompanied by a detailed description of the proposed final landscape, with emphasis on the reclamation of surface drainage over the restored area;</p> <p>b) A description of how progressive reclamation will be employed and monitored throughout the life of the mine, plus reclamation scheduling and coordination of activities with the overall sequence of the project; details of reclamation scheduling and procedures for coordinating reclamation activities</p>

<p>procedures for coordinating reclamation activities within the overall mining sequence and materials balance;</p> <p>c) Implications of water quality model re-calibration results on the Tailings Impoundment Area discharge strategy and any adaptive management measures that may be required;</p> <p>d) An evaluation of closure and reclamation measures for each mine component, including the goals, objectives, closure criteria and the rationale for selection of the preferred measures;</p> <p>e) A comprehensive assessment of materials suitability, including geochemical and physical characterization, and schedule of availability for reclamation needs, with attention to cover materials, including maps where appropriate, showing sources and stockpile locations of all reclamation construction materials and any water related mitigation required during implementation;</p> <p>f) An assessment and description of any required post-closure treatment for drainage water that is not acceptable for discharge from any of the reclaimed mine components;</p> <p>g) Contingency measures for all reclamation components including action thresholds that are linked to the monitoring programs;</p> <p>h) Monitoring programs to assess reclamation performance and environmental conditions including monitoring locations for surface water and groundwater, parameters, schedules and overall timeframes;</p> <p>i) QA/QC procedures for managing the demolition landfill and other waste disposal areas;</p> <p>j) The requirement that all Waste Rock classified as mineralized in accordance with the approved Waste Rock and Ore Management Plan as submitted under PART G, Item 14, be returned underground as backfill through progressive and final reclamation procedures, unless otherwise approved by the Board in writing.</p> <p>k) Underground mine plans and sections,</p>	<p>management measures that may be required;</p> <p>d) An evaluation of closure and reclamation measures for each mine component, including the goals, objectives, closure criteria and the rationale for selection of the preferred measures;</p> <p>e) A comprehensive assessment of materials suitability, including geochemical and physical characterization, and schedule of availability for reclamation needs, with attention to cover materials, including maps where appropriate, showing sources and stockpile locations of all reclamation construction materials and any water related mitigation required during implementation;</p> <p>f) An assessment and description of any required post-closure treatment for drainage water that is not acceptable for discharge from any of the reclaimed mine components;</p> <p>g) Contingency measures for all reclamation components including action thresholds that are linked to the monitoring programs;</p> <p>h) Monitoring programs to assess reclamation performance and environmental conditions including monitoring locations for surface water and groundwater, parameters, schedules and overall timeframes;</p> <p>i) QA/QC procedures for managing the demolition landfill and other waste disposal areas;</p> <p>j) The requirement that all Waste Rock classified as mineralized in accordance with the approved Waste Rock and Ore Management Plan as submitted under PART G, Item 14, be returned underground as backfill through progressive and final reclamation procedures, unless otherwise approved by the Board in writing.</p> <p>k) Underground mine plans and sections, including the areas of backfill, the type of material placed and volumes should also be included;</p> <p>l) Protocol for the disposal of any contaminated soil into the underground mine at closure;</p> <p>m) An assessment of the long term physical stability of all remaining project components including the north and south dams;</p> <p>n) Detailed criteria for the final breaching of the North Dam;</p> <p>o) A revised closure and reclamation cost estimate; and</p> <p>p) A detailed implementation schedule for completion of reclamation work.</p>			<p>within the overall mining sequence and materials balance;</p> <p>e) Implications of water quality model re-calibration results on the Tailings Impoundment Area discharge strategy and any adaptive management measures that may be required;</p> <p>d) An evaluation of closure and reclamation measures for each mine component, including the goals, objectives, closure criteria and the rationale for selection of the preferred measures;</p> <p>e) A comprehensive assessment of materials suitability, including geochemical and physical characterization, and schedule of availability for reclamation needs, with attention to cover materials, including maps where appropriate, showing sources and stockpile locations of all reclamation construction materials and any water related mitigation required during implementation;</p> <p>f) An assessment and description of any required post-closure treatment for drainage water that is not acceptable for discharge from any of the reclaimed mine components;</p> <p>g) Contingency measures for all reclamation components including action thresholds that are linked to the monitoring programs;</p> <p>h) Monitoring programs to assess reclamation performance and environmental conditions including monitoring locations for surface water and groundwater, parameters, schedules and overall timeframes;</p> <p>i) QA/QC procedures for managing the demolition landfill and other waste disposal areas;</p> <p>j) The requirement that all Waste Rock classified as mineralized in accordance with the approved Waste Rock and Ore Management Plan as submitted under PART G, Item 14, be returned underground as backfill through progressive and final reclamation procedures, unless otherwise approved by the Board in writing.</p> <p>k) Underground mine plans and sections, including the areas of backfill, the type of material placed and volumes should also be included;</p> <p>l) Protocol for the disposal of any contaminated soil into the underground</p>
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<p>including the areas of backfill, the type of material placed and volumes should also be included;</p> <p>l) Protocol for the disposal of any contaminated soil into the underground mine at closure;</p> <p>m) An assessment of the long-term physical stability of all remaining project components including the north and south dams;</p> <p>n) Detailed criteria for the final breaching of the North Dam;</p> <p>o) A revised closure and reclamation cost estimate; and</p> <p>p) A detailed implementation schedule for completion of reclamation work.</p>				<p>mine at closure;</p> <p>m) An assessment of the long-term physical stability of all remaining project components including the north and south dams;</p> <p>n) Detailed criteria for the final breaching of the North Dam;</p> <p>o) A revised closure and reclamation cost estimate; and</p> <p>p) A detailed implementation schedule for completion of reclamation work.</p>
<p>7. The Licensee shall submit to the Board for approval, within eighteen (18) months of the start of Operations, a Final Mine Closure and Reclamation Plan prepared in accordance with the Mine Site Reclamation Guidelines for the Northwest Territories, 2006 and consistent with the INAC Mine Site Reclamation Policy for Nunavut, 2002. The Final Plan shall incorporate revisions, which reflect the pending closed status of the mine, and include the following:</p> <p>a) Soil Quality Remediation Objectives along with CCME Guidelines and the Government of Nunavut Environmental Guideline for Site Remediation;</p> <p>b) Environmental Site Assessment plans in accordance Canadian Standards Association (CSA) criteria; and</p> <p>c) Evaluation of the Human Health and Ecological Risk Assessment.</p>	<p>7.The Licensee shall submit to the Board for approval, within eighteen (18) months of the start of Operations <u>six (6) months prior to the start of Closure</u>, a Final Mine Closure and Reclamation Plan prepared in accordance with the Mine Site Reclamation Guidelines for the Northwest Territories, 2006 and consistent with the INAC Mine Site Reclamation Policy for Nunavut, 2002 <u>as may be revised from time to time</u>. The Final Plan shall incorporate revisions, which reflect the pending closed status of the mine, and include the following:</p> <p>a.Soil Quality Remediation Objectives along with CCME Guidelines and the Government of Nunavut Environmental Guideline for Site Remediation;</p> <p>b.Environmental Site Assessment plans in accordance Canadian Standards Association (CSA) criteria; and</p> <p>c.Evaluation of the Human Health and Ecological Risk Assessment.</p> <p><u>NOTE: TMAC has revised its position. Refer to table column providing TMAC Rationale]</u></p>	<p>INAC Aug 3, 2016</p> <p>The Licensee shall submit to the Board for approval, within eighteen (18) months of the start of Operations, a Final Mine Closure and Reclamation Plan prepared in accordance with the Mine Site Reclamation Guidelines for the Northwest Territories, 2006 <u>2007</u> and consistent with the INAC Mine Site Reclamation Policy for Nunavut, 2002.</p> <p>INAC Sept 21, 2016:</p> <p><i>Six months prior to the start of Closure may not provide sufficient time for a Final Closure and Reclamation Plan to be reviewed and approved. INAC recommends that the Licensee provide both a Final Closure and Reclamation Plan and an updated closure cost estimate to the NWB for approval at least 12 months prior to the expected planned end of mining. This timeline is consistent with the Meaadowbank Type A Water Licence No. 2AM=MEA1525.</i></p> <p>ECCC Sept 21, 2016:</p> <p><i>6 months may not allow sufficient time for review and approval of the plan prior to implementation. ECCC suggest that 12 months prior to start of Closure may be more appropriate submission deadline.</i></p> <p>KIA Sept 21, 2016:</p> <p><i>It is noted that this timeline is no longer applicable based on the submitted amendment application.</i></p>	<p>TMAC Sept 14, 2016:</p> <p>Suggested revised timing of submission of final closure plan, as the plan that was reviewed during the amendment process fully considered the comment of Operations.</p> <p>TMAC Sept 23, 2016:</p> <p><i>Regarding submission of a Final Closure and Reclamation Plan 6 months prior to final closure, TMAC notes that this is consistent with the current language of the licence (18 months following the start of operations is the equivalent of 6 months prior to closure given the Doris North project 2 year mine plan at the time of licence issuance). Regardless, and in response to party comments, TMAC considers it reasonable to provide a Final Closure and Reclamation Plan 12 months prior to the start of Final Closure.</i></p>	<p>The Licensee shall submit to the Board for approval, within eighteen (18) months of the start of Operations <u>twelve (12) months prior to the start of Closure</u>, a Final Mine Closure and Reclamation Plan prepared in accordance with the Mine Site Reclamation Guidelines for the Northwest Territories, 2006 and consistent with the INAC Mine Site Reclamation Policy for Nunavut, 2002 <u>as may be revised from time to time</u>. The Final Plan shall incorporate revisions, which reflect the pending closed status of the mine, and include the following:</p> <p>a.Soil Quality Remediation Objectives along with CCME Guidelines and the Government of Nunavut Environmental Guideline for Site Remediation;</p> <p>b.Environmental Site Assessment plans in accordance Canadian Standards Association (CSA) criteria; and</p> <p>c.Evaluation of the Human Health and Ecological Risk Assessment.</p>

		<i>KIA agrees with INAC. Six (6) months is too short a time to deal with a final closure plan and licence.</i>		
8. The Licensee shall, if not approved by the Board, revise the Plan(s) referred to in this Part and resubmit to the Board for approval within thirty (30) days of receiving notification of the Board's decision.				The Licensee shall, if not approved by the Board, revise the Plan(s) referred to in this Part and resubmit to the Board for approval within thirty (30) days of receiving notification of the Board's decision.
9. The Licensee shall complete all reclamation work in accordance with the Plan(s) referred to in this Part as and when approved by the Board in writing.				The Licensee shall complete all reclamation work in accordance with the Plan(s) referred to in this Part as and when approved by the Board in writing.
10. The Licensee shall carry out progressive reclamation of any components of the project no longer required for the Licensee's operations.	10.The Licensee shall carry out progressive reclamation of any components of the project no longer required for the Licensee's operations. <u>Where Progressive Reclamation has been undertaken to the satisfaction of the Inspector the Licensee shall be entitled to a reduction in the bonding amount determined by the Board.</u>			The Licensee shall carry out progressive reclamation of any components of the project no longer required for the Licensee's operations. <u>Where Progressive Reclamation has been undertaken to the satisfaction of the Inspector the Licensee shall be entitled to a reduction in the bonding amount determined by the Board.</u>
11. All roads and airstrip, if any, shall be re-graded to match natural contour to reduce erosion.	Remove		TMAC Sept 14, 2016: This provision should be removed as it is a detail which would be considered as part of the review of the Closure Plan.	All roads and airstrip, if any, shall be re-graded to match natural contour to reduce erosion.
12. The Licensee shall remove any culverts and restore the drainage to match the natural channel. Measures shall be implemented to minimize erosion and sedimentation.	Remove		TMAC Sept 14, 2016: This provision should be removed as it is a detail which would be considered as part of the review of the Closure Plan.	The Licensee shall remove any culverts and restore the drainage to match the natural channel. Measures shall be implemented to minimize erosion and sedimentation.
13. In order to promote growth of vegetation and the needed microclimate for seed deposition, all disturbed surfaces shall be prepared by ripping, grading, or scarifying the surface to conform to the natural topography.	Remove		TMAC Sept 14, 2016: This provision should be removed as it is a detail which would be considered as part of the review of the Closure Plan.]	In order to promote growth of vegetation and the needed microclimate for seed deposition, all disturbed surfaces shall be prepared by ripping, grading, or scarifying the surface to conform to the natural topography.
14. Areas that have been contaminated by hydrocarbons from normal fuel transfer procedures shall be reclaimed to meet objectives as outlined in the Government of Nunavut's Environmental Guideline for Site Remediation, 2010. The use of reclaimed soils for the purpose of back fill or general site grading may be carried out only upon consultation and approval by the Government of Nunavut, Department of Environment and an Inspector.	Areas that have been contaminated by hydrocarbons from normal fuel transfer procedures shall be reclaimed to meet objectives as outlined in the Government of Nunavut's Environmental Guideline for Site Remediation, 2010. <u>Materials such as soil and rock that have been contaminated by hydrocarbons may be disposed of in the underground mine.</u> The use of reclaimed soils for the purpose of back fill or general site grading may be carried out only upon consultation and approval by the Government of Nunavut, Department of Environment and an Inspector.		TMAC Sept 14, 2016: This suggested change reflects the outcome of discussions between the parties undertaken during the licencing process and also reflects the content of the revised Waste Rock & Ore Management Plan.	Areas that have been contaminated by hydrocarbons from normal fuel transfer procedures shall be reclaimed to meet objectives as outlined in the Government of Nunavut's Environmental Guideline for Site Remediation, 2010. <u>Materials such as soil and rock that have been contaminated by hydrocarbons may be disposed of in the underground mine.</u> The use of reclaimed soils for the purpose of back fill or general site grading may be carried out only upon consultation and approval by the Government of Nunavut, Department of Environment and an Inspector.

15. The Licensee shall contour and stabilize all disturbed areas to a pre-disturbed state upon completion of work.	<u>The Licensee shall contour and stabilize all disturbed areas to a geo-technically stable state upon completion of work.</u> [NOTE: Refer to table column providing TMAC Rationale]	KIA Sept 21, 2016: <i>"Geo-technical" stability must also be safe for people and wildlife.</i>	TMAC Sept 14, 2016: It is noted that this will be dependent on land owner decision relating to disturbed areas. TMAC Sept 23, 2016: <i>TMAC recommend the Board includes KIA's recommended text.</i>	<u>The Licensee shall contour and stabilize all disturbed areas to a geotechnically stable state, that is safe for people and wildlife, upon completion of work.</u>
16. The Licensee shall consult traditional land users, land owners, and other stakeholders on the proposed post-closure land use criteria. Particularly, the proposal to leave certain facilities in place and confirm the soil quality remediation objectives.				The Licensee shall consult traditional land users, land owners, and other stakeholders on the proposed post-closure land use criteria. Particularly, the proposal to leave certain facilities in place and confirm the soil quality remediation objectives.
Schedules are provided for: A – Definitions B – General Conditions D – Conditions Applying to Construction G – Conditions Applying to Waste Management and Waste Management Plans J – Conditions Applying to General and Aquatic Effects Monitoring				Schedules are provided for: A – Definitions B – General Conditions D – Conditions Applying to Construction G – Conditions Applying to Waste Management and Waste Management Plans J – Conditions Applying to General and Aquatic Effects Monitoring
PART M SCHEDULES				
Schedule A. Definitions				
In this Licence: 2AM-DOH1325	In this Licence: 2AM-DOH1323 5			In this Licence: 2AM-DOH1323 5
"Abandonment" means the permanent dismantlement of a facility so it is permanently incapable of its intended use. This includes the removal of associated equipment and structures;				"Abandonment" means the permanent dismantlement of a facility so it is permanently incapable of its intended use. This includes the removal of associated equipment and structures;
"Act" means the Nunavut Waters and Nunavut Surface Rights Tribunal Act;				"Act" means the Nunavut Waters and Nunavut Surface Rights Tribunal Act;
"Acid Rock Drainage (ARD)" means the production of acidic leachate, seepage or drainage from underground workings, ore piles, waste rock, and portal development rock that can lead to the release of metals to groundwater or surface water during the life of the Project and after closure;	"Acid Rock Drainage (ARD)" means the production of acidic leachate, seepage or drainage from underground workings, ore piles, W waste R ock, and portal development rock that can lead to the release of metals to groundwater or surface water during the life of the Project and after C losure;			"Acid Rock Drainage (ARD)" means the production of acidic leachate, seepage or drainage from underground workings, ore piles, W waste R ock, and portal development rock that can lead to the release of metals to groundwater or surface water during the life of the Project and after C losure;
"Acutely Lethal Effluent" means Effluent as defined in the Metal Mining Effluent Regulations SOR/2002-222 dated 6 June 2002 and amended on March 2 2012;			TMAC Sept 23, 2016: <i>Remove. Term not used in the licence.</i>	"Acutely Lethal Effluent" means Effluent as defined in the Metal Mining Effluent Regulations SOR/2002-222 dated 6 June 2002 and amended on March 2 2012;
"Adaptive Management" means a management plan that describes a way of managing risks associated with uncertainty and provides a flexible framework for the mitigation measures to be implemented and actions to be taken when specified thresholds are exceeded;	"Adaptive Management" means a management plan that describes a way of managing risks associated with uncertainty and provides a flexible framework for the mitigation measures to be implemented and actions to be taken when specified thresholds are exceeded;		TMAC Sept 14, 2016: Enhance clarity.	"Adaptive Management" means a management plan that describes a way of managing risks associated with uncertainty and provides a flexible framework for the mitigation measures to be implemented and actions to be taken when specified thresholds are exceeded;

"Aliquot" means the amount comprising a known fraction of a whole and constituting a sample used for analysis;	"Aliquot" means the amount comprising a known fraction of a whole and constituting a sample used for analysis;		TMAC Sept 14, 2016: Remove. Term not used in the licence.	"Aliquot" means the amount comprising a known fraction of a whole and constituting a sample used for analysis;
"Amendment" means a change to original terms and conditions of this Licence requiring correction, addition or deletion of specific terms and conditions of the Licence; modifications inconsistent with the terms of the set terms and conditions of the Licence;	"Amendment" means a change to original terms and conditions of this Licence requiring correction, addition or deletion of specific terms and conditions of the Licence; modifications inconsistent with the terms of the set terms and conditions of the Licence; <u>[NOTE: Refer to table column providing TMAC Rationale]</u>	KIA Sept 21, 2016: <i>What are the "original terms and conditions"? Which version of the licence does this term refer to?</i>	TMAC Sept 14, 2016: Suggest removal of the highlighted sentence as it reduces the clarity provided by the first part of this definition. TMAC Sept 23, 2016: <i>As per KIA's comment, remove 'original'.</i>	"Amendment" means a change to original terms and conditions of this Licence requiring correction, addition or deletion of specific terms and conditions of the Licence; modifications inconsistent with the terms of the set terms and conditions of the Licence;
"Analyst" means an Analyst designated by the Minister under Section 85 (1) of the Act;				"Analyst" means an Analyst designated by the Minister under Section 85 (1) of the Act;
"Annually" means, in the context of monitoring frequency, one sampling event occurring every 365 days with a minimum of 200 days between sampling events;				"Annually" means, in the context of monitoring frequency, one sampling event occurring every 365 days with a minimum of 200 days between sampling events;
"Aquatic Effects Monitoring Plan (AEMP)" means a monitoring program designed to determine the short and long-term effects in the aquatic environment resulting from the Project, to evaluate the accuracy of impact predictions, to assess the effectiveness of planned impact mitigation measures and to identify additional impact mitigation measures to avert or reduce environmental effects;	"Aquatic Effects Monitoring Plan (AEMP)" means a monitoring program designed to determine the short and long-term effects in the <u>freshwater</u> aquatic environment resulting from the Project, to evaluate the accuracy of impact predictions, to assess the effectiveness of planned impact mitigation measures and to identify additional impact mitigation measures to avert or reduce environmental effects;	KIA Sept 21, 2016: <i>See comment above.</i>	TMAC Sept 23, 2016: <i>As per KIA's comment, replaced 'freshwater' with 'inland waters'.</i>	"Aquatic Effects Monitoring Plan (AEMP)" means a monitoring program designed to determine the short and long-term effects to <u>inland waters in the aquatic environment</u> resulting from the Project, to evaluate the accuracy of impact predictions, to assess the effectiveness of planned impact mitigation measures and to identify additional impact mitigation measures to avert or reduce environmental effects;
"Beach Laydown Area" means the area designed for temporary storage of equipment and materials at Roberts Bay as indicated in the document "Doris North Project 2011 Construction Summary", with engineered drawings attached as Appendix L for the Robert Bay Laydown Area, December 2011, DWGS N0 DN-RB-00 to 04, Rev AB, as built drawings;	"Beach Laydown Area" means the area designed for temporary storage of equipment and materials at Roberts Bay <u>as described in the Water Licence Applications, or as modified in accordance with Part H, or as otherwise approved by the Board</u> and as reflected in as-built drawings submitted to the Board;			"Beach Laydown Area" means the area designed for temporary storage of equipment and materials at Roberts Bay <u>as described in the Water Licence Applications, or as modified in accordance with Part H, or as otherwise approved by the Board</u> and as reflected in as-built drawings submitted to the Board;
"Board" means the Nunavut Water Board established under Article 13 of the Nunavut Land Claims Agreement and under Section 14 of the Act;				"Board" means the Nunavut Water Board established under Article 13 of the Nunavut Land Claims Agreement and under Section 14 of the Act;
"Canadian Council of the Ministers of Environment" (CCME) is the primary minister-led intergovernmental forum for collective action on environmental issues of national and international concern. CCME sets guidelines for environmental protection across Canada such as the Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life;	"Canadian Council of the Ministers of <u>the Environment</u> " (CCME) is the primary minister-led intergovernmental forum for collective action on environmental issues of national and international concern. CCME sets guidelines for environmental protection across Canada such as the Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life;			"Canadian Council of the Ministers of <u>the Environment</u> " (CCME) is the primary minister-led intergovernmental forum for collective action on environmental issues of national and international concern. CCME sets guidelines for environmental protection across Canada such as the Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life;
"Care and Maintenance" in respect of a mine, means when the Licensee ceases construction, production or commercial				"Care and Maintenance" in respect of a mine, means when the Licensee ceases construction, production or commercial

operation temporarily for an undefined period of time;				operation temporarily for an undefined period of time;
"Chief Administrative Officer" means the Executive Director of the Nunavut Water Board;	"Chief Administrative Officer" means the Executive Director of the Nunavut Water Board;		TMAC Sept 14, 2016: Remove. Term not used in the licence.	"Chief Administrative Officer" means the Executive Director of the Nunavut Water Board;
"Closure" means when a mine ceases operations without the intent to resume mining activities in the future;				"Closure" means when a mine ceases operations without the intent to resume mining activities in the future;
"Commercial Operation" in respect of a mine, means an average rate of production that is equal to or greater than 25% of the design rated capacity of the mine over a period of 90 consecutive days;	"Commercial Operation" in respect of a mine, means an average rate of production that is equal to or greater than 25% of the design rated capacity of the mine over a period of 90 consecutive days;		TMAC Sept 14, 2016: Remove. Term not used in the licence.	"Commercial Operation" in respect of a mine, means an average rate of production that is equal to or greater than 25% of the design rated capacity of the mine over a period of 90 consecutive days;
"Construction" means any activities undertaken to construct or build any component of, or associated with, the development of the Doris North Mine Project, as described in the Revised Water Licence Application, Supporting Documents, and Technical Meeting Information Supplement documents submitted to the Board throughout the regulatory process;	"Construction" means any activities undertaken to construct or build any <u>major</u> component of, or associated with, the development of the Doris North Mine Project, as described in the Revised Water Licence Applications, Supporting Documents, and Technical Meeting Information Supplement documents submitted to the Board throughout the regulatory process;		TMAC Sept 23, 2016: <i>Note update to the definition of construction as per ECCC's comment in Part D Item 8.</i> <i>From time to time small additions and modifications to previously constructed facilities may occur. These works do not constitute a phase change.; the addition of the term 'major' to the definition is intended to support his distinction wherein in Construction refers to major activities associated with a phase change. It is noted that construction and Operations can and do occur at the same time.</i>	"Construction" means any activities undertaken to construct or build any <u>major</u> component of, or associated with, the development of the Doris North Mine Project, as described in the Revised Water Licence Applications, Supporting Documents, and Technical Meeting Information Supplement documents submitted to the Board throughout the regulatory process;
"Dam Safety Guidelines" means the Canadian Dam Association (CDA) Dam Safety Guidelines (DSG), January 1999 or subsequent approved editions;				"Dam Safety Guidelines" means the Canadian Dam Association (CDA) Dam Safety Guidelines (DSG), January 1999 or subsequent approved editions;
"Deleterious Substances" means a substance as defined in Section 34(1) of the Fisheries Act;	"Deleterious Substances" means a substance as defined in Section 34(1) of the Fisheries Act;		TMAC Sept 14, 2016: Remove. Term not used in the licence.	
"Deposit" means the placement of waste rock, tailings or other solids materials on land or in water;				"Deposit" means the placement of waste rock, tailings or other solids materials on land or in water;
"Discharge" means the release of any water or waste to the receiving environment;	"Discharge" means the release of any water or waste to the receiving environment, other than discharges to marine waters;			"Discharge" means the release of any water or waste to the receiving environment, other than discharges to marine waters;
"Dissolved Metals" means the suite of metals referred to as MD in Schedule J Table 1 entitled Monitoring Groups. Dissolved metals shall be analyzed on a filtered sample;				"Dissolved Metals" means the suite of metals referred to as MD in Schedule J Table 1 entitled Monitoring Groups. Dissolved metals shall be analyzed on a filtered sample;
"Domestic Waste" means all solid waste generated form the accommodations, kitchen facilities and all other site facilities, excluding those industrial and	"Domestic Waste" means all solid waste generated form the accommodations, kitchen facilities and all other site facilities, excluding those industrial		TMAC Sept 14, 2016: Remove. Term not used in the licence.	"Domestic Waste" means all solid waste generated form the accommodations, kitchen facilities and all other site facilities,

hazardous wastes associated with the mining and processing of ore;	and hazardous wastes associated with the mining and processing of ore;			excluding those industrial and hazardous wastes associated with the mining and processing of ore;
"Effluent" means treated or untreated liquid waste material that is discharged into the environment from a structure such as a settling pond, landfarm or a treatment plant;				"Effluent" means treated or untreated liquid waste material that is discharged into the environment from a structure such as a settling pond, landfarm or a treatment plant;
"Emergency Dump Catch Basin" means a facility designed to contain tailings and reclaim water from the tailings and reclaim pipelines as described in the Revised Water Licence Application Supporting Document S1 entitled "Design of Tailings Containment Area" and as illustrated in the Revised Water Licence Application Supporting Document S4 entitled "Engineering Drawings for Tailings Containment Area and Surface Infrastructure Components", DWGS T-13 dated March 2007, SRK Job Number ICM014.008;	"Emergency Dump Catch Basin" means a facility designed to contain tailings and reclaim water from the tailings and reclaim pipelines <u>as described in the Water Licence Application or as modified in accordance with Part H or as otherwise approved by the Board</u> and as reflected in as-built drawings submitted to the Board.			"Emergency Dump Catch Basin" means a facility designed to contain tailings and reclaim water from the tailings and reclaim pipelines <u>as described in the Water Licence Application or as modified in accordance with Part H or as otherwise approved by the Board</u> and as reflected in as-built drawings submitted to the Board.
"Engineer" means a professional engineer registered to practice in Nunavut in accordance with the Consolidation of Engineers and Geoscientists Act S. Nu 2008, c.2 and the Engineering and Geoscience Professions Act S.N.W.T. 2006, c.16 Amended by S.N.W.T. 2009, c.12;				"Engineer" means a professional engineer registered to practice in Nunavut in accordance with the Consolidation of Engineers and Geoscientists Act S. Nu 2008, c.2 and the Engineering and Geoscience Professions Act S.N.W.T. 2006, c.16 Amended by S.N.W.T. 2009, c.12;
"Engineering Geologist" means a professional geologist registered with the Association of Professional Engineers, Geologist and Geophysicists of Nunavut and whose principal field of specialization is the investigation and interpretation of geological conditions for civil engineering purposes;	"Engineering Geologist" means a professional geologist registered with the Association of Professional Engineers, Geologist and Geophysicists of Nunavut and whose principal field of specialization is the investigation and interpretation of geological conditions for civil engineering purposes;		TMAC Sept 14, 2016: Remove. Term not used in the licence.	"Engineering Geologist" means a professional geologist registered with the Association of Professional Engineers, Geologist and Geophysicists of Nunavut and whose principal field of specialization is the investigation and interpretation of geological conditions for civil engineering purposes;
"Engineered Structure" means any facility, which was designed and approved by a Professional Engineer registered with the Association of Professional Engineers, Geologists and Geophysicists of Nunavut;				"Engineered Structure" means any facility, which was designed and approved by a Professional Engineer registered with the Association of Professional Engineers, Geologists and Geophysicists of Nunavut;
"Environmental Assessment" means, for the purpose of this licence, the totality of the Nunavut Impact Review Board (NIRB) Public Registry as established under the authority of Article 12 of the NLCA, this includes everything that was submitted by the Licensee to the NIRB, the scope of which is consistent with the Water Licence Application;	"Environmental Assessment" means, for the purpose of this licence, the totality of the Nunavut Impact Review Board (NIRB) Public Registry as established under the authority of Article 12 of the NLCA, this includes everything that was submitted by the Licensee to the NIRB, the scope of which is consistent with the Water Licence Application;		TMAC Sept 14, 2016: Remove. Term not used in the licence.	"Environmental Assessment" means, for the purpose of this licence, the totality of the Nunavut Impact Review Board (NIRB) Public Registry as established under the authority of Article 12 of the NLCA, this includes everything that was submitted by the Licensee to the NIRB, the scope of which is consistent with the Water Licence Application;
"Explosives Mixing and Storage Facility" means a facility designed for the storage of ammonium nitrate, detonators and	"Explosives Mixing and Storage Facility" means a facility designed for the storage of ammonium nitrate, detonators and explosives; and designed for		TMAC Sept 14, 2016: Remove. Term not used in the licence.	"Explosives Mixing and Storage Facility" means a facility designed for the storage of ammonium nitrate, detonators and

explosives; and designed for the mixing and storage of Ammonium Nitrate Fuel Oil (ANFO), as indicated in the document "Doris North Project: 2011 Construction Summary", and illustrated in the attached document "Engineering Drawings for DN Explosives Facility", Nov 2011, DWGS N0 TL-EXP-00 to 03, Rev 1 and DWGS N0 TL-EXP-04 to 08, Rev 0 (issued for construction drawings, IFC);	the mixing and storage of Ammonium Nitrate Fuel Oil (ANFO), as indicated in the document "Doris North Project: 2011 Construction Summary", and illustrated in the attached document "Engineering Drawings for DN Explosives Facility", Nov 2011, DWGS N0 TL-EXP-00 to 03, Rev 1 and DWGS N0 TL-EXP-04 to 08, Rev 0 (issued for construction drawings, IFC);			explosives; and designed for the mixing and storage of Ammonium Nitrate Fuel Oil (ANFO), as indicated in the document "Doris North Project: 2011 Construction Summary", and illustrated in the attached document "Engineering Drawings for DN Explosives Facility", Nov 2011, DWGS N0 TL-EXP-00 to 03, Rev 1 and DWGS N0 TL-EXP-04 to 08, Rev 0 (issued for construction drawings, IFC);
"Float Plane Dock" means the infrastructure designed to allow for the offloading of supplies from a Twin Otter Plane using a Bobcat forklift, as indicated in the document "2AM-DOH0713 Proposed, Issued for Construction and As built Drawings, April 2010, and illustrated in the attached document "Proposed IFC/ As Built Drawings", DWG N0 s- 24, Rev C (IFC);	"Float Plane Dock" means the infrastructure designed to allow for the offloading of supplies from a Twin Otter Plane using a Bobcat forklift, as indicated in the document "2AM-DOH0713 Proposed, Issued for Construction and As built Drawings, April 2010, and illustrated in the attached document "Proposed IFC/ As Built Drawings", DWG N0 s- 24, Rev C (IFC);		TMAC Sept 14, 2016: Remove. Term not used in the licence.	"Float Plane Dock" means the infrastructure designed to allow for the offloading of supplies from a Twin Otter Plane using a Bobcat forklift, as indicated in the document "2AM-DOH0713 Proposed, Issued for Construction and As built Drawings, April 2010, and illustrated in the attached document "Proposed IFC/ As Built Drawings", DWG N0 s- 24, Rev C (IFC);
"Freeboard" means the vertical distance between the water level and the top of the containment element (i.e. a liner), within a dam or any other channel or pond used for containment of site runoff;				"Freeboard" means the vertical distance between the water level and the top of the containment element (i.e. a liner), within a dam or any other channel or pond used for containment of site runoff;
"Fresh Water Intake" means the infrastructure required for extraction of water from Doris Lake and as required for extraction of fresh water from Windy Lake, as indicated in the document entitled "2AM-DOH0713 Proposed, Issued for Construction and As built Drawings, April 2010, and illustrated in the attached document "Proposed IFC/ As Built Drawings", DWGS N0 0002 Rev1, DWGS 0003 Rev 2, as built; and in the Water Licence Renewal Application, August 2012, supporting document "Proposed Freshwater Intake –Doris Windy";	"Fresh Water Intake" means the infrastructure required for extraction of water from Doris Lake and as required for extraction of fresh water from Windy Lake, as indicated in the document entitled "2AM-DOH0713 Proposed, Issued for Construction and As built Drawings, April 2010, and illustrated in the attached document "Proposed IFC/ As Built Drawings", DWGS N0 0002 Rev1, DWGS 0003 Rev 2, as built; and in the Water Licence Renewal Application, August 2012, supporting document "Proposed Freshwater Intake –Doris Windy" Water Licence Application or as the result of Modifications identified under Part H of the Licence or as otherwise approved by the Inspector;			"Fresh Water Intake" means the infrastructure required for extraction of water from Doris Lake and as required for extraction of fresh water from Windy Lake, as indicated in the document entitled "2AM-DOH0713 Proposed, Issued for Construction and As built Drawings, April 2010, and illustrated in the attached document "Proposed IFC/ As Built Drawings", DWGS N0 0002 Rev1, DWGS 0003 Rev 2, as built; and in the Water Licence Renewal Application, August 2012, supporting document "Proposed Freshwater Intake –Doris Windy" Water Licence Application or as the result of Modifications identified under Part H of the Licence or as otherwise approved by the Inspector;
"Frozen Core" means a permafrost core comprising frozen ice-saturated aggregate material and functioning as an impervious seepage barrier;				"Frozen Core" means a permafrost core comprising frozen ice-saturated aggregate material and functioning as an impervious seepage barrier;
"Fuel Storage and Containment Facility" means the facilities designed for the bulk storage of fuel at the Doris North Plant site and Roberts Bay as indicated in the documents "Doris North Project 2012 Construction Summary", and illustrated in the attached document Engineering Drawings for the Robert Bay Fuel Tank Farm, May 2012, DWGS N0 RBTF-00 to 02 and RBTF-04 to 07, Rev AB1, as built; and RBTF-04 to 07, Rev AB1, as built; and	"Fuel Storage and Containment Facility" means the facilities designed for the bulk storage of fuel at the Doris North Plant site and Roberts Bay as indicated in the documents "Doris North Project 2012 Construction Summary", and illustrated in the attached document Engineering Drawings for the Robert Bay Fuel Tank Farm, May 2012, DWGS N0 RBTF-00 to 02 and RBTF-04 to 07, Rev AB1, as built; and in the document entitled "Doris North Project: 2011 Construction Summary", and illustrated in the			"Fuel Storage and Containment Facility" means the facilities designed for the bulk storage of fuel at the Doris North Plant site and Roberts Bay as indicated in the documents "Doris North Project 2012 Construction Summary", and illustrated in the attached document Engineering Drawings for the Robert Bay Fuel Tank Farm, May 2012, DWGS N0 RBTF-00 to 02 and RBTF-04 to 07, Rev AB1, as built; and in the document entitled "Doris

in the document entitled "Doris North Project: 2011 Construction Summary", and illustrated in the attached document Engineering Drawings for the Roberts Bay Quarry 1 Fuel Tank Farm, December 2011, DWGS N0 RB-Q1TF-00 to 05, RB-Q1TF-09 to 10, RB-Q1TF-12 to 14 Rev 2, and RB-Q1TF-06 to 08, RB-Q1TF-11 and 15 Rev 1, IFC, and in the attached document Engineering Drawings for the DN Fuel Tank Farm, December 2011 DWGS N0 DNTF-01 to 07 Rev AB, as built;	attached document Engineering Drawings for the Roberts Bay Quarry 1 Fuel Tank Farm, December 2011, DWGS N0 RB-Q1TF-00 to 05, RB-Q1TF-09 to 10, RB-Q1TF-12 to 14 Rev 2, and RB-Q1TF-06 to 08, RB-Q1TF-11 and 15 Rev 1, IFC, and in the attached document Engineering Drawings for the DN Fuel Tank Farm, December 2011 DWGS N0 DNTF-01 to 07 Rev AB, as built <u>Water Licence Application or as the result of Modifications identified under Part H of the Licence or as otherwise approved by the Board and as reflected in as-built drawings submitted to the Board;</u>			North Project: 2011 Construction Summary", and illustrated in the attached document Engineering Drawings for the Roberts Bay Quarry 1 Fuel Tank Farm, December 2011, DWGS N0 RB-Q1TF-00 to 05, RB-Q1TF-09 to 10, RB-Q1TF-12 to 14 Rev 2, and RB-Q1TF-06 to 08, RB-Q1TF-11 and 15 Rev 1, IFC, and in the attached document Engineering Drawings for the DN Fuel Tank Farm, December 2011 DWGS N0 DNTF-01 to 07 Rev AB, as built <u>Water Licence Application or as the result of Modifications identified under Part H of the Licence or as otherwise approved by the Board and as reflected in as-built drawings submitted to the Board;</u>
"Geotechnical Engineer" means a professional engineer registered with the Association of Professional Engineers, Geologist and Geophysicists of Nunavut and whose principal field of specialization with the engineering properties of earth materials in dealing with man-made structures and earthworks that will be built on a site. These can include shallow and deep foundations, retaining walls, dams, and embankments;				"Geotechnical Engineer" means a professional engineer registered with the Association of Professional Engineers, Geologist and Geophysicists of Nunavut and whose principal field of specialization with the engineering properties of earth materials in dealing with man-made structures and earthworks that will be built on a site. These can include shallow and deep foundations, retaining walls, dams, and embankments;
"Grab Sample" means an undiluted quantity of material collected at a particular time and place that may be representative of the total substance being sampled at the time and place it was collected;				"Grab Sample" means an undiluted quantity of material collected at a particular time and place that may be representative of the total substance being sampled at the time and place it was collected;
"Greywater" means the component of Effluent produced from domestic use (i.e. washing, bathing, food preparation and laundering), excluding sewage;				"Greywater" means the component of Effluent produced from domestic use (i.e. washing, bathing, food preparation and laundering), excluding sewage;
"Ground Ice" means ice that occupies fractures in rock and soil below the ground surface and may be present as ice inclusion in permafrost, soil or rock, as pore ice, lense ice or massive ice;	"Ground Ice" means ice that occupies fractures in rock and soil below the ground surface and may be present as ice inclusion in permafrost, soil or rock, as pore ice, lense ice or massive ice;		TMAC Sept 14, 2016: Remove. Term not used in the licence.	"Ground Ice" means ice that occupies fractures in rock and soil below the ground surface and may be present as ice inclusion in permafrost, soil or rock, as pore ice, lense ice or massive ice;
"Ground Water" means water that occupies pores and fractures in rock and soil below the ground surface in a liquid or frozen state;	"Groundw-Water" means water that occupies pores and fractures in rock and soil below the ground surface in a liquid or frozen state;			"Groundw-Water" means water that occupies pores and fractures in rock and soil below the ground surface in a liquid or frozen state;
"Hazardous Materials" means a contaminant which is a dangerous good that is no longer used for its original purpose and is intended for recycling, treatment, disposal or storage;	"Hazardous Waste" means a substance as defined in <u>applicable</u> federal or territorial <u>legislation</u>		TMAC Sept 14, 2016: Suggest refer to legal definition and revise licence to reflect updated definition accordingly	"Hazardous Waste" means a substance as defined in <u>applicable</u> federal or territorial <u>legislation</u>
"High Water Mark" means the usual or average level to which a body of water rises at its highest point and remains for				"High Water Mark" means the usual or average level to which a body of water rises at its highest point and remains for sufficient

sufficient time so as to change the characteristics of the land (ref. Department of Fisheries and Oceans Canada, Operational Statement: Mineral Exploration Activities);				time so as to change the characteristics of the land (ref. Department of Fisheries and Oceans Canada, Operational Statement: Mineral Exploration Activities);
	" <u>Hope Bay Quarry Management and Monitoring Program</u> " means the plan for quarry management and monitoring as indicated in the Water Licence Application, as the result of Modifications submitted under Part H of the Licence, or as approved by the Board.		TMAC Sept 14, 2016: New definition	" <u>Hope Bay Quarry Management and Monitoring Program</u> " means the plan for quarry management and monitoring as indicated in the Water Licence Application, as the result of Modifications submitted under Part H of the Licence, or as approved by the Board.
"ICP Metals Scan" means, for the purpose of the Licence, elements detected in an inductively coupled plasma (ICP) mass spectrometer. Metal parameters should be consistent with baseline data previously collected and include any other metals of concern or interest;				"ICP Metals Scan" means, for the purpose of the Licence, elements detected in an inductively coupled plasma (ICP) mass spectrometer. Metal parameters should be consistent with baseline data previously collected and include any other metals of concern or interest;
"Inspector" means an Inspector designated by the Minister under Section 85 (1) of the Act;				"Inspector" means an Inspector designated by the Minister under Section 85 (1) of the Act;
"Interim Closure and Reclamation Plan" means a conceptual detailed plan on the reclamation of mine components which will not be closed until near the end of the mining operations, and operational detail for components which are to be progressively reclaimed earlier in the mine life;				"Interim Closure and Reclamation Plan" means a conceptual detailed plan on the reclamation of mine components which will not be closed until near the end of the mining operations, and operational detail for components which are to be progressively reclaimed earlier in the mine life;
"Landfarm" means a lined, engineered area designed to contain and treat hydrocarbon impacted sediment and soil using bioremediation as indicated in the document "Doris North Project 2012 Construction Summary", and illustrated in the attached document "Engineering drawings for the DN Land Farm", April 2012, DWGS N0 LF-00 and LF-02 to 08, Rev AB, as built;	"Landfarm" means a lined, engineered area designed to contain and treat hydrocarbon impacted sediment and soil using bioremediation as indicated in the document " Doris North Project 2012 Construction Summary ", and illustrated in the attached document " Engineering drawings for the DN Land Farm ", April 2012, DWGS N0 LF-00 and LF-02 to 08, Rev AB, as built <u>Water Licence Application or as the result of Modifications identified under Part H of the Licence and as reflected in as-built drawings submitted to the Board;</u>			"Landfarm" means a lined, engineered area designed to contain and treat hydrocarbon impacted sediment and soil using bioremediation as indicated in the document " Doris North Project 2012 Construction Summary ", and illustrated in the attached document " Engineering drawings for the DN Land Farm ", April 2012, DWGS N0 LF-00 and LF-02 to 08, Rev AB, as built <u>Water Licence Application or as the result of Modifications identified under Part H of the Licence and as reflected in as-built drawings submitted to the Board;</u>
"Landfill" means a facility designed to permanently contain solid, non-combustible, non-hazardous waste materials, as described in the Type A Water Licence Amendment Application No. 4 submitted to the Nunavut Water Board in August 2012.	"Landfill" means a facility designed to permanently contain solid, non-combustible , non-hazardous waste materials, as described in the Type A Water Licence Amendment Application No. 4 submitted to the Nunavut Water Board in August 2012. <u>Water Licence Application, as the result of Modifications identified under Part H of the Licence or as otherwise approved by the Board and as reflected in as-built drawings submitted to the Board.</u>		TMAC Sept 14, 2016: Revised to allow for disposal of non-hazardous combustible material that can't be open burned nor will fit into the incinerator.	"Landfill" means a facility designed to permanently contain solid, non-combustible , non-hazardous waste materials, as described in the Type A Water Licence Amendment Application No. 4 submitted to the Nunavut Water Board in August 2012. <u>Water Licence Application, as the result of Modifications identified under Part H of the Licence or as otherwise approved by the</u>

				<u>Board and as reflected in as-built drawings submitted to the Board.</u>
"Licence" means this Type "A" Water Licence 2AM-DOH1323, issued by the Nunavut Water Board in accordance with the Act, to TMAC Resources Inc. (TMAC) for the Doris North Project;				"Licence" means this Type "A" Water Licence 2AM-DOH1323, issued by the Nunavut Water Board in accordance with the Act, to TMAC Resources Inc. (TMAC) for the Doris North Project;
"Licensee" means to whom Licence 2AM-DOH1323 is issued to or assigned;				"Licensee" means to whom Licence 2AM-DOH1323 is issued to or assigned;
"Maximum Average Concentration" means the average concentration of any four consecutively collected samples taken from the identical sampling location and taken during any given timeframe;	"Maximum Average Concentration" means the average concentration of any four consecutively collected samples taken from the identical sampling location and taken during any given timeframe;	KIA Sept 21, 2016: <i>Definition of Maximum Average Concentration - any four samples can make up an average. This may be true but removing the requirement for consecutive samples means that they could choose to omit samples from the average calculation. I would recommend that we not accept this.</i>	TMAC Sept 14, 2016: Consecutively collection is not necessary for an average. TMAC Sept 23, 2016: <i>This was not our intent so we accept recommended revision</i>	"Maximum Average Concentration" means the average concentration of any four consecutively collected samples taken from the identical sampling location and taken during any given timeframe;
"Metal Leaching" means the mobilization of metals into solution under neutral, acidic or alkaline conditions;				"Metal Leaching" means the mobilization of metals into solution under neutral, acidic or alkaline conditions;
"Mine Water" means any water, including groundwater, that is pumped or flows out of any underground workings or open pit;	"Mine Water" means any water, including groundwater, that is pumped or flows out of any underground workings or open pit;		TMAC Sept 14, 2016: Remove. Term not used in the licence.	"Mine Water" means any water, including groundwater, that is pumped or flows out of any underground workings or open pit;
"Minister" means the Minister of Aboriginal Affairs and Northern Development Canada (AANDC);	"Minister" means the Minister of Aboriginal Affairs and Northern Development Indigenous and Northern Affairs Canada (AANDCINAC);			"Minister" means the Minister of Aboriginal Affairs and Northern Development Indigenous and Northern Affairs Canada (AANDCINAC);
"Modification" means an alteration to a physical work that introduces a new structure or eliminates an existing structure and does not alter the purpose or function of the work, but does not include an expansion;	Modification" means an alteration to a physical work that introduces a new structure or eliminates an existing structure and does not alter the purpose or function of the work, but does not include an expansion;		TMAC Sept 14, 2016: A modification would arguably inherently alter function of the work.	Modification" means an alteration to a physical work that introduces a new structure or eliminates an existing structure and does not alter the purpose or function of the work, but does not include an expansion;
"Monthly" means, in the context of monitoring frequency, one sampling event occurring every 30 days with a minimum of 21 days between sampling events;				"Monthly" means, in the context of monitoring frequency, one sampling event occurring every 30 days with a minimum of 21 days between sampling events;
"North Dam" means the infrastructure designed as a water retaining structure utilizing a central frozen core with a geosynthetic clay liner (GCL) installed against the upstream side of the core, as illustrated in the document "North Dam As Built Report", submitted on December 2012, with attached document "Engineering Drawings for the North Dam, DNP", September 2012, DWGS No DN-ND-00 to 27 and DN-ND-29 to 31, Rev AB, as built drawings;	"North Dam" means the infrastructure designed as a water retaining structure utilizing a central frozen core with a geosynthetic clay liner (GCL) installed against the upstream side of the core, as illustrated in the document "North Dam As Built Report", submitted on December 2012, with attached document "Engineering Drawings for the North Dam, DNP", September 2012, DWGS No DN-ND-00 to 27 and DN-ND-29 to 31, Rev AB, as built drawings Water Licence Application, as the result of Modifications <u>identified under Part H of the Licence or as otherwise approved by the Board</u> and as reflected in as-built drawings submitted to the Board;			"North Dam" means the infrastructure designed as a water retaining structure utilizing a central frozen core with a geosynthetic clay liner (GCL) installed against the upstream side of the core, as illustrated in the document "North Dam As Built Report", submitted on December 2012, with attached document "Engineering Drawings for the North Dam, DNP", September 2012, DWGS No DN-ND-00 to 27 and DN-ND-29 to 31, Rev AB, as built drawings Water Licence Application, <u>as the result of Modifications identified under Part H of the Licence or as otherwise approved by the Board</u> and as reflected in as-built drawings submitted to the Board;

"Nunavut Land Claims Agreement" (NLCA) means the "Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada," including its preamble and schedules, and any amendments to that agreement made pursuant to it;				"Nunavut Land Claims Agreement" (NLCA) means the "Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada," including its preamble and schedules, and any amendments to that agreement made pursuant to it;
"Nutrients" means the suite of parameters referred to as N1 and N2 in Schedule J Table 1 entitled Monitoring Groups;				"Nutrients" means the suite of parameters referred to as N1 and N2 in Schedule J Table 1 entitled Monitoring Groups;
"Operations" means the entire set of site activities (excluding construction, care and maintenance, and decommissioning activities) associated with mining, processing and recovery of gold at the Doris North Project, as described in the Revised Water Licence Application, Supporting Documents, and Technical Meeting Information Supplement documents submitted to the Board throughout the regulatory process;	"Operations" means the entire set of site activities (excluding <u>C</u> onstruction, <u>C</u> are and <u>M</u> aintenance, and decommissioning <u>C</u> losure activities) associated with mining, processing and recovery of gold at the Doris North Project, as described in the Revised Water Licence Application, Supporting Documents, and Technical Meeting Information Supplement documents submitted to the Board throughout the regulatory process, and for greater clarity <u>Operation commences with the deposition of tailings</u> ;	INAC Sept 21, 2016: <i>For greater clarity, the Department recommends that Operations commence with ore processing rather than tailings deposition because the project is dependant on gold production.</i>	TMAC Sept 14, 2016: As per suggestion of Inspector. TMAC Sept 23, 2016: <i>TMAC acknowledges and accepts INAC's recommendation</i>	"Operations" means the entire set of site activities (excluding <u>C</u> onstruction, <u>C</u> are and <u>M</u> aintenance, and decommissioning <u>C</u> losure activities) associated with mining, processing and recovery of gold at the Doris North Project, as described in the Revised Water Licence Application, Supporting Documents, and Technical Meeting Information Supplement documents submitted to the Board throughout the regulatory process, and for greater clarity <u>Operation commences with ore processing</u> ;
"Operator" means the person who operates, has control or custody of, or is in charge of a mine or recognized closed mine;	"Operator" means the person who operates, has control or custody of, or is in charge of a mine or recognized closed mine;		TMAC Sept 14, 2016: Remove. Term not used in the licence.	"Operator" means the person who operates, has control or custody of, or is in charge of a mine or recognized closed mine;
"Ore Stockpile" means the above-ground facility designated for the temporary storage of ore to be processed in the mill as illustrated in the Revised Water Licence Application Supporting Document S4 entitled "Engineering Drawings for Tailings Containment Area and Surface Infrastructure Components" DWG S-07 dated Mar 2007, SRK Job Number ICM014.008;	"Ore Stockpile" means the above-ground facility designated for the temporary storage of ore to be processed in the mill as illustrated in the Revised Water Licence Application Supporting Document S4 entitled "Engineering Drawings for Tailings Containment Area and Surface Infrastructure Components" DWG S-07 dated Mar 2007, SRK Job Number ICM014.008 Water Licence Application <u>or as the result of Modifications identified under Part H of the Licence</u> ;			"Ore Stockpile" means the above-ground facility designated for the temporary storage of ore to be processed in the mill as illustrated in the Revised Water Licence Application Supporting Document S4 entitled "Engineering Drawings for Tailings Containment Area and Surface Infrastructure Components" DWG S-07 dated Mar 2007, SRK Job Number ICM014.008 Water Licence Application <u>or as the result of Modifications identified under Part H of the Licence</u> ;
"Pollution Control Pond" means a facility designed to temporarily contain stormwater runoff from the camp mill pad, specifically the temporary waste rock pile, the ore stockpile, the crusher and mill yard areas as indicated in the document "Doris North Project 2012 Construction Summary", and illustrated in the attached document "Engineering Drawings for the DN Camp Area", May 2012, DWGS N0 DN-DMC-011, DN-DMC-014, DN-DMC-032 and DN-DMC-033 to 039, Rev AB, as built drawings;	"Pollution Control Pond" means a facility designed to temporarily contain stormwater runoff from the camp mill pad, specifically the temporary W waste R ock P ile, the <u>O</u> re <u>S</u> tackpile, the crusher and mill yard areas and Pad U as indicated in the document "Doris North Project 2012 Construction Summary", and illustrated in the attached document "Engineering Drawings for the DN Camp Area", May 2012, DWGS N0 DN-DMC-011, DN-DMC-014, DN-DMC-032 and DN-DMC-033 to 039, Rev AB, as built drawings Water Licence Application <u>or as the result of Modifications identified under Part H of the Licence</u> or as approved by the Board and as reflected in as-built drawings submitted to the Board.;			"Pollution Control Pond" means a facility designed to temporarily contain stormwater runoff from the camp mill pad, specifically the temporary W waste R ock P ile, the <u>O</u> re <u>S</u> tackpile, the crusher and mill yard areas and Pad U as indicated in the document "Doris North Project 2012 Construction Summary", and illustrated in the attached document "Engineering Drawings for the DN Camp Area", May 2012, DWGS N0 DN-DMC-011, DN-DMC-014, DN-DMC-032 and DN-DMC-033 to 039, Rev AB, as built drawings Water Licence Application <u>or as the result of Modifications identified under Part H of the Licence</u> or as approved by the Board and as

				reflected in as-built drawings submitted to the Board.;
"Portal Development Rock" means rock that will be produced at the beginning of mine life, as the underground access ramp is driven from the collar location to the ore body;				"Portal Development Rock" means rock that will be produced at the beginning of mine life, as the underground access ramp is driven from the collar location to the ore body;
"Progressive Reclamation" means actions that can be taken during mining operations before permanent closure, to take advantage of cost and operating efficiencies by using the resources available from mine Operations to reduce the overall reclamation costs incurred. It enhances environmental protection and shortens the timeframe for achieving the reclamation objectives and goals;	"Progressive Reclamation" means closure and reclamation actions that can be taken during mining operations, in locations <u>where the Licencee has confirmed that mine areas and facilities will not be used in future</u> , before permanent <u>C</u> losure, to take advantage of cost and operating efficiencies and using the resources available from mine Operations <u>to close certain parts of the operating areas</u> . It enhances environmental protection and shortens the timeframe for achieving the reclamation objectives and goals.		TMAC Sept 14, 2016: Revised to enhance clarity.	"Progressive Reclamation" means closure and reclamation actions that can be taken during mining operations, in locations <u>where the Licencee has confirmed that mine areas and facilities will not be used in future</u> , before permanent <u>C</u> losure, to take advantage of cost and operating efficiencies and using the resources available from mine Operations <u>to close certain parts of the operating areas</u> . It enhances environmental protection and shortens the timeframe for achieving the reclamation objectives and goals.
"Project" means the Doris North Project as outlined in the Final Environmental Impact Statement (FEIS) and supplemental information submitted by the Licensee to the Nunavut Impact Review Board (NIRB) as well as the Revised Water Licence Application, Renewal and Amendment Application, Supporting Documents, and Technical Meeting Information Supplement documents submitted to the Nunavut Water Board throughout the regulatory process. It comprises an underground mine, surface processing facilities, surface waste containment, water collection and treatment facilities and other infrastructure;	"Project" means the Doris North Project as outlined in the Final Environmental Impact Statement (FEIS), <u>subsequent applications for Project Certificate Reconsideration</u> , and supplemental information submitted by the Licensee to the Nunavut Impact Review Board (NIRB), as well as the Revised Water Licence Application, Renewals and Amendment Applications, Supporting Documents, and Technical Meeting Information Supplement documents submitted to the Nunavut Water Board throughout the regulatory process, any Modifications identified under Part H of the Licence or as otherwise approved by the Board. It comprises an underground mine, surface processing facilities, surface waste containment, water collection and treatment facilities and other infrastructure;			"Project" means the Doris North Project as outlined in the Final Environmental Impact Statement (FEIS), <u>subsequent applications for Project Certificate Reconsideration</u> , and supplemental information submitted by the Licensee to the Nunavut Impact Review Board (NIRB), as well as the Revised Water Licence Application, Renewals and Amendment Applications, Supporting Documents, and Technical Meeting Information Supplement documents submitted to the Nunavut Water Board throughout the regulatory process, any Modifications identified under Part H of the Licence or as otherwise approved by the Board. It comprises an underground mine, surface processing facilities, surface waste containment, water collection and treatment facilities and other infrastructure;
"Quarry" means the four (4) areas of surface excavation for extracting rock material for construction purposes as identified in section 2.4.15 of the Revised Water Licence Application Support Document, April 2007 as well as the borrow source #5 required for the construction of the airstrip bypass road and airstrip expansion described in the amendment 2 application dated October 29, 2010.	"Quarry" means the four (4) areas of surface excavation for extracting rock material for construction purposes as identified in section 2.4.15 of the Revised Water Licence Application Support Document, April 2007 as well as the borrow source #5 required for the construction of the airstrip bypass road and airstrip expansion described in the <u>Amendment 2 application dated October 29, 2010, as the result of Modifications identified under Part H of the Licence or as otherwise approved by the Board.</u>		TMAC Sept 14, 2016: Update to include additional quarries	"Quarry" means the four (4) areas of surface excavation for extracting rock material for construction purposes as identified in section 2.4.15 of the Revised Water Licence Application Support Document, April 2007 as well as the borrow source #5 required for the construction of the airstrip bypass road and airstrip expansion described in the <u>Amendment 2 application dated October 29, 2010, as the result of Modifications identified under Part H of the Licence or as otherwise approved by the Board.</u>
"Quarterly" means, in the context of monitoring frequency, one sampling event occurring every 3 months with a minimum of 90 days between sampling events;	"Quarterly" means, in the context of monitoring frequency, one sampling event occurring every 3 months with a minimum of 7 90 days between sampling events;		TMAC Sept 14, 2016: Revise to allow similar reasonable flexibility as definitions for weekly, monthly and annually.	"Quarterly" means, in the context of monitoring frequency, one sampling event occurring every 3 months with a minimum of 7 90 days between sampling events;

“Reagent and Cyanide Storage Facility” means the engineered storage and containment areas described in the amendment 2 application dated October 29, 2010 with engineered drawings attached as Appendix A to SRK Consulting memo dated September 21, 2010; and as indicated in the document “Doris North Project 2011 Construction Summary”, and illustrated in the attached document Engineering Drawings for the DN Reagent and Cyanide Storage Facility, November 2011, DWGS NO DN-CRSF-00 to 05 Rev 0 and DN-CRSF-00 to 05 Rev A, IFC;	“Reagent and Cyanide Storage Facility” means the engineered storage and containment areas described in the Amendment 2 application dated October 29, 2010 with engineered drawings attached as Appendix A to SRK Consulting memo dated September 21, 2010; and as indicated in the document “Doris North Project 2011 Construction Summary”, and illustrated in the attached document Engineering Drawings for the DN Reagent and Cyanide Storage Facility, November 2011, DWGS NO DN-CRSF-00 to 05 Rev 0 and DN-CRSF-00 to 05 Rev A, <u>IFC Water Licence Application or as a reflected in as-built drawings submitted to the Board;</u>			“Reagent and Cyanide Storage Facility” means the engineered storage and containment areas described in the Amendment 2 application dated October 29, 2010 with engineered drawings attached as Appendix A to SRK Consulting memo dated September 21, 2010; and as indicated in the document “Doris North Project 2011 Construction Summary”, and illustrated in the attached document Engineering Drawings for the DN Reagent and Cyanide Storage Facility, November 2011, DWGS NO DN-CRSF-00 to 05 Rev 0 and DN-CRSF-00 to 05 Rev A, <u>IFC Water Licence Application or as a reflected in as-built drawings submitted to the Board;</u>
“Reclaim System” means the facility used to pump water from the Tailings Impoundment Area to the plant as described in the Revised Water Licence Application Supporting Document S10j entitled “Water Management Plan” and illustrated in the Revised Water Licence Application Supporting Document S4 entitled “Engineering Drawings for Tailings Containment Area and Surface Infrastructure Components” DWG T-11 dated Mar 2007, SRK Job Number ICM014.008;	“Reclaim System” means the facility used to pump water from the Tailings Impoundment Area to the plant as described in the Revised Water Licence Application Supporting Document S10j entitled “Water Management Plan” and illustrated in the Revised Water Licence Application Supporting Document S4 entitled “Engineering Drawings for Tailings Containment Area and Surface Infrastructure Components” DWG T-11 dated Mar 2007, SRK Job Number ICM014.008 as the result of Modifications identified under Part H of the Licence, or as otherwise approved by the Board.;			“Reclaim System” means the facility used to pump water from the Tailings Impoundment Area to the plant as described in the Revised Water Licence Application Supporting Document S10j entitled “Water Management Plan” and illustrated in the Revised Water Licence Application Supporting Document S4 entitled “Engineering Drawings for Tailings Containment Area and Surface Infrastructure Components” DWG T-11 dated Mar 2007, SRK Job Number ICM014.008 as the result of Modifications identified under Part H of the Licence, or as otherwise approved by the Board.;
“Reclamation” means the process of returning the mine sites and affected areas to viable and, wherever practicable, self-sustaining ecosystems that are compatible with a healthy environment and with human activities;	“Reclamation” means the process of returning the mine sites and affected areas to <u>stable conditions</u> that are compatible with a healthy environment and with human activities;			“Reclamation” means the process of returning the mine sites and affected areas to <u>stable conditions</u> that are compatible with a healthy environment and with human activities;
“Receiving Environment” means both the aquatic and terrestrial environments that receive any discharge resulting from the Project;	“Receiving Environment” means both the <u>freshwater</u> aquatic and terrestrial environments that receive any discharge resulting from the Project;			“Receiving Environment” means both the <u>freshwater</u> aquatic and terrestrial environments that receive any discharge resulting from the Project;
“Recognized Closed Mine” means a recognized closed mine as defined by section (1) of the Metal Mining Effluent Regulations SOR/2002-222 dated 6 June 2002, with amendments;				“Recognized Closed Mine” means a recognized closed mine as defined by section (1) of the Metal Mining Effluent Regulations SOR/2002-222 dated 6 June 2002, with amendments;
“Regulations” means the Nunavut Waters Regulations SOR/2013-69 18th April, 2013;				“Regulations” means the Nunavut Waters Regulations SOR/2013-69 18th April, 2013;
“Sedimentation Pond” means a facility designed to temporarily contain stormwater runoff from the “clean” surfaces of the camp mill pad including the camp, mill and laydown and chemical reagent storage area as indicated in the document “Doris North	“Sedimentation Pond” means a facility designed to temporarily contain stormwater runoff from the “clean” surfaces of the camp mill pad including the camp, mill and laydown and chemical reagent storage area as well as water pumped form the Pollution Control Pond, as indicated in the document “Doris North Project 2012 Construction Summary”,		TMAC Sept 23, 2016: <i>At present water from both the surface, the Pollution Control Ponds and containment areas around fuel storage areas at the</i>	“Sedimentation Pond” means a facility designed to temporarily contain stormwater runoff from the “clean” surfaces of the camp mill pad including the camp, mill and laydown and chemical reagent storage area as well as water pumped form the Pollution Control Pond, as indicated in the document

Project 2012 Construction Summary", Appendix B, and illustrated in the attached document Engineering Drawings for the DN Camp Area, May 2012, DWGS NO DN-DMC-011, DN-DMC-014, DN-DMC-032 and DN-DMC-041 to 044, Rev AB, as built drawings;	Appendix B, and illustrated in the attached document Engineering Drawings for the DN Camp Area, May 2012, DWGS NO DN-DMC-011, DN-DMC-014, DN-DMC-032 and DN-DMC-041 to 044, Rev AB, as built drawings-Water Licence Application or as the result of Modifications identified under Part H of the Licence or as otherwise approved by the Board;		Mill Pad are all transferred to the TIA prior to pumping to the TIA Some of the water entering the Sedimentation Pond via the Pollution Control Pond may be considered contact water, therefor use of the term 'clean' is not considered appropriate.	"Doris North Project 2012 Construction Summary", Appendix B, and illustrated in the attached document Engineering Drawings for the DN Camp Area, May 2012, DWGS NO DN-DMC-011, DN-DMC-014, DN-DMC-032 and DN-DMC-041 to 044, Rev AB, as built drawings-Water Licence Application or as the result of Modifications identified under Part H of the Licence or as otherwise approved by the Board;
"Seepage" means any water that drains through or escapes from any structure designed to contain, withhold, divert or retain water or waste. Seepage also includes any flows that have emerged from the toe, or as a result of runoff from overburden storage areas, waste rock storage facilities, and ore stockpile areas; (note roads, dams, pads, quarries);	"Seepage" means any water that drains through or escapes from any structure designed to contain, withhold, divert or retain water or waste. Seepage also includes any flows that have emerged from the toe, or as a result of runoff from overburden storage areas, <u>W</u> aste <u>R</u> ock storage facilities, and <u>O</u> re <u>S</u> tockpile areas; (note roads, dams, pads, quarries);			"Seepage" means any water that drains through or escapes from any structure designed to contain, withhold, divert or retain water or waste. Seepage also includes any flows that have emerged from the toe, or as a result of runoff from overburden storage areas, <u>W</u> aste <u>R</u> ock storage facilities, and <u>O</u> re <u>S</u> tockpile areas; (note roads, dams, pads, quarries);
"Sewage" means all toilet wastes and greywater;	"Sewage" means all toilet wastes and greywater ;		TMAC Sept 14, 2016: Greywater has its own definition, which is mutually exclusive from sewage	"Sewage" means all toilet wastes and greywater ;
"Shoreline erosion protection" as described in the Revised Water Licence Application Supporting Document S-1 Appendix G;	"Shoreline erosion protection" as described in the Revised Water Licence Application Supporting Document S-1 Appendix G <u>as the result of Modifications or as otherwise approved by the Board;</u>			"Shoreline erosion protection" as described in the Revised Water Licence Application Supporting Document S-1 Appendix G <u>as the result of Modifications or as otherwise approved by the Board;</u>
"South Dam" means the infrastructure designed as a water retaining structure utilizing a central frozen core with a geosynthetic clay liner (GCL) installed against the upstream side of the core, as illustrated in the Revised Water Licence Application Supporting Document S4 entitled "Engineering Drawings for Tailings Containment Area and Surface Infrastructure Components" DWG T-05, SRK Job Number ICM014.008;	"South Dam" means the infrastructure designed as a solids retaining water retaining structure utilizing a central frozen foundation core with a geosynthetic clay liner (GCL) installed against the upstream side of the core, as illustrated in the Revised Water Licence Application Supporting Document S4 entitled "Engineering Drawings for Tailings Containment Area and Surface Infrastructure Components" DWG T-05, SRK Job Number ICM014.008 <u>as the result of Modifications or as otherwise approved by the Board</u> and as reflected in as-built drawings;			"South Dam" means the infrastructure designed as a solids retaining water retaining structure utilizing a central frozen foundation core with a geosynthetic clay liner (GCL) installed against the upstream side of the core, as illustrated in the Revised Water Licence Application Supporting Document S4 entitled "Engineering Drawings for Tailings Containment Area and Surface Infrastructure Components" DWG T-05, SRK Job Number ICM014.008 <u>as the result of Modifications or as otherwise approved by the Board</u> and as reflected in as-built drawings;
"Spillway" means an engineered structure to facilitate the emergency release of water or waste from a facility. The spillway elevation is the elevation at which water or waste begins to flow through the spillway structure as illustrated in the Revised Water Licence Application Supporting Document S4 entitled "Engineering Drawings for Tailings Containment Area and Surface Infrastructure Components" DWG T-08, SRK Job Number ICM014.008;	"Spillway" means an engineered structure to facilitate the emergency release of water or waste from a facility. The spillway elevation is the elevation at which water or waste begins to flow through the spillway structure as illustrated in the Revised Water Licence Application Supporting Document S4 entitled "Engineering Drawings for Tailings Containment Area and Surface Infrastructure Components" DWG T-08, SRK Job Number ICM014.008 <u>as the result of Modifications or as otherwise approved by the Board;</u>			"Spillway" means an engineered structure to facilitate the emergency release of water or waste from a facility. The spillway elevation is the elevation at which water or waste begins to flow through the spillway structure as illustrated in the Revised Water Licence Application Supporting Document S4 entitled "Engineering Drawings for Tailings Containment Area and Surface Infrastructure Components" DWG T-08, SRK Job Number ICM014.008 <u>as the result of Modifications or as otherwise approved by the Board;</u>

"Sump" means a containment facility for the collection of surface drainage;				"Sump" means a containment facility for the collection of surface drainage;
"Surface Drainage" means all surface waters resulting from the flow over, through or out of an operations area and is collected by means of engineered structures considered under the Storm Water Management Facilities as described in the Revised Water Licence Application Supporting Document S10j entitled "Water Management Plan";	"Surface Drainage" means all surface waters resulting from the flow over, through or out of an operations area and is collected by means of engineered structures considered under the Storm Water Management Facilities as described in the Revised Water Licence Application Supporting Document S10j entitled " <u>Water Management Plan</u> ", <u>as the result of Modifications or as otherwise approved by the Board</u> ;			"Surface Drainage" means all surface waters resulting from the flow over, through or out of an operations area and is collected by means of engineered structures considered under the Storm Water Management Facilities as described in the Revised Water Licence Application Supporting Document S10j entitled " <u>Water Management Plan</u> ", <u>as the result of Modifications or as otherwise approved by the Board</u> ;
"Tailings Impoundment Area" means the lake designated as a Tailings Impoundment Area under Schedule 2 of the Metal Mining Effluent Regulations. Also referred to in the Revised Water Licence Application as Tail Lake or Tailings Containment Area;	"Tailings Impoundment Area" means the <u>lake water body</u> designated as a Tailings Impoundment Area under Schedule 2 of the Metal Mining Effluent Regulations. Also referred to in the Revised Water Licence Application as Tail Lake or Tailings Containment Area;			"Tailings Impoundment Area" means the <u>lake water body</u> designated as a Tailings Impoundment Area under Schedule 2 of the Metal Mining Effluent Regulations. Also referred to in the Revised Water Licence Application as Tail Lake or Tailings Containment Area;
"Tailings Water Management Strategy" means the strategy employed during Operations to discharge Effluent from the Tailings Impoundment Area to Doris Creek to meet CCME guidelines for parameters of concern to protect freshwater aquatic life in Doris Creek, downstream of the waterfall, as described in the Revised Water Licence Application Supporting Document "Tailings Management Plan".	"Tailings Water Management Strategy" means the strategy employed during Operations to discharge Effluent from the Tailings Impoundment Area to Doris Creek to meet CCME guidelines for parameters of concern to protect freshwater aquatic life in Doris Creek, downstream of the waterfall, as described in the Revised Water Licence Application Supporting Document "Tailings Management Plan".		TMAC Sept 14, 2016: Suggests removing this section. Refer to Part G Item 27.	"Tailings Water Management Strategy" means the strategy employed during Operations to discharge Effluent from the Tailings Impoundment Area to Doris Creek to meet CCME guidelines for parameters of concern to protect freshwater aquatic life in Doris Creek, downstream of the waterfall, as described in the Revised Water Licence Application Supporting Document "Tailings Management Plan".
"Talík" means a layer or body of unfrozen ground occurring in a permafrost area due to a local anomaly in thermal, hydrological, hydrogeological or hydrochemical condition;				"Talík" means a layer or body of unfrozen ground occurring in a permafrost area due to a local anomaly in thermal, hydrological, hydrogeological or hydrochemical condition;
"Temporary Waste Rock Pad" means the engineered facility designed for the storage of Waste Rock and potentially acid generating rock, as illustrated in the Engineering Drawings (specifically DN-DMC-01 and 06) for the Doris North Camp Area, Doris North Project, Nunavut, Canada, prepared by SRK Consulting for Hope Bay Mining Ltd., Project No. 1CH008.027, dated September 29, 2010 and further design as submitted under the Waste Rock Management Plan and approved by the Board in writing.	"Temporary Waste Rock Pad" means the engineered facility ies designed for the storage of Waste Rock and potentially acid generating rock, as illustrated in the Engineering Drawings (specifically DN-DMC-01 and 06) for the Doris North Camp Area, Doris North Project, Nunavut, Canada, prepared by SRK Consulting for Hope Bay Mining Ltd., Project No. 1CH008.027, dated September 29, 2010 and further design as submitted under the Waste Rock and Ore Management Plan and approved by the Board in writing Water Licence Application <u>as the result of Modifications or as otherwise approved by the Board</u> .		TMAC Sept 14, 2016: Note that the Board approved modification to Temporary Waste Rock Pad under Part G Item 19c	"Temporary Waste Rock Pad" means the engineered facility ies designed for the storage of Waste Rock and potentially acid generating rock, as illustrated in the Engineering Drawings (specifically DN-DMC-01 and 06) for the Doris North Camp Area, Doris North Project, Nunavut, Canada, prepared by SRK Consulting for Hope Bay Mining Ltd., Project No. 1CH008.027, dated September 29, 2010 and further design as submitted under the Waste Rock and Ore Management Plan and approved by the Board in writing Water Licence Application <u>as the result of Modifications or as otherwise approved by the Board</u> .
"Traditional Knowledge" means the practical knowledge that has been gathered through the experience of living in close contact with nature and has been passed along or communicated	"Traditional Knowledge" means the practical knowledge that has been gathered through the experience of living in close contact with nature and has been passed along or communicated		TMAC Sept 14, 2016: Remove. Term not used in the licence.	"Traditional Knowledge" means the practical knowledge that has been gathered through the experience of living in close contact with nature and has been passed along

orally, and handed down from generation to generation;	orally, and handed down from generation to generation;			or communicated orally, and handed down from generation to generation;
"Total Metals" means the suite of metals referred to as MT in Schedule J Table 1 entitled Monitoring Groups. Total metals shall be analyzed on an un-filtered sample;				"Total Metals" means the suite of metals referred to as MT in Schedule J Table 1 entitled Monitoring Groups. Total metals shall be analyzed on an un-filtered sample;
"Use" means use as defined in section 4 of the Act;	"Use" means use <u>of waters</u> as defined in section 4 of the Act;			"Use" means use <u>of waters</u> as defined in section 4 of the Act;
"Waste" means waste as defined in section 4 of the Act;				"Waste" means waste as defined in section 4 of the Act;
"Waste Disposal Facility" means all site infrastructure designed to contain waste on a temporary or permanent basis including the Landfill, Landfarm, Tailings Impoundment Area, site Sumps, Pollution Control Pond, and Sedimentation Pond	"Waste Disposal Facility" means all site infrastructure designed to contain wWaste on a temporary or permanent basis including the Landfill, Landfarm, Tailings Impoundment Area, site Sumps, Pollution Control Ponds, and Sedimentation Pond;		.	"Waste Disposal Facility" means all site infrastructure designed to contain wWaste on a temporary or permanent basis including the Landfill, Landfarm, Tailings Impoundment Area, site Sumps, Pollution Control Ponds, and Sedimentation Pond;
"Waste Rock" means all unprocessed rock materials that are or were produced as a result of mining operations and having no current economical value;				"Waste Rock" means all unprocessed rock materials that are or were produced as a result of mining operations and having no current economical value;
"Wastewater" means the water generated by site activities or originates on-site that requires treatment or any other water management activity;				"Wastewater" means the water generated by site activities or originates on-site that requires treatment or any other water management activity;
"Wastewater Treatment Plant (WTP)" means the Sani-Membrane Bio-Reactor system designed for the treatment of sewage described in the document "Wastewater Treatment Management Plan", March 2012; and as indicated in the document "2AM-DOH0713 Proposed, Issued for Construction and As built Drawings", April 2010, and illustrated in the attached document "Proposed IFC/As built drawings, Feb 2010" DWGS NO 004 to 007, Rev 2, as built.	" <u>Domestic Wastewater Treatment Plant (WWTP)</u> " means the Sani-Membrane Bio-Reactor <u>wastewater treatment system</u> designed for the treatment of sewage described in the document " Wastewater Treatment Management Plan ", March 2012; and as indicated in the document "2AM-DOH0713 Proposed, Issued for Construction and As built Drawings", April 2010, and illustrated in the attached document " <u>Proposed IFC/As built drawings, Feb 2010</u> " DWGS NO 004 to 007, Rev 2, as built <u>Water Licence Application or as the result of Modifications identified under Part H of the Licence</u> and as-built drawings submitted to the Board.			" <u>Domestic Wastewater Treatment Plant (WWTP)</u> " means the Sani-Membrane Bio-Reactor <u>wastewater treatment system</u> designed for the treatment of sewage described in the document " Wastewater Treatment Management Plan ", March 2012; and as indicated in the document "2AM-DOH0713 Proposed, Issued for Construction and As built Drawings", April 2010, and illustrated in the attached document " <u>Proposed IFC/As built drawings, Feb 2010</u> " DWGS NO 004 to 007, Rev 2, as built <u>Water Licence Application or as the result of Modifications identified under Part H of the Licence</u> and as-built drawings submitted to the Board.
"Water or Waters" means water as defined in section 4 of the Act;				"Water or Waters" means water as defined in section 4 of the Act;
"Water Supply Facility" means the Fresh Water Intake, the Reclaim System and associated infrastructure;				"Water Supply Facility" means the Fresh Water Intake, the Reclaim System and associated infrastructure;
"Water Licence Renewal Application" for the purposes of this Licence includes the totality of the NWB and NIRB Public Registries established as a result of the filing of the application dated August 2012. Including Supporting Documents, and Technical Meeting Information Supplement documents; and	"Water Licence Renewal Application" for the purposes of this Licence includes the totality of the NWB and NIRB Public Registries established as a result of the <u>initial</u> filing of the application dated and subsequent <u>renewals and amendments August 2012</u> . Including Supporting Documents, and Technical Meeting Information Supplement documents, <u>Management and Monitoring Plans and</u>			"Water Licence Renewal Application" for the purposes of this Licence includes the totality of the NWB and NIRB Public Registries established as a result of the <u>initial</u> filing of the application dated and subsequent <u>renewals and amendments August 2012</u> . Including Supporting Documents, and Technical Meeting Information Supplement documents.

	IFC drawings submitted to the Board throughout the regulatory process;			Management and Monitoring Plans and IFC drawings submitted to the Board throughout the regulatory process;
"Weekly" means, in the context of monitoring frequency, one sampling event occurring every 7 days with a minimum of 5 days between sampling events.				"Weekly" means, in the context of monitoring frequency, one sampling event occurring every 7 days with a minimum of 5 days between sampling events.
Schedule B. General Conditions				
The Annual Report referred to in Part B, Item 3 shall include the following:			TMAC Sept 23, 2016: <i>Suggest revision as per INAC comment at Part A Item 2a</i>	"Unless otherwise approved by the Board, [The Annual Report referred to in Part B, Item 3 shall include the following:"
1. Summary of monthly monitoring reporting performed in accordance with Part J, Item 21. Summary shall convert daily volumes and tonnages to monthly and annual volumes and tonnages;				Summary of monthly monitoring reporting performed in accordance with Part J, Item 21. Summary shall convert daily volumes and tonnages to monthly and annual volumes and tonnages;
2. Summary of the Construction Monitoring Report referred to in Part D, Item 8 and outlined in Schedule D;	2. Summary of the Construction Monitoring Report referred to in Part D, Item 8 and outlined in Schedule D;		TMAC Sept 14, 2016: TMAC suggests that the redundant reporting (the requirement to report a summary of the Construction Monitoring Report in the Annual Report as well as the requirement to file a stand alone report) should be streamlined by removing the Annual Report requirement.	Summary of the Construction Monitoring Report referred to in Part D, Item 8 and outlined in Schedule D;
3. A Geochemical Monitoring and Waste Rock Storage Assessment that includes the following: a) For the tailings solids: i. All geochemical data appended; ii. All tonnage data appended and locations of disposal; iii. Discussion of geochemical data (static and kinetic, if applicable) with relevant figures and calculation of NNP and NPR; and iv. Geochemical interpretation of data. b) For tailings supernatant: i. All geochemical data appended; and ii. Figures depicting time series of constituent concentrations and loads. c) For waste rock: i. Tonnage of mineralized and un-mineralized Waste Rock placed on the Temporary Waste Rock Pad and in other locations as approved by the Board in writing;	d) For Waste R ock: e) For cyanide leach residue: ii. Presentation of results of bi-annual underground inspection of the following: • Location of inspection; • Extent of freezeback of cyanide leach residue; • Seepage from the cyanide leach residue; and		TMAC Sept 14, 2016: This material is intended to be disposed of in the interstices of the waste rock backfill on an ongoing basis, not in a specific singular or designated site. This inspection should be removed.	A Geochemical Monitoring and Waste Rock Storage Assessment that includes the following: a) For the tailings solids: i. All geochemical data appended; ii. All tonnage data appended and locations of disposal; iii. Discussion of geochemical data (static and kinetic, if applicable) with relevant figures and calculation of NNP and NPR; and iv. Geochemical interpretation of data. b) For tailings supernatant: i. All geochemical data appended; and ii. Figures depicting time series of constituent concentrations and loads. c) For Waste R ock: i. Tonnage of mineralized and un-mineralized Waste Rock placed on the Temporary Waste Rock Pad and in other locations as approved by the Board in writing; d) For barren bleed stream: i. Raw monthly monitoring results from

<p>d) For barren bleed stream:</p> <ol style="list-style-type: none"> Raw monthly monitoring results from monitoring station TL-9; and Figures depicting time series for each of the parameters. <p>e) For cyanide leach residue:</p> <ol style="list-style-type: none"> Presentation of results of bi-annual underground inspection of the following: <ul style="list-style-type: none"> Location of inspection; Extent of freezeback of cyanide leach residue; Seepage from the cyanide leach residue; and <p>f) Geochemical and inspection data of any samples taken from seepage from the cyanide leach residue including geochemical discussion of results.</p>				<p>monitoring station TL-9; and</p> <ol style="list-style-type: none"> Figures depicting time series for each of the parameters. <p>e) For cyanide leach residue:</p> <ol style="list-style-type: none"> Presentation of results of bi-annual underground inspection of the following: <ul style="list-style-type: none"> Location of inspection; Extent of freezeback of cyanide leach residue; Seepage from the cyanide leach residue; and; and <p>f) Geochemical and inspection data of any samples taken from seepage from the cyanide leach residue including geochemical discussion of results.</p>
<p>4. A summary of the results of the monthly water balance and water quality model assessments referred to in Part G, Item 33 and any re-calibrations that have been carried out. The report shall include:</p> <ol style="list-style-type: none"> Relevant supporting data; a comparison of measured water balance and water quality values to predicted values; Monitoring and internal modelling results; Discharge volume calculations; a discussion of any discrepancies in model inputs; re-evaluation of Tailings Water Management Strategy and a discussion of any changes to the discharge schedule; and Identification of any necessary adaptive management strategies. 	<p>3. Based on A summary of the results of the monthly annual water balance and water quality model assessments referred to in Part G, Item 33 and any re-calibrations that have been carried out. The report shall include:</p> <ol style="list-style-type: none"> Relevant supporting data; a comparison of measured water balance and water quality values to predicted values; Monitoring and internal modelling results; Discharge volume calculations; a discussion of any discrepancies in model inputs; evaluation of Tailings Water Management Strategy and a discussion of any changes to the discharge schedule; and Identification of any necessary Adaptive Management strategies. 	<p>KIA Sept 21, 2016: <i>Remove requirement for reporting on model recalibration and 4 other reporting requirements from Item G.33. I would suggest that these are critical for adaptive management and should be summarized and reported to compare predictions with operational results.</i></p>	<p>TMAC Sept 14, 2016: Suggest removal of re-calibration requirement.</p> <p>TMAC Sept 23, 2016: <i>Refer to revision made to Part G Item 33.</i></p>	<p>Based on A summary of the results of the monthly annual water balance and water quality model assessments referred to in Part G, Item 33 and any re-calibrations that have been carried out. The report shall include:</p> <ol style="list-style-type: none"> Relevant supporting data; a comparison of measured water balance and water quality values to predicted values; Monitoring and internal modelling results; Discharge volume calculations; a discussion of any discrepancies in model inputs; evaluation of Tailings Water Management Strategy and a discussion of any changes to the discharge schedule; and Identification of any necessary Adaptive Management strategies.
<p>5. Summary of the Geotechnical Inspection Report referred to in Part J, Item 18 that includes the following:</p> <ol style="list-style-type: none"> All quantities in cubic meters of dike seepage from the North and South Dams pumped back into the Tailings Impoundment Area; As-built drawings and a summary of the mitigation works undertaken along the shoreline of the Tailings Impoundment Area in response to erosion, as stipulated in the Shoreline Adaptive Management Plan; and 	<p>4. Summary of the Geotechnical Inspection Report referred to in Part J, Item 18 that includes the following:</p> <ol style="list-style-type: none"> All quantities in cubic meters of dike seepage from the North and South Dams pumped back into the Tailings Impoundment Area; As-built drawings and a summary of the mitigation works undertaken along the shoreline of the Tailings Impoundment Area in response to erosion, as stipulated in the Shoreline Adaptive Management Plan; and 		<p>TMAC Sept 14, 2016: TMAC suggests that the redundant reporting (the requirement to report a summary of the geotechnical inspection in the Annual Report as well as the requirement to file a stand alone report) should be streamlined by removing the Annual Report requirement.</p>	<p>Summary of the Geotechnical Inspection Report referred to in Part J, Item 18 that includes the following:</p> <ol style="list-style-type: none"> All quantities in cubic meters of dike seepage from the North and South Dams pumped back into the Tailings Impoundment Area; As-built drawings and a summary of the mitigation works undertaken along the shoreline of the Tailings Impoundment Area in response to erosion, as stipulated in the Shoreline Adaptive Management Plan; and

c) All data and information generated from the monitoring of all project geotechnical instrumentation.	c) All data and information generated from the monitoring of all project geotechnical instrumentation.			c) All data and information generated from the monitoring of all project geotechnical instrumentation.
6. An update on the current capacity of the Tailings Impoundment Area;				An update on the current capacity of the Tailings Impoundment Area;
7. A comparison of the flows (m³/day) at monitoring stations TL-1, TL-2, TL-3, and TL-4;	6. A record of measurements of Doris Lake water level.	KIA Sept 21, 2016: <i>They want to remove monitoring of inflows and outflows and replace with reporting of the water levels in Doris lake to show "the potential for lake level drawdown". Monitoring of the lake will show the actual drawdown but, without flows from TL1, 2,3 4 they will not have any data to determine causation of nay change on lake level. Recommend we do not accept this change.</i>	TMAC Sept 14, 2016: To monitor the potential for lake water level drawdown. TMAC Sept 23, 2016: <i>In accordance with the request from INAC, we are developing a relationship with the stream flow and the water level in Doris lake to monitor for effects.</i>	A record of measurements of Doris Lake water level.
8. Annual review and any revisions submitted in the form of addendums to the Management Plans or Emergency Response and Contingency Plan;	7. Annual review <u>of</u> and <u>submission of</u> any revisions submitted in the form of addendums to the Management Plans, or the Emergency Response Plan and or the Spill Contingency Plan in the form of either addenda <u>or revised Plans</u> ;		TMAC Sept 14, 2016: Revised for clarity	Annual review <u>of</u> and <u>submission of</u> any revisions submitted in the form of addendums to the Management Plans, or the Emergency Response Plan and or the Spill Contingency Plan in the form of either addenda <u>or revised Plans</u> ;
9. A list and description of all unauthorized discharges including volumes, spill report line identification number and summaries of follow-up action taken;				A list and description of all unauthorized discharges including volumes, spill report line identification number and summaries of follow-up action taken;
10. The results of the Aquatic Effects Monitoring Program in accordance with Part J, Item 3	9. The results of the Aquatic Effects Monitoring Program <u>and</u> in accordance with Part J, Item 3			The results of the Aquatic Effects Monitoring Program <u>and</u> in accordance with Part J, Item 3
11. Annual adjustments to reclamation security including any additional security that may be required;	10. Annual adjustments to amount of reclamation security including any additional security that may be required for newly affected area and reductions in security for progressive reclamation actions;			Annual adjustments to amount of reclamation security including any additional security that may be required for newly affected area and reductions in security for progressive reclamation actions;
12. Annual Incineration stack testing results;	11. Annual Incineration stack testing results <u>in years when stack testing is required</u> ;		TMAC Sept 14, 2016: Revise. Annual testing not required	Annual Incineration stack testing results <u>in years when stack testing is required</u> ;
13. Annual Landfill Management report;				Annual Landfill Management report;
14. A summary of modifications and/or major maintenance work carried out on the Water Supply and the Waste Disposal Facilities, including all associated structures, and an outline of any work anticipated for the next year;				A summary of modifications and/or major maintenance work carried out on the Water Supply and the Waste Disposal Facilities, including all associated structures, and an outline of any work anticipated for the next year;
15. A summary of any closure and reclamation work undertaken and an outline of any work anticipated for the next year, including any changes to implementation and scheduling;			TMAC Sept 14, 2016: Relocate this provision to be in proximity to the reclamation security item above.	A summary of any closure and reclamation work undertaken and an outline of any work anticipated for the next year, including any changes to implementation and scheduling;
16. A summary report describing public consultation and participation with local organizations and the residents of the nearby communities, including a				A summary report describing public consultation and participation with local organizations and the residents of the nearby

schedule of upcoming community events/information sessions;				communities, including a schedule of upcoming community events/information sessions;
17. GPS locations of monitoring stations as confirmed with the Inspector Part J, Item 5;				GPS locations of monitoring stations as confirmed with the Inspector Part J, Item 5;
18. A summary of actions taken to address concerns or deficiencies listed in the inspection reports and/or compliance reports filed by an Inspector; and				A summary of actions taken to address concerns or deficiencies listed in the inspection reports and/or compliance reports filed by an Inspector; and
19. Any other details on Water use or Waste Disposal requested by the Board by November 1st of the year being reported.				Any other details on Water use or Waste Disposal requested by the Board by November 1st of the year being reported.
Schedule D. Conditions Applying to Construction				
<p>1. The Construction Monitoring Report referred to in Part D, Item 8 shall include the following, where applicable:</p> <p>a) Blast vibration monitoring for quarrying activity carried out in close proximity to fish bearing waters;</p> <p>b) Monitoring of the performance of erosion protection measures employed by the construction contractor;</p> <p>c) Monitoring for sediment release from construction areas;</p> <p>d) Monitoring for wildlife interactions;</p> <p>e) Monitoring to ensure the protection of all migrating birds and their nesting sites;</p> <p>f) Waste Rock and Quarry Monitoring Report, including the following:</p> <p>i. A summary of the geochemical inspections;</p> <p>ii. Results of the seep surveys;</p> <p>iii. Results of geochemical sampling and analysis; and</p> <p>iv. A summary of all mitigation activities undertaken as a result of monitoring.</p> <p>g) Monitoring of the waste management practices employed by the contractors and their employees (food waste, hazardous wastes such as engine oil and filters etc, non-hazardous wastes);</p> <p>h) Monitoring of contractor's activity to minimize ground impacts to the tundra (i.e. keeping vehicles off the tundra and on constructed roadways);</p>	<p>2.The Construction Monitoring Report referred to in Part D, Item 8 shall include the following, where applicable:</p> <p>a) Blast vibration monitoring for quarrying activity carried out in close proximity to fish bearing Wwaters;</p> <p>b) [no change]</p> <p>c) [no change]</p> <p>d) Monitoring for wildlife interactions;</p> <p>e) Monitoring to ensure the protection of all migrating birds and their nesting sites;</p> <p>f) Waste Rock and Quarry Monitoring Report, including the following:</p> <p>i. A summary of the geochemical inspections;</p> <p>ii. Results of the seep surveys;</p> <p>iii. Results of geochemical sampling and analysis; and</p> <p>iv. A summary of all mitigation activities undertaken as a result of monitoring.</p> <p>Monitoring of the waste management practices employed by the contractors and their employees (food waste, hazardous wastes such as engine oil and filters etc, non-hazardous wastes);</p> <p>g) Monitoring of dust generation and use of Wwater by the contractor to manage dust emissions from crushing and construction activity;</p> <p>j) Re-Vegetation monitoring, where applicable</p> <p>k) Summary of the Quarry Rock Construction Monitoring Program referred to in Part D, Item 9;</p> <p>l) Summary of the construction of the North and South Dams;</p> <p>m) Summary of the items referred to in Part D, Item 13 with respect to updated construction drawings for the all weather access roads;</p> <p>n) Summary of the Quarry Rock Seepage Monitoring Program referred to in Part D, Item 20; and</p>		<p>TMAC Sept 14, 2016:</p> <p>d-e) Wildlife monitoring is reported to the NIRB and is not included in the NWB jurisdiction and is not specific to construction phase</p> <p>f) Remove the requirement to report a summary of a Geotech inspection report - redundant</p> <p>j) TMAC reports this though the air quality monitoring program. Suggest change for clarity.</p> <p>k) This is the same reporting as f. (quarry rock construction monitoring program). Redundant and request removal of the requirement to report a summary of a Report in the Construction Monitoring Report.</p> <p>m) complete – remove</p> <p>n) This is the same reporting as f. Remove the requirement to report a summary of a Report in the Construction Monitoring Report.</p> <p>o) will include these full reports here (rather than 90 days after completion – see related change in Part D, Item 25)</p> <p>TMAC Sept 23, 2016:</p>	<p><u>Unless otherwise approved by the Board,</u> The Construction Monitoring Report referred to in Part D, Item 8 shall include the following, where applicable:</p> <p>a) Blast vibration monitoring for quarrying activity carried out in close proximity to fish bearing Wwaters;</p> <p>b) Monitoring of the performance of erosion protection measures employed by the construction contractor;</p> <p>c) Monitoring for sediment release from construction areas;</p> <p>d) Monitoring for wildlife interactions;</p> <p>e) Monitoring to ensure the protection of all migrating birds and their nesting sites;</p> <p>f) Waste Rock and Quarry Monitoring Report, including the following:</p> <p>i. A summary of the geochemical inspections;</p> <p>ii. Results of the seep surveys;</p> <p>iii. Results of geochemical sampling and analysis; and</p> <p>iv. A summary of all mitigation activities undertaken as a result of monitoring.</p> <p>g) Monitoring of the waste management practices employed by the contractors and their employees (food waste, hazardous wastes such as engine oil and filters etc, non-hazardous wastes);</p> <p>h) Monitoring of contractor's activity to minimize ground impacts to the tundra (i.e. keeping vehicles off the tundra and on constructed roadways);</p> <p>i) Monitoring of dust generation and use of water by the contractor to manage dust</p>

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<div>CCME - Water Quality guidelines for total ammonia for the protection of aquatic life (mg·L⁻¹ NH₃)</div> <table><tr><th>Temp ° (°C)</th><th colspan="8">pH</th></tr><tr><th></th><th>6.0</th><th>6.5</th><th>7.0</th><th>7.5</th><th>8.0</th><th>8.5</th><th>9.0</th><th>9.5</th></tr><tr><td>0</td><td>231</td><td>73.0</td><td>23.1</td><td>7.32</td><td>2.33</td><td>0.749</td><td>0.250</td><td>0.042</td></tr><tr><td>5</td><td>153</td><td>48.3</td><td>15.3</td><td>4.84</td><td>1.54</td><td>0.502</td><td>0.172</td><td>0.034</td></tr><tr><td>10</td><td>102</td><td>32.4</td><td>10.3</td><td>3.26</td><td>1.04</td><td>0.343</td><td>0.121</td><td>0.029</td></tr><tr><td>15</td><td>69.7</td><td>22.0</td><td>6.98</td><td>2.22</td><td>0.715</td><td>0.239</td><td>0.089</td><td>0.026</td></tr><tr><td>20</td><td>48.0</td><td>15.2</td><td>4.82</td><td>1.54</td><td>0.499</td><td>0.171</td><td>0.067</td><td>0.024</td></tr><tr><td>25</td><td>33.5</td><td>10.6</td><td>3.37</td><td>1.08</td><td>0.354</td><td>0.125</td><td>0.053</td><td>0.022</td></tr><tr><td>30</td><td>23.7</td><td>7.50</td><td>2.39</td><td>0.767</td><td>0.256</td><td>0.094</td><td>0.043</td><td>0.021</td></tr></table>	Temp ° (°C)	pH									6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	0	231	73.0	23.1	7.32	2.33	0.749	0.250	0.042	5	153	48.3	15.3	4.84	1.54	0.502	0.172	0.034	10	102	32.4	10.3	3.26	1.04	0.343	0.121	0.029	15	69.7	22.0	6.98	2.22	0.715	0.239	0.089	0.026	20	48.0	15.2	4.82	1.54	0.499	0.171	0.067	0.024	25	33.5	10.6	3.37	1.08	0.354	0.125	0.053	0.022	30	23.7	7.50	2.39	0.767	0.256	0.094	0.043	0.021				<div>CCME - Water Quality guidelines for total ammonia for the protection of aquatic life (mg·L⁻¹ NH₃)</div> <table><tr><th>Temp ° (°C)</th><th colspan="8">pH</th></tr><tr><th></th><th>6.0</th><th>6.5</th><th>7.0</th><th>7.5</th><th>8.0</th><th>8.5</th><th>9.0</th><th>9.5</th></tr><tr><td>0</td><td>231</td><td>73.0</td><td>23.1</td><td>7.32</td><td>2.33</td><td>0.749</td><td>0.250</td><td>0.042</td></tr><tr><td>5</td><td>153</td><td>48.3</td><td>15.3</td><td>4.84</td><td>1.54</td><td>0.502</td><td>0.172</td><td>0.034</td></tr><tr><td>10</td><td>102</td><td>32.4</td><td>10.3</td><td>3.26</td><td>1.04</td><td>0.343</td><td>0.121</td><td>0.029</td></tr><tr><td>15</td><td>69.7</td><td>22.0</td><td>6.98</td><td>2.22</td><td>0.715</td><td>0.239</td><td>0.089</td><td>0.026</td></tr><tr><td>20</td><td>48.0</td><td>15.2</td><td>4.82</td><td>1.54</td><td>0.499</td><td>0.171</td><td>0.067</td><td>0.024</td></tr><tr><td>25</td><td>33.5</td><td>10.6</td><td>3.37</td><td>1.08</td><td>0.354</td><td>0.125</td><td>0.053</td><td>0.022</td></tr><tr><td>30</td><td>23.7</td><td>7.50</td><td>2.39</td><td>0.767</td><td>0.256</td><td>0.094</td><td>0.043</td><td>0.021</td></tr></table>	Temp ° (°C)	pH									6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	0	231	73.0	23.1	7.32	2.33	0.749	0.250	0.042	5	153	48.3	15.3	4.84	1.54	0.502	0.172	0.034	10	102	32.4	10.3	3.26	1.04	0.343	0.121	0.029	15	69.7	22.0	6.98	2.22	0.715	0.239	0.089	0.026	20	48.0	15.2	4.82	1.54	0.499	0.171	0.067	0.024	25	33.5	10.6	3.37	1.08	0.354	0.125	0.053	0.022	30	23.7	7.50	2.39	0.767	0.256	0.094	0.043	0.021
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TMAC Sept 23, 2016: *change as per INAC comment above in Part A Item 2b.*
Unless otherwise approved by the Board, the Licensee shall undertake the monitoring described in Tables 1 and 2.

Table 1 MONITORING GROUPS

Group	Analytical Parameters	Measurement Units	Colour Reference	TMAC Rationale for the Change
General (G)	pH	pH units	Red	TMAC Sept 14, 2016 Reason for removing colours is that it is not needed, is redundant. Is the same as the Group column
	TSS	mg/L		
Nutrients (N1)	Total Ammonia-N	mg-N/L	Blue	
	Nitrate-N			
	Nitrite-N			
Nutrients (N2)	Orthophosphate-P	mg/L	Orange	
	Total Phosphate-P			
Total Metals - Unfiltered (MT)	T-Aluminum	mg/L	Green	
	T-Arsenic			
	T-Copper			
	T-Iron			
	T-Nickel			
	T-Lead			
	T-Zinc			
Dissolved Metals - Filtered (MD)	D-Iron	mg/L	Purple	
	D-Copper			
	D-Arsenic			
	D-Zinc			
	D-Cadmium			
	D-Nickel			
Biological (B)	Biological Oxygen Demand	mg/L	Yellow	TMAC Sept 14, 2016 Revised to allow flexibility in use of equivalent alternate Lab methods.
	Fecal Coliforms	CFU or MPN/100 mL (colony forming units)		
Hydrocarbons (HC)	Total Oil and Grease	mg/L	Dk. Green	
	T-Lead			
	Benzene			
	Toluene			
	Ethyl-Benzene			
Discharge (D)	Flow	m ³ /day	Grey	
	Volume	m ³		
	Duration	Day		

* (definition: metals consistent with baseline data previously collected and any other metals of current interest)

GROUP REFERENCE

STATION	TL-1		TL-2	TL-3	TL-4	TL-5	TL-6	TL-7	TL-8	TL-9	TL-10	TL-11	TL-12	ST-1	ST-2	ST-3	ST-4	ST-5	ST-6	ST-7	ST-7a	ST-8	ST-9	ST-10	ST-11	ST-12	TMAC Rationale for the Change	
PARAMETER																												
pH	x		x	*	*	*			x	*	*	x	*	*	*	x	x	x	x	x	x	x	x		x		TMAC Sept 14, 2016: Rationale for station changes/removal is provided later on in the document	
Electrical Conductivity												x																
TSS	x		x	*	*	*			x		*		*	*	*	x	x	x	x	x	x	x	x	x	x	x		
TDS	x		x	*	*						*																Added ST-11 is it was omitted from this table in previous water licence.	
Cl	x		x	*	*						*			*														
Free CN	x		x	*	*	*			x		*										x	*						
Total CN	x		x	*	*	*			x	*	*	x		*	*	x					x	*				x		
WAD CN						*		x		*		x																
Total Ammonia-N	x		x	*	*	*			x		*	x	*	*	*	x	x				x	x				x		
Nitrate-N	x		x	*	*	*			x		*	x	*	*	*						x	x				x		
Nitrite-N	x		x	*	*	*			x		*	x	*	*	*						x	x				x		
Sulphate						*						x	*	*	*	x										x		
Orthophosphate-P	x		x	*	*				x		*										x	x						
Total Phosphate-P	x		x	*	*				x		*										x	x						
T-Al	x		x	*	*	*	x		x		*			*	*	x					x	x				x		
T-Ag	x		x	*	*				x		*										x	x						
T-As	x		x	*	*	*	x		x		*			*	*	x					x	x				x		
T-Ca	x		x	*	*						*										x	x						
T-Cd	x		x	*	*	*	x		x		*										x	x						
T-Cr	x		x	*	*	*	x		x		*										x	x						
T-Cu	x		x	*	*	*	x		x		*			*	*	x					x	x				x		
T-Fe	x		x	*	*	*	x		x		*			*	*	x					x	x				x		
T-Hg	x		x	*	*	*	x		x		*										x	x						
T-K	x		x	*	*						*																	
T-Mo	x		x	*	*	*	x		x		*										x	x						
T-Mg	x		x	*	*						*																	
T-Na	x		x	*	*						*																	
T-Ni	x		x	*	*	*	x		x		*			*	*	x					x	x				x		
T-Pb	x		x	*	*	*	x		x		*			*	*	x	x	x	x	x	x	x				x		
T-Se	x		x	*	*	*	x		x		*										x	x						
T-Zn	x		x	*	*	*	x		x		*			*	*	x					x	x				x		
T-Tl	x		x	*	*				x		*										x	x						
T-Radium 226	x				*																							
Dissolved Oxygen																												
Acute Lethality	x				*																							
Flow	x		x	*	*	*			x				*	*	*	x	x	x	x	x	x	x	x		x			
Volume	x		x	*	*	*			x				*	*	*	x	x	x	x	x	x	x	x		x			
Water Level	x																									x		
Ice thickness																										x		
Total Metals by ICP-MS*						*																						
Total Metals ICP-MS including Sulphur							x																					

Trace Metals by ICP-MS																													
Alkalinity												x			*														
Acidity												x																	
Dissolved Fe										*																			
D-Cu										*																			
D-As										*																			
D-Zn										*																			
D-Cd										*																			
D-Ni										*																			
BOD5	x				*														x	x	x	x							
Fecal Coliforms	x				*														x	x	x	x							
Cyanate						*		x																					
Thiocyanate						*		x																					
Moisture content								x																					
Total Oil and Benzene																	x	x	x										
Toluene																	x	x	x										
Ethyl-Benzene																	x	x	x										
Tonnage							x	x																					
Chemical Oxygen Demand																													
Total Inorganic Carbon							x																						

* (definition: metals consistent with baseline data previously collected and any other metals of current interest)

Table 2: MONITORING REQUIREMENTS

Station	Description	Phase	Monitoring Parameters	Frequency during Care and Maintenance prior to any deposit of Tailings to the TIA	Frequency (during Operations and any time after initial deposit of Tailings to the TIA)	TMAC Rationale for Changes and Party Comments
TL-1	TIA discharge at the Reclaim Pump Barge—depth 1.5m below surface	Operation, Care and Maintenance, Closure, Post Closure (for up to nine (9) years after cessation of mining.	G, N1, N2, MT and TDS, Cl, Free CN, Total CN, T-Ag, T-Ca, T-Cd, T-Cr, T-Hg, T-K, T-Mo, T-Mg, T-Na, T-Se, T-Tl, Total Oil and Grease	Three times per week for one (1) week prior to discharge and two times per week for two (2) weeks after discharge commences, then reducing to once per week during remainder of annual discharge period	Annually Monthly Every second day for two (2) weeks prior to discharge and for two (2) weeks after discharge commences, then reducing to once per week during remainder of annual discharge period	<p>TMAC Sept 14, 2016 Change to monthly monitoring as per discussion with Parties.</p> <p>Suggest removal of column “Frequency during Care and Maintenance prior to any deposit of Tailings to the TIA as it will no longer be used following the deposition of tailings</p> <p>Location will be at the reclaim pipeline.</p> <p>Cyanide destruct tailings will be placed underground</p> <p>Added in response to Party comments. NWB was to follow-up with us on this. No follow-up received.</p> <p>Frequency altered to reflect ocean discharge during Ops and Closure and that the water in the TIA is a major input of process water to the milling process.</p> <p>INAC Sept 21, 2016 <i>INAC recommends that cyanide monitoring remain in place (Free CN and Total CN) because mill process water will be directed to the TIA. Residual Cyanide may be present in this effluent.</i></p> <p>KIA Sept 21, 2016 <i>Station TL-1 (TIA at reclaim pipeline) will be sampled during operation, care and maintenance, closure and post closure (for up to nine years after mining). The sampling frequency has been reduced to annually (during all project phases), with the rationale that there will no longer be any freshwater discharge during operations and closure. We feel that the monitoring frequency should increase two years prior to breach of the North Dam, and in the post-closure phase (when TIA water will be directed to Doris Lake) to understand how water quality changes seasonally. We recommend TMAC collect water quality samples three times per year (under ice, freshet, and pre-freeze up). Once water quality is demonstrably stable in the TIA, and meets an established threshold, monitoring may be reduced to annually. Stability should be evaluated in each season, and</i></p>

						<p><i>be defined as statistically similar season specific water quality measurements over a pre-determined period.</i></p> <p><i>We recognize that details of the monitoring may be outlined in the Final Closure Plan, but want to raise it so it is not missed in the future.</i></p> <p>TMAC Sept 23, 2016 <i>TMAC accept this position and recommends maintain the following monitoring parameters: G, N1, N2, MT and TDS, Cl, Free CN, Total CN, T-Ag, T-Ca, T-Cd, T-Cr, T-Hg, T-K, T-Mo, T-Mg, T-Na, T-Se, T-Tl, Total Oil and Grease</i></p> <p><i>In response to the KIA's comment, the recommendation regarding post closure monitoring is noted. As in similar conversation on this matter that have occurred throughout the process TMAC and parties have agreed to revisit this at the time of the next licence issuance, which will occur closure to Post-Closure.</i></p>
			Dissolved Oxygen and Redox Potential	Every second month	Annually Every second month	
			Acute Lethality	Once prior to discharge	<u>Annually during post-closure only</u> Once prior to discharge	TMAC Sept 14, 2016 Revised to reflect discharge to freshwater occurring only during Post- Closure
			D	Daily during periods of discharge	Daily during periods of discharge	TMAC Sept 14, 2016 Removing this to reflect the change to ocean discharge Will be measured as part of MMER and reported through that process.
TL-2	Doris Outflow Creek - upstream (at the flow monitoring station adjacent to the bridge)	Operation, Closure, Post Closure (for up to nine (9) years after cessation of mining).	G, N1, N2, MT and TDS, Cl, Free CN, Total CN, T-Ag, T-Ca, T-Cd, T-Cr, T-Hg, T-K, T-Mo, T-Mg, T- Na, T-Se, T-Tl,	One duplicate sample collected prior to discharge; single samples collected twice per week for two(2) weeks after discharge commences, then reducing to once per week during the remainder of annual discharge period	Every second day for two (2) weeks prior to discharge and for two (2) weeks after discharge commences, then reducing to once per week during remainder of annual discharge period <u>Annually for 2 years prior to Post-Closure, and during Post-Closure</u>	<p>TMAC Sept 14, 2016 Removed monitoring during Operations to reflect ocean discharge.</p> <p>Removal of sampling during Operations and closure. Addition of annual sampling in years prior to Post-Closure to reflect party comments and during Post-Closure to reflect freshwater discharge post breaching of North dam.</p> <p>KIA Sept 21, 2016 <i>Station TL-2 (Doris Outflow Creek) will be sampled during closure and post closure (for up to nine years after mining). The sampling frequency also has been reduced to annually 2 years prior to Post-Closure, an during Post Closure. Similar to TL-1, monitoring frequency should increase two years prior to breach of the North Dam, and in the post-closure phase (when TIA water will be directed to Doris Lake) to understand how water quality changes seasonally before the dam breaches, and the influence of the breach on downstream water quality once the dam has been breached. We recommend TMAC collect water quality samples three times per year (under ice, freshet, and pre-freeze up). Once water quality is demonstrably stable in the TIA, and meets the established threshold, monitoring at TL-2 may be reduced to annually (as any variations in water</i></p>

						<p>quality are not from the TIA effluent quality). Stability should be evaluated in each season, and be defined as statistically similar season specific water quality measurements over a pre-determined period.</p> <p>We recognize that details of the monitoring may be outlined in the Final Closure Plan, but want to raise it so it is not missed in the future.</p> <p>TMAC Sept 23, 2016 In response to the KIA's comment, the recommendation regarding post closure monitoring is noted. As in similar conversation on this matter that have occurred throughout the process TMAC and parties have agreed to revisit this at the time of the next licence issuance, which will occur closure to Post-Closure.</p>
			D	Daily during periods of discharge from Tail Lake	Daily during periods of discharge from Tail Lake	<p>TMAC Sept 14, 2016 Remove. Discharge from TIA will no longer be based on Doris Creek discharge.</p>
TL-3	Doris Outflow Creek (~80m downstream of the base of the waterfall)	Operation, Closure, Post Closure (for up to nine (9) years after cessation of mining)	<p>G, N1, N2, MT and TDS, Cl, Free CN, Total CN, T-Ag, T-Ca, T-Cd, T-Cr, T-Hg, T-K, T-Mo, T-Mg, T-Na, T-Se, T-Tl, Total Oil and Grease</p>	One duplicate sample collected prior to discharge; single samples collected twice per week for two(2) weeks after discharge commences, then reducing to once per week during the remainder of annual discharge period	Every second day for two (2) weeks prior to discharge and for two (2) weeks after discharge commences, then reducing to once per week during remainder of annual discharge period	<p>TMAC Sept 14, 2016 Remove TL-3 altogether. Replaced, where appropriate, with sampling from TL-2, with adoption of TL-3 compliance criteria at the TL-2 location.</p>
			D	Daily during periods of discharge from Tail Lake	Daily during periods of discharge from Tail Lake	
TL-4	TIA Discharge End-of Pipe (taken at a valve at the discharge end of the transfer pump pipeline)	Operation, Closure, Post Closure (for up to nine (9) years after cessation of mining)	<p>G, N1, N2, MT, and TDS, Cl, Free CN, Total CN, T-Ag, T-Ca, T-Cd, T-Cr, T-Hg, T-K, T-Mo, T-Mg, T-Na, T-Se, T-Tl, Radium-226</p>	Weekly during periods of discharge	Weekly during periods of discharge	<p>TMAC Sept 14, 2016 Remove TL-4 altogether. Is redundant given TL-1 sampling.</p>
			Acute Lethality	Once approximately midway through annual discharge	Monthly during discharge	
			B	Monthly	Monthly	
			D	Daily during periods of discharge from Tail Lake	Daily during periods of discharge from Tail Lake	
TL-5	Combined Tailings Discharged into TIA (Water Component) taken from a valve in the mill at the	Operations	<p>G, N1, MT, and Free CN, Total CN, WAD CN, Sulphate, T-Cd, T-Cr, T-Hg, T-Mo, T-Se, and Total Metals by ICP-MS</p>	-	Daily initially, reduced to weekly after 3 months of operation	<p>TMAC Sept 14, 2016 Remove this station as Monitoring and reporting is captured within the Water Management Plan.</p>
			Cyanate and Thiocyanate	-	Quarterly	

	discharge end of the mill tailings pumps		D	-	Daily initially, reduced to weekly after 3 months of operation	
TL-6	Combined Tailings Discharged into TIA (Solid Component) taken from a valve in the mill at the discharge end of the mill tailings pumps	Operations	Tonnage of dry tailings solids	-	Monthly during periods of discharge	TMAC Sept 14, 2016 Only flotation tailings will go into the TIA
			MT and T-Cd, T-Cr, T-Hg, T-Mo, T-Se,	-	Sampled on a weekly basis with analyses carried out monthly on a composite sample of the TL-6 weekly samples	
			Total Inorganic Carbon and Total Metals by ICP-MS (must include Sulphur)	-		
TL-7	Filtered Cyanide Leach Residue Detoxified Tailings sent underground as backfill	Operations	Dry tonnage of CN leach residue detoxified tailings sent underground, WAD CN, Total Inorganic Carbon, Total Metals by ICP- MS (including Sulphur), Moisture content of backfill trucked underground,	-	Monthly	TMAC Sept 14, 2016 Clarified for consistent terminology with other site document
			Cyanate and Thiocyanate	-	Quarterly	
TL-8	Reclaim water pumped from TIA to Mill Process water tank taken from a valve at the discharge end of the reclaim water pump	Operation	G, N1, N2, MT and Free CN, Total CN, T-Ag, T-Cd, T-Cr, T-Hg, T-Mo, T-Se, T-Tl,	-	Monthly	TMAC Sept 14, 2016 Redundant with TL-1
			D	-	Daily during periods of pumping	
TL-9	Barren Bleed Solution sent to tailings taken from a sampling valve within the mill	Operations	MD and pH, Total and WAD CN, Chemical Oxygen Demand,	-	Monthly	TMAC Sept 14, 2016 Remove this station as Monitoring and reporting is captured within the Water Management Plan.
TL-10	Water Column in deepest portion of Tail Lake and at a location away from the TIA Reclaim water floating pump house, sampled at surface, mid-depth and near bottom.	Operation, Closure, Post Closure (for up to nine (9) years after cessation of mining)	G, N1, N2, MT and TDS, Cl, Free CN, Total CN, T-Ag, T-Ca, T-Cd, T-Cr, T-Hg, T-K, T-Mo, T-Mg, T-Na, T-Se, T-Tl, Dissolved Oxygen and Redox Potential	-	Monthly during discharge starting two (2) weeks prior to start of discharge season	TMAC Sept 14, 2016 Removed entirely to reflect ocean discharge

TL-11	Seepage from underground backfilled stopes	Operations	Visual inspection for seepage. If seepage present parameters to be monitored include N1 and pH, EC, Trace metals by ICP-MS, Alkalinity, Acidity, Sulphate, Total and WAD-CN,	-	Survey Twice annually	TMAC Sept 14, 2016 Remove this station as Monitoring and reporting is captured within the Groundwater Management Plan.
TL-12	Underground Minewater—water pumped from the underground mine into the Mill tailings pump box	Operations,	G, N1 and Sulphate and Total Metals by ICP-MS,	-	Monthly	TMAC Sept 14, 2016 Remove this station as Monitoring and reporting is captured within the Water Management Plan.
			D	-	Monthly during pumping	
ST-1	Discharge from Sedimentation Pond taken at a depth of ~0.25 m	Construction, Operation, Closure	G, N1, MT and Total Sulphate, Total CN, Total Oil and Grease,	-	Once before any discharge, daily when discharging onto the tundra	TMAC Sept 14, 2016 Remove this station as Monitoring and reporting is captured within the Water Management Plan.
			D	-	Daily during periods of discharge	
ST-2	Discharge from Pollution Control Pond taken at a depth of ~0.25m	Construction, Operation, Closure	G, N1, MT and Total Sulphate, Total CN, Total Oil and Grease, Alkalinity, Chloride, and Total Metals by ICP-MS	Monthly during open water season	Monthly during open water season	TMAC Sept 14, 2016 Remove this station as Monitoring and reporting is captured within the Water Management Plan.
			D	Daily during periods of discharge	Daily during periods of discharge	
ST-3	Discharge from Non-hazardous Landfill pollution control sump	Construction, Operation, Closure, <u>Care and Maintenance</u>	G, MT and Total Ammonia-N, Total Sulphate, Total CN, Total Oil and Grease,	Once before any discharge, daily when discharging onto the tundra	Annually, oOnce before any discharge, daily when discharging onto the tundra	TMAC Sept 14, 2016 Added Care and Maintenance Sampling reduced to a single sample prior to discharge based on discussion with parties
			D	Daily during periods of discharge	Daily during periods of discharge	
ST-4	Discharge from Landfarm sump	Construction, Operation, Closure, <u>Care and Maintenance</u>	G, HC	Once before any discharge, daily when discharging onto the tundra	Annually, oOnce before any discharge, daily when discharging onto the tundra	TMAC Sept 14, 2016 Added Care and Maintenance Sampling reduced to a single sample prior to discharge based on discussion with parties
			D	Daily during periods of discharge	Daily during periods of discharge	
ST-5	Discharge from the Plant Site Fuel Storage and	Construction, Operation, Closure, <u>Care and Maintenance</u>	G, HC	Once before any discharge, daily when discharging onto the tundra	Annually, oOnce before any discharge, daily when discharging onto the tundra	TMAC Sept 14, 2016 Added Care and Maintenance Sampling reduced to a single sample prior to discharge based on discussion with parties

	Containment Area Sump		D	Daily during periods of discharge	Daily during periods of discharge	
ST-6a And ST-6b	Discharge from the Roberts Bay Fuel Storage and Containment Area Sumps	Construction, Operation, Closure, <u>Care and Maintenance</u>	G, HC	Once before any discharge, daily when discharging onto the tundra	Annually, or Once before any discharge, daily when discharging onto the tundra	TMAC Sept 14, 2016 Added Care and Maintenance Sampling reduced to a single sample prior to discharge based on discussion with parties INAC R35
			D	Daily during periods of discharge	Daily during periods of discharge	

ST-7	Freshwater pumped from Doris Lake taken from a valve on the discharge end of the freshwater pump	Construction, Operation, Closure, <u>Care and Maintenance</u>	G, N1, N2, MT and Free CN, Total CN, T-Ag, T-Cd, T-Cr, T-Hg, T-Mo, T-Se, T-Tl, and Total Oil and Grease	-	Monthly <u>during periods of pumping</u>	TMAC Sept 14, 2016 Text removal to allow flexibility in sampling location, sampling location will reflect the water uptake. Added Care and Maintenance. Removed Total Oil and Grease as per discussion with parties. Clarification that sampling would occur during periods of pumping.
			B	-		TMAC Sept 14, 2016 Biological parameters removed because sewage effluent will report to the TIA or to the Glenn/Windy watershed during tundra discharge.
			D	-	Monthly during periods of pumping	
ST-7a (new)	Freshwater pumped from the Windy Lake freshwater intake (Appendix H of the Application),	Construction, Operation, Closure, <u>Care and Maintenance</u>	G, N1, N2, MT and Free CN, Total CN, T-Ag, T-Cd, T-Cr, T-Hg, T-Mo, T-Se, T-Tl, <u>T-Ca</u> and Total Oil and Grease	-	Monthly <u>during periods of pumping</u>	TMAC Sept 14, 2016 Text removal to allow flexibility in sampling location, sampling location will reflect the water uptake. Added Care and Maintenance. Removed cyanide as no cyanide use will occur in this watershed. Calcium added for consistency with Schedule J Group Reference table. Clarification that sampling would occur during periods of pumping.
			B	-		
			D	-	Monthly during periods of pumping	
ST-8	Discharge from Wastewater Treatment Plant bio-membrane	Construction, Operation, Closure, <u>Care and Maintenance</u>	G, B, and Total Oil and Grease	-	Monthly <u>when discharging to tundra; Annually, when discharging to TIA</u>	TMAC Sept 14, 2016 Modified description to allow flexibility in the sampling location, water sampled will be reflective of treated effluent. Added Care and Maintenance.

						Clarified frequency in relation to discharge location
			Location of discharge	-	Monthly during periods of discharge	
			D	-	Monthly during periods of discharge	
ST-9	Runoff from Wastewater Treatment Plant discharge - downstream of wastewater treatment plant discharge point and just prior to flow entering Doris Glenn Lake	Construction, Operations, Closure, Care and Maintenance	G, B, and Total Oil and Grease	Monthly	Monthly <u>when discharging to tundra</u>	TMAC Sept 14, 2016 Corrected error. Added phases during which tundra discharge may occur. Clarified frequency in relation to tundra discharge.
ST-10	Site Runoff from Sediment Controls	Construction, Operations, Closure	TSS <u>or</u> Turbidity	Daily during periods of discharge	Daily during periods of discharge	TMAC Sept 14, 2016 Addition to allow flexibility in measurement parameter which allows for more expedient on-site response. Will adopt alternate proposed parameter (turbidity) following development of a site-specific TSS-turbidity relationship.
ST-11 (new)	Discharge from the Reagent and Cyanide Storage Facility Sumps.	Construction, Operation, Closure, <u>Care and Maintenance</u>	G, HC, MT, Total <u>Ammonia</u> , Total CN, and D	Once before any discharge, daily when discharging onto the tundra	Annually, o Once before any discharge, daily when discharging onto the tundra	TMAC Sept 14, 2016 Added Care and Maintenance. Additional parameters added here for consistency with water licence text.
<u>ST-12</u>	<u>Doris Lake</u>	<u>Operation, Closure</u>	<u>Water Level</u>		<u>Monthly</u>	TMAC Sept 14, 2016 New station.
			<u>Ice Thickness</u>		<u>Annually in April</u>	
Monitoring Strip #1	Shoreline (location provided in S4 DWG T-14 dated March 2007)	Construction, Operations, Closure	Erosion via bathymetric survey of the underwater section of the monitoring strip down to the original Tailings Impoundment Area water level of 28.3 m	Annually	Annually	
Monitoring Strip #2	Shoreline (location provided in S4 DWG T-14 dated March 2007)	Construction, Operations, Closure	Erosion via bathymetric survey of the underwater section of the monitoring strip down to the original Tailings Impoundment Area water level of 28.3 m	Annually	Annually	

Monitoring Strip #3	Shoreline (location provided in S4 DWG T-14 dated March 2007)	Construction, Operations, Closure	Erosion via bathymetric survey of the underwater section of the monitoring strip down to the original Tailings Impoundment Area water level of 28.3 m	Annually	Annually	TMAC Sept 14, 2016 Remove as this area will be covered with subaerially-deposited tailings
Monitoring Strip #4	Shoreline (location provided in S4 DWG T-14 dated March 2007)	Construction, Operations, Closure	Erosion via bathymetric survey of the underwater section of the monitoring strip down to the original Tailings Impoundment Area water level of 28.3 m	Annually	Annually	TMAC Sept 14, 2016 Remove as this area will be covered with subaerially-deposited tailings
Monitoring Strip #5	Shoreline (location provided in S4 DWG T-14 dated March 2007)	Construction, Operations, Closure	Erosion via bathymetric survey of the underwater section of the monitoring strip down to the original Tailings Impoundment Area water level of 28.3 m	Annually	Annually	
Monitoring Strip #6	Shoreline (location provided in S4 DWG T-14 dated March 2007)	Construction, Operations, Closure	Erosion via bathymetric survey of the underwater section of the monitoring strip down to the original Tailings Impoundment Area water level of 28.3 m	Annually	Annually	

Table 3 THERMAL MONITORING

Station	Location	Location Reference	Phase	Monitoring Parameters	Frequency Prior to Operations; During Care and Maintenance	Frequency During Operations	TMAC Rationale for Changes and Party Comments
T1	Jetty	SD4 – DWG J-01	Operation	Temperature		1A	TMAC Sept 14, 2016 Suggest removing column titles “Monitoring Parameters” as it is redundant: it is implied that thermistors monitor temperature. Inactive, therefore remove.
T2	Jetty	SD4 – DWG J-01	Operation	Temperature		1A	TMAC Sept 14, 2016 Inactive, therefore remove.
T4	Beach Laydown	SD4 – DWG S-01	Operation	Temperature		1A	TMAC Sept 14, 2016 Inactive, therefore remove.
T5	Fuel Storage and Containment Facility at Robert's Bay	-	Operation	Temperature		1A	TMAC Sept 14, 2016 Inactive, therefore remove.
T7	Airstrip	SD4 – DWG S-03	Operation	Temperature		1A	TMAC Sept 14, 2016 Inactive, therefore remove.
T8	Airstrip	SD4 – DWG S-03	Operation	Temperature		1A	TMAC Sept 14, 2016 Inactive, therefore remove.
T9	Airstrip	SD4 – DWG S-03	Operation	Temperature	A	A	TMAC Sept 14, 2016 Thermistor was for baseline data collection and so is no longer needed.
T-1	Bridge Abutment	SD4 - DWG S-12	Operation	Temperature	D	A	
T-2	Bridge Abutment	SD4 - DWG S-12	Operation	Temperature	D	A	
DOR-1	Camp	to be confirmed	Operation	Temperature		1A	TMAC Sept 14, 2016 Inactive, therefore remove.
DOR-2	Camp	to be confirmed	Operation	Temperature	D	A	TMAC Sept 14, 2016 This was intended as a baseline station that was alter deemed unnecessary
DOR-3	Pollution Control Pond	to be confirmed <u>PCP-1</u>	Operation	Temperature	D	A	TMAC Sept 14, 2016 Clarification on location
DOR-4	Sedimentation Pond	to be confirmed	Operation	Temperature	D	A	TMAC Sept 14, 2016 Not needed as Sed Pond is fully lined.
DOR-5	Float Plane Dock Laydown Area	to be confirmed	Operation	Temperature		1A	TMAC Sept 14, 2016 Inactive, therefore remove.
DOR-6	Road	to be confirmed <u>Doris-Windy All Weather Road</u>	Operation	Temperature	D	A	
DOR-7	Road	to be confirmed <u>Doris-Windy All Weather Road</u>	Operation	Temperature	D	A	
DOR-8	Road	to be confirmed <u>Doris-Windy All Weather Road</u>	Operation	Temperature	D	A	
DOR-9	Road	to be confirmed <u>Doris-Windy All Weather Road</u>	Operation	Temperature	D	A	
DOR-10	Road	to be confirmed <u>Doris-Windy All Weather Road</u>	Operation	Temperature	D	A	
SRK-53	Shoreline	to be confirmed	Operation, Closure	Temperature	D	B	TMAC Sept 14, 2016 Remove as this area will be covered with subaerially-deposited tailings

SRK-54	Shoreline	to be confirmed	Operation, Closure	Temperature		IA	TMAC Sept 14, 2016 Inactive, therefore remove.
SRK-55	Shoreline	to be confirmed TIA East Shore	Operation, Closure	Temperature		IA	
SRK-56	Shoreline	to be confirmed TIA West Shore	Operation, Closure	Temperature		IA	
SRK-57	Shoreline	to be confirmed TIA East Shore	Operation, Closure	Temperature	D	B	
SRK-58	Shoreline	to be confirmed TIA West Shore	Operation, Closure	Temperature	D	B	
NI1- NI28	North Dam	SD4 - DWG T-09	Operation, Closure	Temperature	C	C	TMAC Sept 14, 2016 Request removal of specific string numbers here as there are redundant strings to account for string failure over time. Listing individual strings here is not necessary as reporting on strings status and active strings occurs within the Geotechnical Inspection Report.
SI2- SI22	South Dam	SD4 - DWG T-10	Operation, Closure	Temperature	C	C	TMAC Sept 14, 2016 Request removal of specific string numbers here as there will be redundant strings to account for string failure over time. Listing individual strings here is not necessary as reporting on strings status and active strings occurs within the Geotechnical Inspection Report.

A – Monthly April – October, increasing if warming trend is observed

B – Monthly April – October

C - Monthly readings taken manually April – October; data loggers installed to collect continuous data at key locations. Frequency maintained until dam reaches pseudo steady state conditions. The frequency may then be reduced but will have to coincide with the peaks of the annual climatic cycles

D – Annually at the end of summer when the active layer should be at maximum thickness.

AWM – Monthly April – October during periods of active water management (Prior to Operations and during Care and Maintenance)

IA – Inactive