**Summary of ~~TMAC~~ KIA Comments on 2AM-DOH0713 and Proposed Amendments**

**[Draft as at 1~~8~~4/09/2016]**

What follows are ~~TMAC Resources Inc.'s (TMAC's)~~ the Kitikmeot Inuit Association's (KIA) comments on the TMAC proposal for changes to the 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 provide the KIA response 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.

**NOTE TO DRAFT**: the review of this document only includes comments where KIA is concerned, asks for clarification and/or disagrees with the changes proposed by TMAC. In any other case where a change is proposed and KIA does not comment the Board and TMAC may assume that KIA agrees or takes no position on the change.

---------- Forwarded message ----------
From: **John Roesch** <srproject@kitia.ca>
Date: Wednesday, September 21, 2016
Subject: 2AM-DOH1323 Water Licence Blackline
To: Sonia Aredes <sonia.aredes@nwb-oen.ca>

Hello Sonia, below are comments provided by our aquatic consultant on the schedule J for the aquatic monitoring TMAC submitted at the public hearing. Also enclosed is our legal council's comments on TMAC's proposed changes to the wording of the water licence.

John

**From:** Deborah Sinclair [mailto:Deborah.Sinclair@environmentalsciences.ca]
**Sent:** Tuesday, September 20, 2016 2:10 PM
**To:** John Roesch <srproject@kitia.ca>
**Cc:** Richard Nesbitt <Richard.Nesbitt@environmentalsciences.ca>; Neil Hutchinson <Neil.Hutchinson@environmentalsciences.ca>
**Subject:** RE: 2AM-DOH1323 Water Licence Blackline

Hi John,

Richard said that you asked us to formulate our response in an email to you. I have reviewed Schedule J and have some comments on the proposed changes.

1. 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 be defined as statistically similar season specific water quality measurements over a pre-determined period.

2. 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, and 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 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.

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.

If you have any questions please let us know.

Thanks, Deb

**Deborah Sinclair, M.A.Sc. I Senior Aquatic Scientist**
Hutchinson Environmental Sciences Ltd.
Suite 202, 501 Krug Street, Kitchener ON N2B 1L3
P: 519-576-1711 x 302
www.environmentalsciences.ca

| CONDITION NO. AND CURRENT LICENCE WORDING | TMAC SUGGESTED REWORDING | **COMMENTS FROM KIA ~~PARTIES~~** ON SPECIFIC LICENCE TERMS | TMAC RATIONALE |
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| 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:<br><br>Licence Number/Type: 2AM-DOH1323 Type A<br>Water Management Area: Queen Maud Gulf Watershed No. 30 | 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. 95, Wellington Street West, Suite 1010, Box 44, Toronto ON, M5J2N7 hereinafter called the Licensee, the right to alter, divert or otherwise use W~~w~~ater or deposit W~~w~~aste for a period subject to restrictions and conditions contained within this Licence:<br><br>Licence Number/Type: 2AM-DOH1323 Type A<br>Water Management Area: Queen Maud Gulf Watershed No. 30 | | Revised throughout to for consistent use of terms and capitalization as per Part M Schedule A.<br><br>Note updated TMAC address. Consider whether it is appropriate to include specific address as a license term. |

<table>
<tr>
<td>Location: Doris North Project, Kitikmeot Region, Nunavut<br>Purpose: Water Use and the Deposit of Waste<br>Description: Mining and Milling Undertaking<br>Quantity of Water not to be exceeded: 480,000 cubic metres per annum<br>Date Licence Issuance: August 16, 2013<br>Expiry of Licence: August 15, 2023</td>
<td>Location: Doris North Project, Kitikmeot Region, Nunavut<br>Purpose: Water Use and the Deposit of Waste<br>Description: Mining and Milling Undertaking<br>Quantity of Water not to be exceeded: 480,000 cubic metres per annum<br>Date Licence Issuance: August 16, 2013<br>Expiry of Licence: August 15, 2023</td>
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<td>PART A SCOPE, DEFINITIONS AND ENFORCEMENT</td>
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<td>1. SCOPE</td>
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<tr>
<td>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.<br><br>The Doris North Project is located at the following general geographical coordinates:
<table>
<tr><td rowspan="4">Project Extents</td><td>Latitude</td><td>Longitude</td></tr>
<tr><td>68° 11’ 05” N</td><td>106° 38’ 58” W</td></tr>
<tr><td>68° 10’ 43” N</td><td>106° 36’ 31” W</td></tr>
<tr><td>68° 06’ 34” N</td><td>106° 32’ 22” W</td></tr>
<tr><td>68° 08’ 07” N</td><td>106° 37’ 44” W</td></tr>
<tr><td>Camp</td><td>Latitude</td><td>Longitude</td></tr>
</table>
</td>
<td>This Licence authorizes TMAC Resources Inc. (“TMAC” or “Licensee”) to the use of W<s>w</s>aters and deposit of W<s>w</s>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 <s>Type “A”</s> Water Licence Application <s>(Application) submitted to the Nunavut Water Board (NWB) on August 10, 2012 and as reviewed throughout the regulatory process</s> or as the result of Modifications identified under Part H of the Licence.<br><br>The Doris North Project is located at the following general geographical coordinates:
<table>
<tr><td rowspan="4">Project Extents</td><td>Latitude</td><td>Longitude</td></tr>
<tr><td>68° 11’ 13” N</td><td>106° 39’ 15” W</td></tr>
<tr><td>68° 10’ 43” N</td><td>106° 36’ 31” W</td></tr>
<tr><td>68° 06’ 56” N</td><td>106° 3’37” W</td></tr>
<tr><td>68° 02’ 55” N</td><td>106° 37’ 0” W</td></tr>
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<td>Note definition of Water Licence Application has been revised to enhance readability. This change has been made throughout this document.<br><br>TMAC noted an error in the coordinates of the existing licence and has revised to reflect all activities permitted under this licence to include</td>
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| | Camp | 68° 08' 07" N | 106° 36' 52.6" W | | the full TIA and associated structures, and Windy Lake as a water source. |
| 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:<br>• The use of water from Doris Lake for mining and milling processing, associated activities and domestic purposes;<br>• The use of Waters from Windy Lake for domestic purposes at the Doris Camp;<br>• The quarrying of materials from specified locations;<br>• The development and operation of site facilities;<br>• The construction of access and site roads, airstrip and airstrip bypass road, water crossings, and lay down areas;<br>• The construction of a temporary waste rock storage pad;<br>• The construction and operation of a Wastewater Treatment Plant (STP);<br>• The construction and operation of a Landfill and Landfarm;<br>• The construction and operation of a sedimentation pond and pollution control pond;<br>• The management and disposal of wastes associated with the Wastewater Treatment Plant, sedimentation | | | 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:<br>• The use of W~~w~~ater from Doris Lake for M~~m~~ining and M~~m~~illing processing, associated activities and domestic purposes;<br>• The use of Waters from Windy Lake for domestic purposes ~~at the Doris Camp~~;<br>• The quarrying of materials from specified locations;<br>• The development and operation of site facilities;<br>• The construction and operation of access and site roads, airstrip and airstrip bypass road, water crossings, and lay down areas;<br>• The construction of ~~a temporary~~ W~~w~~aste R~~r~~ock storage pads;<br>• The construction and operation of a Domestic Wastewater Treatment Plant (WWTP~~STP~~);<br>• The construction and operation of a Landfill and Landfarm;<br>• The construction and operation of a S~~s~~edimentation P~~p~~ond and P~~p~~ollution C~~c~~ontrol P~~p~~onds;<br>• The management and disposal of W~~w~~astes associated with the Domestic Wastewater Treatment Plant, S~~s~~edimentation and P~~p~~ollution C~~c~~ontrol P~~p~~onds, Landfill and Landfarm, and other W~~w~~astes as described in the Water Licence Application; | | 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).<br><br>Added 'Domestic' to the definition of the Wastwater Treatment Plant, for clarity and specificity. Change made throughout this document. |

| Camp | Latitude | Longitude |
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| Camp | 68° 08' 07" N | 106° 36' 52.6" W |

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| and pollution control ponds, Landfill and Landfarm, and other wastes as described in the application;<br>• The handling and storage of petroleum products and hazardous materials including explosives, cyanide and other reagents;<br>• The construction of dams, spillway, and shoreline erosion control needed for the operation of Tail Lake as a Tailings Impoundment Area;<br>• The extraction of portal development rock, waste rock and ore from underground via decline;<br>• A mining rate of 720 tonnes per day of ore;<br>• A mill with a design milling throughput of 800 tonnes per day ore;<br>• The deposition of tailings into the Tailings Impoundment Area (Tail Lake);<br>• The disposal of waste rock, including potentially acid generating rock, and cyanide leach residue within the underground workings;<br>• The use of Waste Rock from underground for construction as approved by the Board in accordance with conditions of Part G;<br>• The Diversion of site runoff water to water management facilities, including the Tailing Impoundment Area.<br>• The controlled discharge of Effluent from the Tailings Impoundment Area to Doris Creek; and<br>• The progressive reclamation of on-site facilities and infrastructure. | • The handling and storage of petroleum products and hazardous materials including explosives, cyanide and other reagents;<br>• The construction of dams, spillway, and shoreline erosion control needed for the operation of ~~Tail Lake as a~~ the Tailings Impoundment Area;<br>• The extraction of portal development rock, ~~W~~waste ~~R~~rock and ore from underground via decline;<br>• A mining rate of up to ~~720~~ 2,000 tonnes per day of ore annual average;<br>• A mill with a design milling throughput of up to ~~800~~ 2,000 tonnes per day of ore;<br>• The deposition of tailings into the Tailings Impoundment Area ~~(Tail Lake)~~;<br>• The use of W~~w~~aste R~~r~~ock, including potentially acid generating rock, and cyanide leach residue as backfill within the underground workings;<br>• The use of Waste Rock from underground for construction as approved by the Board in accordance with conditions of Part G;<br>• The ~~D~~diversion of site runoff water to water management facilities, including the Tailings Impoundment Area.<br>• The controlled discharge of Effluent from the Tailings Impoundment Area to Doris Creek 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); and<br>• The progressive reclamation of on-site facilities and infrastructure. | | 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.<br><br>Removed reference to Tail Lake as it has now been designated a Tailings Impoundment Area.<br><br>Revised Effluent discharge location to include Roberts Bay and clarify jurisdiction over marine discharge. |

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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. | | | |

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| 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. | | | |
| 2. DEFINITIONS | | | |
| a) The Licensee shall refer to Schedule A for definitions of terms used in this Licence. | a) The Licensee shall refer to Schedule A for definitions of terms used in this Licence. 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. | KIA supports this request for flexibility in the implementation of this licence | 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 |
| 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. | | None of these provisions in Item 3 are legally necessary | |
| b) 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 Wwater and deposit of Wwaste 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 | | | |
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| 1. The amount of water use fees shall be determined in accordance with Section 12(b) of the Regulations. | 1.The amount of W~~w~~ater 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. | | | |
| 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: 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. | 4.Except as otherwise reflected in this Licence, the Licensee shall~~, for all Plans submitted under this Licence~~, implement Plans upon receipt of approval from the Board, or upon 45 days following Plan submission to the Board, whichever occurs first. ~~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 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and will notify the Licensee in writing of acceptance, rejection or alteration of the Plan. | *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~~.~~.*<br><br>*Such a plan should not be implemented absent Board approval. The licence should specify how far in advance submission of a plan is required. As the landowner and lessor KIA relies in part on NWB approval of plans to* | 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 |

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| | | | *address risk to Inuit Owned Lands (IOL).* | Project is being conducted effectively and adaptive management is swiftly implemented.<br><br>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.<br><br>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. |
| 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 or as otherwise approved in accordance with Part B Item 4. | *See KIA comment above.* | See above. |
| 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 or otherwise from time to time as necessary. | *See KIA comment above.*<br><br>*A plan requiring Board approval should not be materially changed or amended without Board approval.*<br><br>*KIA as landowner and other interested parties will not be able to track plan content and requirements* | 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 revisions be implemented on their submission as |

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| | | *if this change is implemented.* | 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. |
| 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. | | | |
| 8. 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:<br><br>Manager of Licensing, Nunavut Water Board<br>P. O. Box 119<br>Gjoa Haven, NU X0B 1J0<br>Telephone: (867) 360-6338<br>Fax: (867) 360-6369<br>Email: licensing@nunavutwaterboard.org | | | |
| 10. Any notice made to an Inspector shall be made in writing to the attention of:<br><br>Water Resources Officer<br>Nunavut District, Nunavut Region<br>P.O. Box 100<br>Iqaluit, NU X0A 0H0<br>Telephone: (867) 975-4295<br>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 | | | Query with the NWB whether there is utility in continuing to file paper copies on a routine basis. It may be more |

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| studies submitted to the Board by the Licensee shall include an executive summary in English, Inuktitut, Inuinnaqtun and French. | | | practical to only provide paper copies where requested by Board staff. |
| 12. 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 make reasonable efforts to 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 or designate. | | 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. |
| 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~~. | 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 provison. | 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. |
| 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. | | | |
| 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. | | | |

| PART C CONDITIONS APPLYING TO SECURITY | | | |
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| 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 | 1.The Licensee shall, within ~~thirty (30)~~ forty-five (45) days following the approval of this Licence by the Minister, furnish and maintain security with the Minister in the amount of ~~$13.090~~ $ 29,678,698 in the form, of the nature, subject to such terms and conditions, in accordance with, the Regulations, or that is satisfactory to the Minister. | *Number to be revised to reflect agreement between TMAC and INAC at the hearing.*<br><br>*KIA would not oppose a 60 day time period.* | Note that in future, TMAC may consider staged increases based on milestones as specified. |
| | 2.Notwithstanding Part C, Item 1, should the Licensee at any time file evidence, in writing with the Board and with notice to the Minister and Kitikmeot Inuit Association that the Licensee has furnished and maintained security with Kitikmeot Inuit Association in an amount that the Kitikmeot Inuit Association confirms is sufficient to secure the mine closure and reclamation costs (including cumulative and legacy liabilities) estimated to be required for the portion of the Project located on Inuit-owned lands, the Board shall reduce the amount of security required to be posted under with the Minister Part C, Item 1 accordingly, provided the amount of security furnished to the Minister under Part C, Item 1 is not less than $XXXX million at any time unless otherwise agreed between the Kitikmeot Inuit Association and the Minister [NTD update number to reflect KIA submissions as to quantum] | This provision may have to be reviewed in light of the submissions of TMAC and the parties on the land/water split.<br><br>As written is limits the Board's discretion in setting quantum of security.<br><br>(see highlight) it is not clear what is meant by the word "discount". KIA understands that security it holds should not be | TMAC is required under its Commercial Lease with the KIA to post reclamation security for equivalent purposes to those required under the NWNSRTA and its regulations. Accordingly, the project would be overbonded if TMAC were required to post this amount with both KIA and the Minister for the same liability.<br><br>Therefore, similar to the approach taken with respect to 2AM-MEA1525 prior to the entering into of a Security Management Agreement between INAC and the KivIA in relation to the Meadowbank Mine, TMAC suggests it would be appropriate for the Board discount bonding posted with the Kitikmeot Inuit Association from the total amount that would otherwise be required to be posted with the Minister under the licence. |

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| | | duplicated by security held by the Minister. | TMAC is confident the suggested timeline of 45 days (Part C item 1) would permit sufficient time to obtain letters of credit issued by a certified Canadian bank. It is noted that 30 days from licence issuance is a challenging timeline from an administrative perspective.<br><br>The 45 day timeline would also prevent the potential for short term double bonding, which would cause an unnecessary administrative and financial burden. TMAC anticipates that within the suggested 45 day timeline, it would be able to post the necessary bond with Kitikmeot Inuit Association and provide evidence of the same to the Board as per Part C Item 2.<br><br>TMAC supports KIA's suggestion that (assuming TMAC has posted the balance of the total bond required with Kitikmeot Inuit Association), $XXXX million should be posted with the Minister in order to address potential for liabilities relating to water. |

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| 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. | 3.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), as may be revised from time to time. 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~~ most recent approved estimate. | In KIA's view this period should be at least 12 months. | Revised to reflect the change in mine life. The Interim Closure and Reclamation Plan that was reviewed during the mendment application processfully considered the Operations phase and so there is no need for an update on that basis. |
| 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. | | | |
| 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. | | | |
| 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. | | | |

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| | 6.In the event that the amount of security required to be held under Part C, Item 1 is reduced on the basis of evidence that the Licensee has furnished and maintained security with the Kitikmeot Inuit Association as set out under Part C, Item 2, the Licensee is required to provide the Board and the Minister with sixty (60) days written notice prior to any material change affecting the security arrangements between the Licensee and the Kitikmeot Inuit Association, including but not limited to the form of security, quantum of security or term associated with holding, accessing or releasing the security. | | New proposed condition |
| | 7.If the Board determines it to be necessary, upon the request of the Licensee, the Minister and/or the Kitikmeot Inuit Association, the Board may issue further directions under this Part with respect to the process for amending the amount of security to be furnished and maintained under the Licence. | | New proposed condition |
| 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 Censtruction from an approved source that shall ~~be free of contaminants~~ not cause contamination to Waters or land. | | Suggestion to enhance clarity and accuracy. |
| 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 Wwastes associated with the undertaking ~~to not enter~~ from entering any Wwater body 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. | INAC: The Licensee shall implement preventive and mitigation measures to prevent any chemicals, fuel or wastes associated with the undertaking ~~to not enter~~ from entering any water body. | TMAC agrees with INAC's suggested revised wording, and suggests the additional wording for clarity. |

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| 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~~w~~ater 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~~ ~~c~~Construction, and during ~~o~~Operation where necessary to prevent entry of sediment into ~~w~~Water. | INAC:The Licensee shall ~~implement~~ maintain sediment and erosion control measures prior to, ~~and maintained~~ during ~~the~~ construction, and during operation where necessary to prevent entry of sediment into water. | TMAC agrees with INAC's suggested revised wording. |
| 5. 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 construction ~~activity~~ to the low water period unless otherwise approved by the Board or the Department of Fisheries and Oceans Canada. In-stream ~~activity~~ construction is prohibited during fish migration unless otherwise approved by the Board or the Department of Fisheries and Oceans Canada. | | This change is intended to acknowledge certain approved activities such fish fence operation. |
| 7. The Licensee shall conduct construction monitoring during all phases of the project. | 7.The Licensee shall conduct C~~c~~onstruction monitoring during all phases of the P~~p~~roject, during periods where construction activities are undertaken. | | Suggestion for clarity. |
| 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.In years when construction has occurred, t~~T~~he 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. | | Suggestion for clarity. |

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| 9. The Licensee shall include, in addition to conducting Quarry Rock Construction Monitoring and 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:<br><br>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<br>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. | 9.The Licensee shall ~~include, in addition to~~ conduct~~ing~~ Quarry and Quarry Rock ~~Construction~~ Monitoring and Management in 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:~~<br><br>~~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~~<br>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~~. | | Remove additional requirement a) and b; completed - see 2009 Quarry Monitoring Report). Quarry and quarry rock monitoring to be conducted in accordance with the Quarry Management and Monitoring Plan. |
| 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. | 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.~~ | | Specific requirement is incorporated in the Quarry Management Plan and Waste Rock and Ore Management Plan– inclusion in licence is therefore redundant. |
| 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:<br><br>a) Environmental Code of Practice for Aboveground Storage Tank Systems Containing Petroleum Products, 2003; CCME, PN 1326; and<br>b) National Fire Code, 1995. | 11.b) National Fire Code, 2010, as may be updated from time to time ~~1995~~. | | Revised to reflect update |

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| 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. | | | |
| 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 include the following:<br><br>a) The thickness of the various materials used at the coarse rock drain locations and for the general road fill;<br>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;<br>c) Be signed and sealed by the appropriately qualified Engineer. | ~~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 include the following:~~<br><br>~~a) The thickness of the various materials used at the coarse rock drain locations and for the general road fill;~~<br>~~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;~~<br>~~c) Be signed and sealed by the appropriately qualified Engineer.~~ | INAC: Obsolete. Condition satisfied on Sept. 16, 2013. | Suggest removing. This condition has been satisfied. |
| 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 the Licensee causes significant pooling of W~~w~~ater or any significant impacts on surface drainage. | | Clarification intended to exclude natural caused pooling |
| 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 W~~w~~ater body is possible, the deposition of debris or sediment into or onto any W~~w~~ater 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 W~~w~~ater. | | |

<table>
<tr>
<td>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.</td>
<td>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 W~~w~~ater body.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td>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.</td>
<td></td>
<td>Remove daily because this sampling is event driven, not schedule driven. When there is water, there are inspections.</td>
</tr>
<tr>
<td>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>
</td>
<td>18.All surface runoff during the construction of any facilities, where flow may directly or indirectly enter a W~~w~~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>
* or equivalent turbidity concentrations, as approved by the Board.</td>
<td>It is not clear what period or number of samples is to be included in the 50 mg/L average.</td>
<td>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.<br><br>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.</td>
</tr>
<tr>
<td>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.</td>
<td>19.The Licensee shall operate the Domestic Wastewater Treatment Plant in accordance with conditions provided in PART G, Item 3 with compliance at monitoring station ST-8 during ~~construction~~ tundra discharge.</td>
<td></td>
<td>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.</td>
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| 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:<br><br>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;<br>b) The seep survey shall measure pH and EC levels at several reference points on the tundra not subject to mine influences;<br>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 seepage stations;<br>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<br>e) The Quarry Rock Seepage Monitoring Program shall be expanded beyond the 100 samples to include monitoring of all rock drains. | 20.The Licensee shall conduct a Quarry Rock Seepage Monitoring and Management program in accordance with the 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 ~~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:~~<br>~~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;~~<br>~~b) The seep survey shall measure pH and EC levels at several reference points on the tundra not subject to mine influences;~~<br>~~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 seepage stations;~~<br>~~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~~<br>~~e) The Quarry Rock Seepage Monitoring Program shall be expanded beyond the 100 samples to include monitoring of all rock drains.~~ | *See KIA comment above.* | Suggest removing the bulleted items as they are redundant; the sampling is addressed in the identified plans. |

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| 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.~~ as an addendum to the Annual Report submitted in the year following data collection. | | Suggestion to harmonize timing of reporting requirements. |
| 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 to be Non-Metal Leaching ~~by Metal Leaching properties~~ | INAC: 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 be Non-Metal Leaching and free of contaminants ~~by Metal Leaching properties~~. | TMAC generally agrees with INAC's comments but suggest that the phrase "free of contaminants" is vague. |
| 22. 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. | | | |
| 23. The Licensee shall construct and maintain all containment and runoff control structures to prevent escape of wastes to the surface or groundwater systems. | 23.The Licensee shall construct and maintain all containment and runoff control structures to prevent ~~escape~~ non-permitted releases of W~~w~~astes to the s~~urface~~ terrestrial environment or groundwater systems. | | |

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| 24. 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 field decisions that deviate from original plans and any data used to support these decisions. | 24.The Licensee shall submit to the Board for review, with the Construction Monitoring Report referred to in Part D, Item 8 following ~~within ninety (90) days of~~ completion of each facility designed to contain, withhold, divert or retain W~~w~~aters or W~~w~~astes during the C~~c~~onstruction phase, a Construction Summary Report prepared by a qualified Engineer(s) that shall include as-built drawings, documentation of field decisions that deviate from original plans and any data used to support these decisions. | | As noted above, this change is suggested in order to harmonize reporting requirements. |
| 25. 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. | 25.The Licensee shall, during the construction of all engineered structures designed to contain, withhold, divert or retain waters or wastes, ~~provide the required supervision and field checks by an appropriately qualified and experienced Engineer in such a manner that the P~~project specification can be enforced and, ~~where required, the quality control measures can be follow~~follow the Quality Control and Quality Assurance procedures as specified in the Project Specifications submitted as part of the engineering design. The Licensee shall maintain all construction records relevant to such procedures of all engineered structures designed to contain, withhold, divert or retain waters or wastes to be made available at the request of the Board and/or an Inspector. | | Clarification relating to scope of NWB jurisdiction under NWNSRTA and to clarify for enforcement purposes |
| 26. 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. | 26.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. | | Suggestion for clarity. |
| 27. The Licensee shall consider the principles of adaptive management in construction and operations. | 27.The Licensee shall consider the principles of A~~a~~daptive M~~m~~anagement in C~~c~~onstruction and O~~o~~perations. | | |

| PART E CONDITIONS APPLYING TO WATER USE | | | |
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| 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 Wwater for domestic camp use, Mmining and Mmilling and associated uses, from Doris Lake ~~at Monitoring Station ST-7 using the Fresh Water Intake~~. Domestic Wwater 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. For clarity, non-consumptive uses and diversions are permitted water uses in accordance with this Licence and are not limited by volume. | | Suggested change to reflect that exploration/mine definition drilling water use may be drawn from other locations within Doris Lake than ST-7.<br><br>Suggested change to reflect that water diversions and non-consumptive uses are not included in the overall volume limit under the licence. |
| 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. | | | |
| 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 Wwater 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. | | | |
| 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 Wwater 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 Wwater body unless authorized by the Board or the Inspector. | | Suggested edit for clarity. |

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| 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 caused by the Licensee to the banks of any body of W~~w~~ater. Sediment and erosion control measures shall be implemented prior to and maintained during the operation to prevent entry of sediment into W~~w~~ater. | | Clarify intent to prevent Project-induced erosion (rather than natural erosion). |
| 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:<br><br>a) Provide additional detail on the requirements, including frequency, for on- going monitoring and calibration of the water quality model;<br>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;<br>c) The Plan shall consider the monitoring requirements set out in PART J and PART K;<br>d) Identify and explain the significance of all drainage facilities and key water bodies within the project area;<br>e) The development of a monitoring system to confirm that an acceptable percentage of mine contact runoff and groundwater (underflow) are captured;<br>f) Maximum water levels for all water collection facilities and associated monitoring activities should be established; and,<br>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 | 1.The Board has approved with issuance of the licence 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:~~.<br><br>~~a) Provide additional detail on the requirements, including frequency, for on- going monitoring and calibration of the water quality model;~~<br>~~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;~~<br>~~c) The Plan shall consider the monitoring requirements set out in PART J and PART K;~~<br>~~d) Identify and explain the significance of all drainage facilities and key water bodies within the project area;~~<br>~~e) The development of a monitoring system to confirm that an acceptable percentage of mine contact runoff and groundwater (underflow) are captured;~~<br>~~f) Maximum water levels for all water collection facilities and associated monitoring activities should be established; and,~~ | | Note this suggested revision assumes plan approval at the time of licence issuance. |

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| potentially contaminated shallow groundwater). | ~~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).~~ | | |
| 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. | 2.The Licensee shall carry out regular inspections of all W~~w~~ater management structures during periods of flow (rock drains, culverts, S~~s~~edimentation and P~~p~~ollution C~~c~~ontrol P~~p~~onds 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. | | |
| PART G CONDITIONS APPLYING TO WASTE MANAGEMENT AND WASTE MANAGEMENT PLANS | | | |
| 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. | 1.Unless otherwise described in this Water Licence or approved by the Inspector, ~~T~~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. | *Replace "described" with "authorized".* | Suggestion to acknowledge Inspector's authority regarding discharges. |
| 2. The Licensee shall perform all land applied discharges in a manner that prevents erosion at the point of discharge and downstream. | | | |

<table>
<tr>
<td>3. The Licensee shall operate the Wastewater Treatment Plant in accordance with the following:<br><br>a) All Sewage and Greywater shall be collected and treated in the Wastewater Treatment Plant;<br><br>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:<br><br>
<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/ 100mL</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>
<br>c) All Effluent from the Wastewater Treatment Plant shall be discharged approximately 1000 metres north of the camp pad;<br>d) During Operations, effluent from the Wastewater Treatment Plant shall be discharged to the Tailings Impoundment Area, or as required, to the tundra as per Item 3(c) upon providing notification to an Inspector; and<br>e) The Licensee shall notify an Inspector at least ten (10) days prior to start-up of the Wastewater Treatment Plant and subsequent discharge from the facility, indicating the discharge location.</td>
<td>3.The Licensee shall operate the Domestic Wastewater Treatment Plant in accordance with the following:<br><br>a) All Sewage and Greywater shall be collected and treated in the Domestic Wastewater Treatment Plant;<br><br>b) ~~During the Cconstruction and Ccare and Mmaintenance phases, a~~All Effluent discharged from the Domestic Wastewater Treatment Plant to tundra at monitoring station ST-8 shall not exceed the following Effluent quality limits:<br><br>
<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 or MPN/ 100mL</td><td>10,000 CFU or 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>
<br>c) ~~All~~ Effluent from the Domestic Wastewater Treatment Plant shall be discharged approximately west of the facility laydown areas;<br><br>d) During Operations, E~~e~~ffluent from the Domestic Wastewater Treatment Plant shall be discharged to the Tailings Impoundment Area, or as required, to the tundra as per Item 3(c) provided the criteria set out in Item 3 are met ~~upon providing notification to an Inspector; and~~</td>
<td>INAC: c. Phase is not specified. Contradicts 3d.<br><br>What if facility laydown area is moved?</td>
<td>Revised to clarify that compliance criteria pertain to tundra discharge, which may occur during any Project phase.<br><br>Revise to reflect alternate equivalent analytical methodologies.<br><br>Suggested revision to reflect discharge location as described during amendment (note the discharge location is west of the camp pad)<br><br>This license can clearly confirm permission to discharge – query practical value of notification to</td>
</tr>
</table>

| | | | |
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| | 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.~~ | | Inspector if it has been confirmed that criteria are met.<br><br>The Domestic Wastewater Treatment Plant will be in continuous operation during the operation of the camp. Therefore no need for this provision. |
| 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:<br><br>a) Operation, maintenance and sludge management; and<br>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. | 4.The Board has approved 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:~~<br><br>~~a) Operation, maintenance and sludge management; and~~<br>~~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.~~ | INAC: Obsolete. This condition can be removed. The Wastewater Treatment Plant was already in use at the time 2013 licence issuance. | The suggested revision assumes plan approval at the time of licence issuance. |
| 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. | 5.The Licensee shall dispose of all food W~~w~~aste 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.. | | Revision to enhance clarity |

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| 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 | 6.The Licensee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood in order to prevent the deposition of W~~w~~aste materials (i.e products of incomplete combustion~~, and/or~~ leachate from contaminated ash residual)~~,~~ from impacting any surrounding W~~w~~aters, unless otherwise approved by the Board in writing. | The Licensee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood in order to prevent the deposition of waste materials (e.g. products of incomplete combustion, ~~and/or~~ leachate from contaminated ash residual, etc.) from impacting any surrounding waters, unless otherwise approved by the Board in writing. | Adopted INAC's suggested wording and added defined terms |
| 7. The Board has approved, with the issuance of the licence, the Hope Bay 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. | 7.The Board has approved, with the issuance of the licence, ~~the Hope Bay Mining Ltd.,~~the 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.~~ | | The suggested revision assumes plan approval at the time of licence issuance. |

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| 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:<br><br>a) Recycling/segregation waste program;<br>b) Incineration technology selected;<br>c) Waste audit – amount and types of wastes to be incinerated or otherwise disposed;<br>d) Consolidation of wastes;<br>e) Operational and maintenance records;<br>f) Operator Training;<br>g) Emission measurements;<br>h) Incinerator Ash disposal;<br>i) Consideration for disposal of used oil and waste fuel; and<br>j) Monitoring, characterization, and disposal of incinerator ash. | 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:<br><br>a) Recycling/segregation Ww~~w~~aste program;<br>~~b) Incineration technology selected;~~<br>c) Waste audit – amount and types of Ww~~w~~astes ~~to be incinerated or otherwise~~ disposed;<br>d) Consolidation of Ww~~w~~astes;<br>e) Operational and maintenance records;<br>f) Operator Training;<br>~~g) Emission measurements;~~<br>~~h) Incinerator Ash disposal;~~<br>~~i) Consideration for disposal of used oil and Wwaste fuel; and~~<br>~~j) Monitoring, characterization, and disposal of incinerator ash.~~ | | 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. |
| 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. | 9.The Licensee is authorized to dispose of and contain all non-hazardous solid Ww~~w~~astes at the Landfill, or as otherwise approved by the Board in writing. | | |
| 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 (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. | 10.The Board has approved the Hope Bay Mining Ltd., Hazardous Waste Management Plan, September 2016~~March 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 (3) months prior to Operations, a revised Plan, which shall include a review of all hazardous materials used and hazardous Wwastes produced at the Project. | INAC: It is recommended that the deadline for providing updated plans and notification prior to commencing Operations be consistent. | Note the Hazardous Waste Management Plan revision described in this condition will be submitted mid-September 2016.. |
| 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 Ww~~w~~astes~~, oil and non- combustible Wwaste~~ generated through the course of the operation at a licensed Ww~~w~~aste disposal site. | | Revised to reflect disposal of non-combustible non-hazardous waste in the Landfill. |

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| | | | Note that as the project has a waste oil burner, there is no need to require backhaul. |
| 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 W~~w~~aste backhauled and records of confirmation of proper disposal of backhauled W~~w~~aste. 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:<br><br>a) Operation and maintenance considerations including the methods of characterization, segregation and treatment;<br>b) Confirmation of the Soil Quality Remediation Objectives (SQROs) and distinction between where parkland versus industrial standards will be applied;<br>c) Contingency measure for contaminated soils that do not meet the SQROs;<br>d) As-built drawings signed and stamped by an Engineer; and<br>e) Any proposed future uses. | 13.The Licensee shall operate the Landfarm as outlined in the Doris North Landfarm Management and Monitoring Plan, 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. ~~The Plan shall include updates to the following:~~<br><br>~~a) Operation and maintenance considerations including the methods of characterization, segregation and treatment;~~<br>~~b) Confirmation of the Soil Quality Remediation Objectives (SQROs) and distinction between where parkland versus industrial standards will be applied;~~<br>~~c) Contingency measure for contaminated soils that do not meet the SQROs;~~<br>~~d) As-built drawings signed and stamped by an Engineer; and~~<br>~~e) Any proposed future uses.~~ | INAC: Obsolete. This condition can be removed. The Landfarm was already in use at the time 2013 licence issuance. | TMAC agrees with INAC's comment and also seeks approval of this management plan with issuance of the Water Licence. |
| 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. | 14. The Board has approved, with issuance of this licence, the plan entitled "TMAC Resources' Waste Rock and Ore Management Plan. Hope Bay Project, Nunavut, August 2016," 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~~ | | The suggested revision assumes plan approval at the time of licence issuance. |

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| | ~~submit to the Board for review, a revised Plan six (6) months following the start of Operations.~~ | | |
| 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 outlined in the approved Waste Rock Management Plan, submitted as per PART G, Item 14, including a description of and justification for the change. | 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 outlined in the approved Waste Rock and Ore Management Plan, submitted as per PART G, Item 14, including a description of and justification for the change. | | |
| 16. 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. | | | |
| 17. 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). | | | |
| 18. 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. | | | |
| 19. 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:<br><br>a) Stored on the Temporary Waste Rock Pad;<br>b) Stored at other locations as identified in the approved Waste Rock and Ore Management Plan, and<br>c) Managed as otherwise approved by the Board in writing. | | | |
| 20. 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.~~ | | As this requirement is already incorporated in the approved Plan, TMAC suggests this specific term and |

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| | | | condition be removed as it is redundant. |
| 21. 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 Domestic Wastewater Treatment Plant, Landfill, Landfarm, Fuel Storage and Containment Facilities, Sedimentation Pond, Pollution Control Ponds, and the Reagent and Cyanide Storage Facility sumps ~~to the satisfaction of the Inspector~~ in accordance with generally accepted industry best practice. | INAC: 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.<br>KIA agrees with INAC. "Industry best practice" is too vague. | It is noted that but for the Domestic Wastewater Treatment Plant, each of the facilities listed is subject to an annual geotechnical inspection.<br><br>The TIA is additionally inspected by ECCC and monitored in accordance with the MMER.<br><br>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. |
| 22. All Water from the Pollution Control Pond shall be directed to the Tailings Impoundment Area, unless otherwise authorized by the Board in writing. | 22.All Water from the Pollution Control Ponds shall be directed to the Tailings Impoundment Area, unless otherwise authorized by the Board in writing. | | |

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| 23. The Licensee shall operate and maintain the Sedimentation Pond and Reagent and Cyanide Storage Facility sumps in accordance with the following:<br><br>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:<br><br>**Parameter** / **Maximum Average Concentration (mg/L)** / **Maximum Concentration in any Grab Sample (mg/L)**<br>pH: Between 6.0-9.0 / 9.0<br>Total Suspended Solids: 15.0 / 30.0<br>Total Ammonia –N: 2.0 / 4.0<br>Total CN: 1.0 / 2.0<br>Total Oil and Grease: 5 and no visible sheen / 10 and no visible sheen on pond<br>Total Aluminum – T-Al: 1.0 / 2.0<br>Total Arsenic – T-As: 0.05 / 0.10<br>Total Copper – T-Cu: 0.02 / 0.30<br>Total Iron – T-Fe: 0.30 / 0.60<br>Total Lead – T-Pb: 0.01 / 0.02<br>Total Nickel – T-Ni: 0.05 / 0.10<br>Total Zinc – T-Zn: 0.01 / 0.02<br><br>b) The Licensee shall establish compliance with the Effluent quality limits prior to discharge;<br>c) Water from the Sedimentation Pond that is acceptable for discharge under PARTGPART 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<br>d) Sedimentation Pond Water that does not meet criteria in | 24. Consider removal of clause in its entirety or alternatively (b) and (c) | INAC: 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 | 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. |

<table>
<tr>
<td>PART G, Item 23(a) shall be directed to the Tailings Impoundment Area.</td>
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<tr>
<td>24.The Licensee shall operate and maintain the Sumps in accordance with the following:<br><br>a) Water discharged from the Landfill Sump at monitoring station ST-3 shall not exceed the following Effluent quality limits:
<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>
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;<br>c) Water discharged from the Landfarm Sump at monitoring station ST-4 shall not exceed the following Effluent quality limits:</td>
<td>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;<br>g) Sump <u>W</u>~~w~~ater 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.</td>
<td>INAC: b) discharge under PART G, Item 24(a) may be discharged to the tundra <u>or as</u> designated by an Inspector;</td>
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| 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 |
| Total Ammonia-N | 2.0 | 4.0 |
| Total Lead | 0.01 | 0.02 |
| Benzene | 0.37 | - |
| Toluene | 0.002 | - |
| Ethyl Benzene | 0.090 | - |

d) Water from the Landfarm Sump that is acceptable for discharge under PART G, Item 24(c) may be discharged to the tundra or as designated by an Inspector;
e) Water discharged from the Fuel Storage and Containment Facility Sumps at monitoring stations ST-5, ST-6a and ST-6b shall not exceed the following Effluent quality limits:

| 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 | 30 |
| Total Oil and Grease | 5 | 10 |
| Total Lead | 0.01 | 0.02 |
| Benzene | 0.37 | - |
| Toluene | 0.002 | - |
| Ethyl Benzene | 0.090 | - |

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| f) Water from the Fuel Storage and Containment Facility Sump that is acceptable for discharge under PART G, Item 24 (e) may be discharged to the tundra or as designated by an Inspector; and<br>g) Sump water 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. | | | |
| 25. The Licensee shall 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. | The Licensee shall manage and monitor the 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 sShoreline eErosion pProtection Adaptive Management strategies for monitoring and control.~~ | INAC: It is recommended that the deadline for providing updated plans and notification prior to commencing Operations be consistent. | The suggested revision assumes plan approval at the time of licence issuance. |
| 26. The Licensee shall operate and maintain the Tailings Impoundment Area (TIA) to engineering standards such that:<br><br>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;<br>b) Implement contingency measures where necessary to prevent overtopping of the North Dam;<br>c) Implement the Shoreline Erosion Protection and Adaptive Management strategies as required;<br>d) The Licensee shall collect and return seepage from the TIA, as determined by monitoring and follow-up water | The Licensee shall operate and maintain the Tailings Impoundment Area (TIA) 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:~~<br><br>~~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;~~<br>~~c) The Licensee shall carry out, at a minimum, weekly inspections during any period in which the site is occupied and Wwater is being actively managed, to~~ | | As the detailed content is already included in the Tailings Impoundment Area Operations, Maintenance and Surveillance Manual, suggest removal for readability.<br><br>If this list is included, suggest:<br><br>(a) Remove reference to South Dam<br>(e) Capitilize defined terms<br>(j) should be removed<br>(j) should be removed |

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| quality analyses;<br>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;<br>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;<br>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;<br>h) An annual Geotechnical inspection shall be carried out in accordance with PART J, Item 19;<br>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;<br>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;<br>k) The Licensee shall perform more frequent inspections of the facilities at the request of an Inspector;<br>l) The Licensee shall place all filtered cyanide leach residue underground as mine backfill to remain frozen within | ~~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;~~<br>~~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;~~<br>~~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;~~<br>~~l) The Licensee shall place all filtered cyanide leach residue underground as mine backfill to remain frozen within permafrost;~~<br>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 | | (l) should be modified as follows "the Licencee shall place all filtered cyanide leech residue underground as mine backfill ~~to remain frozen within permafrost~~"<br><br>Similarly, (m) is a duplicate requirement included elsewhere in the licence – should it remain add "To Doris Creek" to the end of this sentence. |

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<td>permafrost;<br>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<br>n) The Licensee shall maintain records of all inspections for the review of an Inspector upon request</td>
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<tr>
<td>27. The Licensee shall implement the Tailings Water Management Strategy as outlined in the Tailings Management Plan, submitted under Part G, Item 25,</td>
<td>~~The Licensee shall implement the Tailings Water Management Strategy as outlined in the Tailings Management Plan, submitted under Part G, Item 25,~~</td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>28. All Water discharged from the Tailings Impoundment Area at monitoring station TL-4 shall not exceed 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>pH</td><td>Between 6.0 – 9.5</td><td>Between 6.0 – 9.5</td></tr>
<tr><td>Total Suspended Solids (TSS)</td><td>15.00</td><td>30.00</td></tr>
<tr><td>Total Arsenic - T-As</td><td>0.50</td><td>1.00</td></tr>
<tr><td>Total Copper - T- Cu</td><td>0.30</td><td>0.60</td></tr>
<tr><td>Total Cyanide - T-CN</td><td>1.00</td><td>2.00</td></tr>
<tr><td>Total Lead – T-Pb</td><td>0.20</td><td>0.40</td></tr>
<tr><td>Total Nickel – T-Ni</td><td>0.50</td><td>1.00</td></tr>
<tr><td>Total Zinc – T- Zn</td><td>0.50</td><td>1.00</td></tr>
<tr><td>Radium 226</td><td>0.37 Bq/L</td><td>1.11 Bq/L</td></tr>
<tr><td>Biological Oxygen Demand (BOD5)</td><td>80</td><td>160</td></tr>
<tr><td>Fecal Coliform</td><td>10,000 CFU/100 mL</td><td>10,000 CFU/100 mL</td></tr>
<tr><td>Total Ammonia-N</td><td>6</td><td>-</td></tr>
</table>
</td>
<td>All Water discharged from the Tailings Impoundment Area at monitoring station TL-1 to freshwater shall not exceed 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>pH</td><td>Between 6.0 – 9.5</td><td>Between 6.0 – 9.5</td></tr>
<tr><td>Total Suspended Solids (TSS)</td><td>15.00</td><td>30.00</td></tr>
<tr><td>Total Arsenic - T-As</td><td>0.50</td><td>1.00</td></tr>
<tr><td>Total Copper - T- Cu</td><td>0.30</td><td>0.60</td></tr>
<tr><td>Total Cyanide - T-CN</td><td>1.00</td><td>2.00</td></tr>
<tr><td>Total Lead – T-Pb</td><td>0.20</td><td>0.40</td></tr>
<tr><td>Total Nickel – T-Ni</td><td>0.50</td><td>1.00</td></tr>
<tr><td>Total Zinc – T- Zn</td><td>0.50</td><td>1.00</td></tr>
<tr><td>Radium 226</td><td>0.37 Bq/L</td><td>1.11 Bq/L</td></tr>
</table>
</td>
<td>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 waters but the term freshwater creates legal confusion.</td>
<td>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.</td>
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<table>
<tr><td>Biological Oxygen Demand ($BOD_5$)</td><td>80</td><td>160</td></tr>
<tr><td>Fecal Coliform</td><td>10,000 CFU or MPN/100 mL</td><td>10,000 CFU or MPN /100 mL</td></tr>
<tr><td>Total Ammonia-N</td><td>6</td><td>-</td></tr>
</table>
</td>
<td></td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td>The Licensee shall ensure that Effluent discharged from monitoring station~~s~~ TL-1 ~~and TL-4~~ to freshwater is demonstrated to be non-acutely toxic in accordance with PART J, Item 8.</td>
<td>See comment above.</td>
<td>See comment above.</td>
</tr>
<tr>
<td>30. 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 20 degrees C[1]</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>
</table>
</td>
<td>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~~ pre-discharge water quality ~~at the time of discharge~~ as measured at monitoring station TL-2, or the following water quality limits:</td>
<td>See comment above.</td>
<td>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.</td>
</tr>
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| 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 | | | |
| 1 Total Ammonia concentration discharge varies with pH and temperature as per Schedule G | | | | |
| 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. | | ~~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.~~ | | Remove. This Item no longer applies. |
| 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. | | ~~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.~~ | | Remove. This Item no longer applies |
| 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:<br>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;<br>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 | | ~~c) Predict the future discharge schedule and compare this prediction to the previously predicted discharge schedule. If necessary identify A~~adaptive ~~M~~management ~~strategies~~<br>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.<br><br>Revise (c) to instead refer back to the Water Management Plan and operate accordingly, as that plan incorporates the adaptive management concept. | | Suggested revision to reflect content of plans and enhance readability of the Water Licence. |

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| be identified and the water quality model shall be re-calibrated; and<br>c) 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. | | | |
| 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:<br>a) The Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications;<br>b) Such Modifications do not place the Licensee in contravention of the Licence or the Act;<br>c) Such Modifications are consistent with NIRB Project Certificate;<br>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<br>e) The Board has not rejected the proposed 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:<br>a) The Licensee has notified the Board in writing of such proposed Modifications at least ~~sixty (60)~~ thirty (30) days prior to beginning the Modifications;<br>b) Such Modifications do not place the Licensee in contravention of the Licence or the Act;<br>c) Such Modifications are consistent with NIRB Project Certificate;<br>d) The Board has not, during the ~~sixty (60)~~ thirty (30) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than ~~sixty (60)~~ thirty (30) days; and<br>e) The Board has not rejected the proposed Modifications. | *KIA suggests the notice should remain at 60 days. KIA simply needs adequate time to respond if the Board requests comments.* | 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.<br><br>The current timing, whereby the NWB can inform a proponent that an amendment is required on day 59, is very challenging from a project planning and management perspective particularly in light of the short Arctic construction season. |

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| 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. | | | |
| 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. | 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. | *The problem with the change is that now only modification of engineered structures require plans and 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-builts.* | Many facility modifications do not warrant an engineers stamp or engineering-type drawings – e.g. the DWWTP change out, or the Windy Lake water uptake line replacement. |
| 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. | 1.The Board has approved with issuance of the Licence the Plan entitled "Spill Contingency Plan, Hope Bay, Nunavut, April 2016"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~~. | | The suggested revision assumes plan approval at the time of licence issuance. |
| 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 | 2.The Licensee shall prevent any chemicals, petroleum products or W~~w~~astes associated with the P~~p~~roject from entering W~~w~~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 | | |

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| body and inspected on a regular basis. | adjacent W~~w~~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. | | | |

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| 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 Facilities ~~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. | | |
| 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:<br>a) Employ the Spill Contingency Plan;<br>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<br>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 up the spill site. | 5.If, during the period of this Licence an unauthorized discharge of W~~w~~aste and/or Effluent occurs, or if such discharge is foreseeable, the Licensee shall:<br>a) Employ the Spill Contingency Plan;<br>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~~ if it is of a size and nature that requires reporting in accordance with the Spill Reporting Regulation; and<br>c) For each spill occurrence reported in accordance with (b), 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. | | 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.<br><br>Note that relevant and current phone numbers are maintained in the Spill Contingency Plan |
| 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 adjacent to a Water body such that the spill is likely to enter a Water body. | *The highlighted phrase should read …"to enter that Water body."* | Revision to remove potential for ambiguity. Note the Spill Reporting Regulation requires reporting of spills of any quantity into water. |

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| 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, in the Annual Report and as required by the Spill Reporting Regulation, details of ~~, an addendum to the Spill Contingency Plan, detailing~~ any changes in O~~o~~perations, personnel, responsibilities, availability of equipment and access to the site for assistance, arising from the spill. Corrective action planning shall be documented on site with records made available to an Inspector upon request. | | Revision for clarity. |
| 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~~w~~ater U~~u~~se and Effluent discharge volumes, where such discharges are made to the terrestrial environment or freshwater and to be operated and maintained to the satisfaction of an Inspector. | | Change to clarify that discharges to Roberts Bay will be regulated per MMER |
| 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~~. | | 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 operations or environmental monitoring. |
| 3. The Licensee shall undertake the Water Monitoring Program detailed in the tables of Schedule J. | | | Note that TMAC has suggested revisions to Schedule J in the attached. |

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| 4. The Licensee shall, during periods of discharge from the TIA:<br>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;<br>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;<br>c) Include the results of any investigation under item 4(a) in the monthly monitoring report required under Part J, Item 21; and<br>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:~~<br>~~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;~~<br>~~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;~~<br>~~c) Include the results of any investigation under item 4(a) in the monthly monitoring report required under Part J, Item 21; and~~<br>~~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).~~ | | As noted above these items are no longer relevant. |
| 5.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. | | | |

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| 7.Additional monitoring may be requested by the Board or by the Inspector. | Remove | | 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 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 |
| 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:<br><br>a) Acute lethality to Rainbow Trout, Oncorhynchus mykiss (in accordance with Environment Canada's Environmental Protection Series Biological Test Method EPS/1/RM/13); and<br>b) Acute lethality to the crustacean, Daphnia magna (in accordance with Environment Canada's Environmental Protection Series Biological Test Method EPS/1/RM/14). | The Licensee shall conduct Acute Lethality Testing in accordance with and as required by the *Metal Mining Effluent Regulations*~~, at monitoring station TL-1 and at monitoring station TL-4 as per Schedule J, Table 2, in accordance with the following test procedures:~~<br>~~a) Acute lethality to Rainbow Trout, Oncorhynchus mykiss (in accordance with Environment Canada's Environmental Protection Series Biological Test Method EPS/1/RM/13); and~~<br>~~b) Acute lethality to the crustacean, Daphnia magna (in accordance with Environment Canada's Environmental Protection Series Biological Test Method EPS/1/RM/14).~~ | | Suggested revision to align Licence requirements with MMER requirements which may change over time. |

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| 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. | 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 applicable legislation or policy or a qualified Analyst. | | |
| 10.All compliance analyses shall be performed in an accredited laboratory according to ISO/IEC Standard 17025. | | | |
| 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. | ~~The Licensee shall file a letter with the Board for review confirming application for accreditation for the on-site environmental laboratory prior to Operations.~~ | | Remove. There will not be an environmental laboratory on site. |
| 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):<br><br>a) The volume of freshwater obtained from Doris Lake for potable water;<br>b) The volume of freshwater obtained from Doris Lake for process water;<br>c) The volume of reclaim water obtained from Tail Lake for process water at Monitoring Station TL-8;<br>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.;<br>e) Tonnes of waste rock returned underground on a monthly basis during construction, operation and closure;<br>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<br>g) Following the deposition of tailings, the ice thickness in Tail Lake measured on a monthly basis during construction, operations and closure. | a) The volume of freshwater obtained from Doris Lake for domestic use ~~potable water~~;<br>b) The volume of freshwater obtained from Windy Lake for domestic use by the Project;<br>c~~b~~) The volume of freshwater obtained from Doris Lake for process water and other uses;<br>d~~c~~) The volume of reclaim water obtained from the Tailings Impoundment Area ~~Tail Lake~~ for process water at Monitoring Station TL-8;<br>e~~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 C~~c~~onstruction, O~~o~~perations and C~~c~~losure;<br>f~~e~~) Tonnes of W~~w~~aste R~~r~~ock returned underground on a monthly basis during C~~c~~onstruction, O~~o~~perations and C~~c~~losure; ~~and~~<br>g~~f~~) The volume of sewage sludge removed from the Domestic Wastewater Treatment Plant and the locations or method of sewage sludge disposal during C~~c~~onstruction, O~~o~~perations and C~~c~~losure; and<br>~~g) Following the deposition of tailings, the ice thickness in Tail Lake measured on a monthly basis during construction, operations and closure.~~ | | Suggestions for clarity |

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| 13.The Licensee shall measure and record in tonnes (unless otherwise stated) including the location of disposal (temporary and permanent) for the following:<br><br>a) The daily dry tonnes of combined tailings placed in the Tailings Impoundment Area;<br>b) The daily dry tonnes of cyanide leach residue; and<br>c) The monthly quantity of ore processed. | a) The daily dry tonnes of ~~combined~~ tailings placed in the Tailings Impoundment Area;<br>b) the daily dry tonnes of cyanide leach <u>tailings placed on the waste rock pile for disposal underground</u>; | | Remove reference to "combined tailings" because cyanide destruct tailings will be placed underground. |
| 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. | | | |
| 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 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. | ~~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 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.~~ | | TMAC request that this be removed. The original intent of this condition was to ensure that 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. |
| 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. | | | |

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| 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:<br><br>a) North and South Dams;<br>b) Geotechnical instrumentation and associated monitoring data;<br>c) A description of geophysical and permafrost conditions at the project site;<br>d) Tailings Impoundment Area shoreline and erosion strip survey monitoring results;<br>e) Emergency Dump Catch Basins;<br>f) All weather access roads;<br>g) Roberts Bay Jetty;<br>h) Landfill;<br>i) Landfarm;<br>j) Fuel Storage and Containment Facilities at the Plant Site and Roberts Bay site;<br>k) Sedimentation Pond;<br>l) Pollution control Pond;<br>m) Sumps;<br>n) Underground mine openings;<br>o) Groundwater conditions underground;<br>p) Rock temperature measurements and groundwater inflow in the underground mine workings;<br>q) Sedimentation control berm at the overburden dump; and<br>r) Doris North Camp Area Diversion Berm. | c) A description of geophysical and permafrost conditions at the Pproject site;<br>e) Emergency Dump Catch Basins;<br>l) Pollution Ceontrol Ponds;<br>g) ~~Roberts Bay Jetty~~; | | Suggest removal of Jetty monitoring as this is not a water licence related facility. |

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| 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. | The Licensee shall submit to the Board, within ~~sixty (60)~~ ninety (90) 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. | | Suggested extension to standard timeline in order to provide adequate time for qualified individual to undertake inspection and prepare report. |
| 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:<br><br>a) Landfill Sump;<br>b) Sedimentation Pond;<br>c) Landfarm Sump;<br>d) Plant Site Fuel Storage and Containment Area Sump;<br>e) Roberts Bay Fuel Storage and Containment Area Sumps;<br>f) Wastewater Treatment Plant (during the construction phase); and<br>h) Reagent and cyanide storage facility sumps. | 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:<br><br>a) Landfill Sump;<br>b) Sedimentation Pond;<br>c) Landfarm Sump;<br>d) Plant Site Fuel Storage and Containment Facility ~~Area~~ Sump;<br>e) Roberts Bay Fuel Storage and Containment Facility ~~Area~~ Sumps;<br>f) ~~Domestic Wastewater Treatment Plant (during the Cconstruction phase);~~ and<br>g) ~~h)~~ Reagent and C~~c~~yanide S~~s~~torage F~~f~~acility sumps.<br><br>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. | | 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. |

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| 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:<br><br>a) All data and information required by this Part and generated by the Monitoring Program in the Tables of Schedule J;<br>b) Copies of results required by NIRB Project Certificate, Item 10;<br>c) An assessment of data to identify areas of non-compliance with regulated discharge parameters referred to in PART G;<br>d) During Operations, a summary of monthly operational assessments of the water balance and water quality model;<br>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<br>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. | 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</u> ~~and hardcopy~~. The Report shall include the following:<br><br>a) All data and information required by this Part and generated by the Monitoring Program in the Tables of Schedule J;<br><u>b)</u> ~~Copies of results required by NIRB Project Certificate, Item 10;~~<br>c) An assessment of data to identify areas of non-compliance with regulated discharge parameters referred to in PART G;<br>d) During Operations, a summary of monthly operational assessments of the water balance and water quality model;<br>~~e) Results of daily visual assessment of suspended sediment along the perimeter of the Tailings Impoundment Area shoreline during Construction, Operations, and c~~<u>C</u>~~losure and while carrying out inspections during Care and Maintenance~~; and<br>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. | INAC: 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 suggests removal of B as this is a requirement relating to the onsite analytical laboratory which has been removed.<br><br>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 does not need to monitor for sediment in the TIA as sub aqueous is no longer the disposal method. |

| PART K CONDITIONS APPLYING TO GENERAL AND AQUATIC EFFECTS MONITORING PLANS | | | |
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| 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. | | | |
| 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). | The Licensee shall ~~submit for review of the Board, three (3) months prior to Operations, a revised~~ comply with the approved 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).~~ | | 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.<br><br>As an alternative to a Board – approved QA-QC Plan, TMAC requests the Board consider including a reference to "Industry standard QA-QC Plan" |
| 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. | 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.~~ | | 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. |
| 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. | 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 applicable regulations or a qualified Analyst. | | |

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| 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. | ~~All analyses shall be performed in a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.~~ | | Suggest removing. See definition of "Accredited Laboratory". |
| 6. The Licensee shall confirm the absence of seepage from the Temporary Waste Pad in groundwater downstream of the Pollution Control Pond. | ~~The Licensee shall confirm the absence of seepage from the Temporary Waste Pad in groundwater downstream of the Pollution Control Pond 1~~. | | There are sumps below the PCP that are intended to deal with additional water. |
| 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. | 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.~~ | INAC: 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.<br><br>*It is recommended that the deadline for providing updated plans and notification prior to commencing Operations be consistent.* | The suggested revision assumes plan approval at the time of licence issuance. |
| 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. | | | |

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| 2. 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. | | | |
| 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. | The Licensee shall provide to the Board, at least thirty (30) days advanced notification in writing, of the initial ~~start or change of Operations~~, deposition of tailings or change of Project Phase. Notification may be provided separately or in accordance with monthly monitoring report as per PART J, Item 21. | INAC: *It is recommended that the deadline for providing updated plans and notification prior to commencing Operations be consistent.* | Notification trigger is currently unclear, revise for clarity. |
| 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, addressing the technical comments received and based on the response submission of the Applicant on February 14, 2013. | 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 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.~~ | | The suggested revision assumes plan approval at the time of licence issuance. |

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| 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:<br><br>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;<br>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;<br>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;<br>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;<br>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; | ~~7. 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:~~<br><br>~~q) 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;~~<br>~~r) 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;~~<br>~~s) Implications of water quality model re-calibration results on the Tailings Impoundment Area discharge strategy and any adaptive management measures that may be required;~~<br>~~t) 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;~~<br>~~u) A comprehensive assessment of materials suitability, including geochemical and physical characterization, and schedule of availability for reclamation needs, with attention to cover~~ | INAC: *It is recommended that the deadline for providing updated plans and notification prior to commencing Operations be consistent.* | Suggest removing. This item is satisfied by the preceding Item. Suggest removing this. |

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| 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;<br>g) Contingency measures for all reclamation components including action thresholds that are linked to the monitoring programs;<br>h) Monitoring programs to assess reclamation performance and environmental conditions including monitoring locations for surface water and groundwater, parameters, schedules and overall timeframes;<br>i) QA/QC procedures for managing the demolition landfill and other waste disposal areas;<br>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.<br>k) Underground mine plans and sections, including the areas of backfill, the type of material placed and volumes should also be included;<br>l) Protocol for the disposal of any contaminated soil into the underground mine at closure;<br>m) An assessment of the long-term physical stability of all remaining project components including the north and south dams;<br>n) Detailed criteria for the final breaching of the North Dam;<br>o) A revised closure and reclamation cost estimate; and<br>p) A detailed implementation schedule for completion of reclamation work. | ~~materials, including maps where appropriate, showing sources and stockpile locations of all reclamation construction materials and any water related mitigation required during implementation;~~<br>~~v) 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;~~<br>~~w) Contingency measures for all reclamation components including action thresholds that are linked to the monitoring programs;~~<br>~~x) Monitoring programs to assess reclamation performance and environmental conditions including monitoring locations for surface water and groundwater, parameters, schedules and overall timeframes;~~<br>~~y) QA/QC procedures for managing the demolition landfill and other waste disposal areas;~~<br>~~z) 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.~~<br>~~aa) Underground mine plans and sections, including the areas of backfill, the type of material placed and volumes should also be included;~~<br>~~bb) Protocol for the disposal of any contaminated soil into the underground mine at closure;~~<br>~~cc) An assessment of the long-term physical stability of all remaining project components including the north and south dams;~~<br>~~dd) Detailed criteria for the final breaching of the North Dam;~~ | | |

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| | ~~oo) A revised closure and reclamation cost estimate; and~~<br>~~A detailed implementation schedule for completion of reclamation work.~~ | | |
| 8. 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:<br><br>a) Soil Quality Remediation Objectives along with CCME Guidelines and the Government of Nunavut Environmental Guideline for Site Remediation;<br>b) Environmental Site Assessment plans in accordance Canadian Standards Association (CSA) criteria; and<br>c) Evaluation of the Human Health and Ecological Risk Assessment. | The Licensee shall submit to the Board for approval, ~~within eighteen (18) months of the start of Operations~~ six (6) months prior to the start of Closure, 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 as may be revised from time to time. The Final Plan shall incorporate revisions, which reflect the pending closed status of the mine, and include the following:<br><br>a.Soil Quality Remediation Objectives along with CCME Guidelines and the Government of Nunavut Environmental Guideline for Site Remediation;<br>b.Environmental Site Assessment plans in accordance Canadian Standards Association (CSA) criteria; and<br>c.Evaluation of the Human Health and Ecological Risk Assessment. | 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~~ 2007 and consistent with the INAC Mine Site Reclamation Policy for Nunavut, 2002.<br><br>*It is noted that this timeline is no longer applicable based on the submitted amendment application.*<br><br>*KIA agrees with INAC. Six (6) months is too short a time to deal with a final closure plan and licence.* | 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. |
| 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. | | | |
| 9. The Licensee shall complete all reclamation work in accordance with the Plan(s) referred to in this Part as and | | | |

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| when approved by the Board in writing. | | | |

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| 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. 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. | | |
| 11. All roads and airstrip, if any, shall be re-graded to match natural contour to reduce erosion. | Remove | | This provision should be removed as it is a detail which would be considered as part of the review of the Closure Plan. |
| 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 | | This provision should be removed as it is a detail which would be considered as part of the review of the Closure Plan. |
| 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 | | This provision should be removed as it is a detail which would be considered as part of the review of the Closure Plan. *]* |
| 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. Materials such as soil and rock that have been contaminated by hydrocarbons may be disposed of underground . 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. | | 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. |
| 15. The Licensee shall contour and stabilize all disturbed areas to a pre-disturbed state upon completion of work. | The Licensee shall contour and stabilize all disturbed areas to a geo-technically stable state upon completion of work. | *"Geo-technical" stability must also be safe for people and wildlife.* | It is noted that this will be dependent on land owner decision relating to disturbed areas. |
| 16. The Licensee shall consult traditional land users, land | | | |

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| 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:<br><br>A – Definitions<br>B – General Conditions<br>D – Conditions Applying to Construction<br>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~~ | | |
| "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; | | | |
| "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~~w~~aste R~~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~~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; | | | |
| "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 | "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 | | Enhance clarity. |

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| taken when specified thresholds are exceeded; | 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;~~ | | Remove. Term not used in 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; | "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;~~ | *What are the "original terms and conditions"? Which version of the licence does this term refer to?* | Suggest removal of the highlighted sentence as it reduces the clarity provided by the first part of this definition. |
| "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; | | | |
| "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 freshwater 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; | *See comment above.* | |
| "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 as described in the Water Licence Applications, or as modified in accordance with Part H, or as otherwise approved by the Board 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; | | | |

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| "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 the 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; | | |
| "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; | | | |
| "Chief Administrative Officer" means the Executive Director of the Nunavut Water Board; | ~~"Chief Administrative Officer" means the Executive Director of the Nunavut Water Board;~~ | | Remove. Term not used in the licence. |
| "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;~~ | | Term not used in the licence |
| "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 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; | | | |
| "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;~~ | | Remove. Term not used in the licence. |
| "Deposit" means the placement of waste rock, tailings or other solids materials on land or in water; | | | |

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| "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; | | |
| "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 hazardous wastes associated with the mining and processing of ore; | ~~"Domestic Waste" means all solid waste generated form the accommodations, kitchen facilities and all other site facilities, excluding those industrial and hazardous wastes associated with the mining and processing of ore;~~ | | Remove. Term not used in the licence. |
| "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 as described in the Water Licence Application or as modified in accordance with Part H or as otherwise approved by the Board 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; | | | |
| "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;~~ | | Remove. Term not used in the licence. |

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| "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;~~ | | 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); | ~~"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);~~ | | 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); | ~~"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);~~ | | Remove. Term not used in the licence. |
| "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; | | | |

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| "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 Board; | | |
| "Frozen Core" means a permafrost core comprising frozen ice-saturated aggregate material and functioning as an impervious seepage barrier; | | | |

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| "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 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; | "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 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~~ | | |

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| | ~~built~~ 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; | | |
| "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; | | | |
| "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;~~ | | Remove. Term not used in the licence. |
| "Ground Water" means water that occupies pores and fractures in rock and soil below the ground surface in a liquid or frozen state; | "Groundw~~W~~ater" 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 applicable federal or territorial legislation | | Suggest refer to legal definition and revise licence to reflect updated definition accordingly |
| "High Water Mark" means the usual or average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land (ref. Department of Fisheries and Oceans Canada, Operational Statement: Mineral Exploration Activities); | | | |

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| | **"<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. | | New definition |
| "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; | | | |
| "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; | | | |

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| "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~~ Water Licence Application or as the result of Modifications identified under Part H of the Licence and as reflected in asbuilt drawings submitted to the Board; | | |
| "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.~~ 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. | | Revised to allow for disposal of non-hazardous combustible material that can't be open burned nor will fit into the incinerator. |
| "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; | | | |
| "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; | | Consecutively collection is not necessary for an average. |
| "Metal Leaching" means the mobilization of metals into solution under neutral, acidic or alkaline conditions; | | | |
| | **"Mineralized Waste Rock"** means [definition to be drafted] | | New definition |

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| "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;~~ | | Remove. Term not used in the licence. |
| "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 (~~AANDC~~INAC); | | |
| "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; | | A modification would arguably inherently alter function of the work. |
| "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 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; | | |
| "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; | | | |

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| "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 Ceonstruction, Ceare and M maintenance, and ~~decommissioning~~ Closure 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 Operation commences with the deposition of tailings; | *INAC: Recommendations: Further definitions of the beginning of operations would be helpful and might be tied to commencement of a specific activity.* | As per suggestion of Inspector. |
| "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;~~ | | Remove. Term not used in the licence, except in context which would not apply |
| "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 or as the result of Modifications identified under Part H of the Licence; | | |

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| "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 Wwaste Rrock Ppile, the Oore Sstockpile, 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 or as the result of Modifications identified under Part H of the Licence 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; | | | |
| "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 where the Licencee has confirmed that mine areas and facilities will not be used in future, before permanent Cclosure, to take advantage of cost and operating efficiencies and using the resources available from mine Operations to close certain parts of the operating areas. It enhances environmental protection and shortens the timeframe for achieving the reclamation objectives and goals. | | Revised to enhance clarity. |

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| "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), subsequent applications for Project Certificate Reconsideration, 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 Aamendment 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. | | Update to include additional quarries |
| "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~~9~~0 days between sampling events; | | Revise to allow similar reasonable flexibility as definitions for weekly, monthly and annually. |

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| "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 N0 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 ~~Aamendment 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 N0 DN-CRSF-00 to 05 Rev 0 and DN-CRSF-00 to 05 Rev A, IFC~~ Water Licence Application or as a reflected in as-built drawings submitted to 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; | "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 site~~s~~ and affected areas to stable conditions 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 freshwater 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 | | | |

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| Regulations SOR/2002-222 dated 6 June 2002, with amendments; | | | |
| "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 Project 2012 Construction Summary", Appendix B, 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-041 to 044, Rev AB, as built drawings; | "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 Project 2012 Construction Summary", Appendix B, 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-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, W~~w~~aste R~~r~~ock storage facilities, and O~~o~~re S~~s~~tockpile areas; (note roads, dams, pads, quarries); | | |
| "Sewage" means all toilet wastes and greywater; | "Sewage" means all toilet wastes ~~and greywater~~; | | Greywater has its own definition, which is mutually exclusive from sewage |
| "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~~ as the result of Modifications or as otherwise approved by the Board;; | | |

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| "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~~ as the result of Modifications or as otherwise approved by the Board 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~~ as the result of Modifications or as otherwise approved by the Board; | | |
| "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 "Water Management Plan",~~ as the result of Modifications or as otherwise approved by the Board; | | |
| "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 | "Tailings Impoundment Area" means the ~~lake~~ water body designated as a Tailings Impoundment Area under Schedule 2 of the Metal Mining Effluent Regulations~~. Also referred to in the Revised Water~~ | | |

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| Water Licence Application as Tail Lake or Tailings Containment Area; | ~~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",~~ | | Suggests removing this section. Refer to Part G Item 27. |
| "Talik" 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 facilit~~y~~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 as the result of Modifications or as otherwise approved by the Board. | | Note that the Board approved modification to Temporary Waste Rock Pad under Part G Item 19c |
| "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 orally, and handed down from generation to generation; | ~~"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 orally, and handed down from generation to generation;~~ | | Remove. Term not used in the licence. |
| "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; | | | |

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| | "Unmineralized Waste Rock" means [definition to be drafted] | | New defintion |
| "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; | | |

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| "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 w<u>W</u>aste on a temporary or permanent basis including the Landfill, Landfarm, Tailings Impoundment Area, site Sumps, Pollution Control Pond<u>s</u>, and Sedimentation Pond<u>;</u> | | . |
| "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 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 N0 004 to 007, Rev 2, as built. | "<u>Domestic Wastewater Treatment Plant (WWTP)</u>" means the ~~Sani-Membrane Bio-Reactor~~ <u>wastewater treatment</u> 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 N0 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>.</u> | | |
| "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; | | | |

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| "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 initial filing of the application ~~dated~~ and subsequent renewals and amendments ~~August 2012~~. Including Supporting Documents, ~~and~~ Technical Meeting Information Supplement documents, Management and Monitoring Plans and IFC drawings submitted to the Board throughout the regulatory process; | | |

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| "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: | | | |
| 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; | | | |
| 2. Summary of the Construction Monitoring Report referred to in Part D, Item 8 and outlined in Schedule D; | ~~Summary of the Construction Monitoring Report referred to in Part D, Item 8 and outlined in Schedule D;~~ | | 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. |

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| 3. A Geochemical Monitoring and Waste Rock Storage Assessment that includes the following:<br><br>a) For the tailings solids:<br>i. All geochemical data appended;<br>ii. All tonnage data appended and locations of disposal;<br>iii. Discussion of geochemical data (static and kinetic, if applicable) with relevant figures and calculation of NNP and NPR; and<br>iv. Geochemical interpretation of data.<br>b) For tailings supernatant:<br>i. All geochemical data appended; and<br>ii. Figures depicting time series of constituent concentrations and loads.<br>c) For waste rock:<br>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;<br>d) For barren bleed stream:<br>i. Raw monthly monitoring results from monitoring station TL-9; and<br>ii. Figures depicting time series for each of the parameters.<br>e) For cyanide leach residue:<br>i. Presentation of results of bi-annual underground inspection of the following:<br>• Location of inspection;<br>• Extent of freezeback of cyanide leach residue;<br>• Seepage from the cyanide leach residue; and<br>f) Geochemical and inspection data of any samples taken from seepage from the cyanide leach residue including geochemical discussion of results. | d) For W~~w~~aste R~~r~~ock:<br><br>e) For cyanide leach residue:<br>ii. Presentation of results of bi-annual underground inspection of the following:<br>• Location of inspection;<br>• Extent of freezeback of cyanide leach residue;<br>• Seepage from the cyanide leach residue; and | | 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. |

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| 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:<br><br>a) Relevant supporting data;<br>b) a comparison of measured water balance and water quality values to predicted values;<br>c) Monitoring and internal modelling results;<br>d) Discharge volume calculations;<br>e) a discussion of any discrepancies in model inputs;<br>f) re-evaluation of Tailings Water Management Strategy and a discussion of any changes to the discharge schedule; and<br>g) Identification of any necessary adaptive management strategies. | 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. T~~the report shall include:<br><br>~~a) Relevant supporting data;~~<br>~~b) a comparison of measured water balance and water quality values to predicted values;~~<br>~~c) Monitoring and internal modelling results;~~<br>~~d) Discharge volume calculations;~~<br>e) a discussion of any discrepancies in model inputs;<br>f) evaluation of Tailings Water Management Strategy and a discussion of any changes to the discharge schedule; and<br>g) Identification of any necessary A~~a~~daptive M~~m~~anagement strategies. | | Suggest removal of re-calibration requirement. |
| 5. Summary of the Geotechnical Inspection Report referred to in Part J, Item 18 that includes the following:<br><br>a) All quantities in cubic meters of dike seepage from the North and South Dams pumped back into the Tailings Impoundment Area;<br>b) 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<br>c) All data and information generated from the monitoring of all project geotechnical instrumentation. | ~~Summary of the Geotechnical Inspection Report referred to in Part J, Item 18 that includes the following:~~<br><br>~~a) All quantities in cubic meters of dike seepage from the North and South Dams pumped back into the Tailings Impoundment Area;~~<br>~~b) 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~~<br>~~c) All data and information generated from the monitoring of all project geotechnical instrumentation.~~ | | 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. |
| 6. An update on the current capacity of the Tailings Impoundment Area; | | | |
| ~~7. A comparison of the flows ($m^3$/day) at monitoring stations TL-1, TL-2, TL-3, and TL-4;~~ | A record of measurements of Doris Lake water level. | | To monitor the potential for lake water level drawdown |

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| 8. Annual review and any revisions submitted in the form of addendums to the Management Plans or Emergency Response and Contingency Plan; | Annual review of and submission of 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 or revised Plans; | | Revised for clarity |
| 9. 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 | The results of the Aquatic Effects Monitoring Program and in accordance with Part J, Item 3 | | |
| 11. Annual adjustments to reclamation security including any additional security that may be required; | 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; | ~~Annual~~ Incineration stack testing results in years when stack testing is required; | | Revise. Annual testing not required |
| 13. 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; | | | |
| 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; | | | Relocate this provision to be in proximity to the reclamation security item above. |
| 16. A summary report describing public consultation and participation with local organizations and the residents of the nearby 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; | | | |
| 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 | | | |

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| 19. 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 | | | |
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| 1. The Construction Monitoring Report referred to in Part D, Item 8 shall include the following, where applicable:<br><br>a) Blast vibration monitoring for quarrying activity carried out in close proximity to fish bearing waters;<br><br>b) Monitoring of the performance of erosion protection measures employed by the construction contractor;<br>c) Monitoring for sediment release from construction areas;<br>d) Monitoring for wildlife interactions;<br>e) Monitoring to ensure the protection of all migrating birds and their nesting sites;<br>f) Waste Rock and Quarry Monitoring Report, including the following:<br><br>i. A summary of the geochemical inspections;<br>ii. Results of the seep surveys;<br>iii. Results of geochemical sampling and analysis; and<br>iv. A summary of all mitigation activities undertaken as a result of monitoring.<br>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);<br>h) Monitoring of contractor's activity to minimize ground impacts to the tundra (i.e. keeping vehicles off the tundra and on constructed roadways);<br>i) Monitoring of dust generation and use of water by the contractor to manage dust emissions from crushing and construction activity;<br>j) Vegetation monitoring;<br>k) Summary of the Quarry Rock Construction Monitoring Program referred to in Part D, Item 9;<br>l) Summary of the construction of the North and South | The Construction Monitoring Report referred to in Part D, Item 8 shall include the following, where applicable:<br><br>a) Blast vibration monitoring for quarrying activity carried out in close proximity to fish bearing W~~w~~aters;<br>b) [no change]<br>c) [no change]<br>~~d) Monitoring for wildlife interactions;~~<br>~~e) Monitoring to ensure the protection of all migrating birds and their nesting sites;~~<br>~~f) Waste Rock and Quarry Monitoring Report, including the following:~~<br><br>~~i. A summary of the geochemical inspections;~~<br>~~ii. Results of the seep surveys;~~<br>~~iii. Results of geochemical sampling and analysis; and~~<br>~~iv. A summary of all mitigation activities undertaken as a result of monitoring.~~<br>~~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);~~<br><br>~~g)~~ ~~Monitoring of dust generation and use of~~ Wwater ~~by the contractor to manage dust emissions from crushing and construction activity~~;<br>j) Re-Vegetation monitoring, where applicable<br>~~k) Summary of the Quarry Rock Construction Monitoring Program referred to in Part D, Item 9;~~<br>l) Summary of the construction of the ~~North and~~ South Dams;<br>i | | a) Use defined term<br>d-e) Wildlife monitoring is reported to the NIRB and is not included in the NWB jurisdiction<br><br>f) Remove the requirement to report a summary of a Geotech inspection report - redundant<br><br>f) Remove - this is monitored and reported as part of the HWMP, INHWMP and WMMP and is not specific to construction phase<br><br>j) TMAC reports this though the air quality monitoring program. Suggest change for clarity.<br><br>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.<br><br>m) complete – remove<br><br>n: This is the same reporting as f. Remove the requirement to report a summary of a Report in the Construction Monitoring Report. |

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| Dams;<br><br>i. Laboratory results of subsurface investigations of the dam foundations from undisturbed samples;<br>ii. Details of the geotechnical instrumentation and monitoring plan proposed to monitor the performance of the dams; and<br>iii. Results of subsurface investigations and laboratory analyses must be reviewed by MHBL and the dam design modified accordingly under the supervision of a Geotechnical Engineer.<br>m) Summary of the items referred to in Part D, Item 13 with respect to updated construction drawings for the all-weather access road;<br>n) Summary of the Quarry Rock Seepage Monitoring Program referred to in Part D, Item 20; and<br>o) Status of the Construction Summary Reports referred to in Part D, Item 25.<br><br>The report shall discuss the monitoring results, analysis and any mitigation measures employed as a result of the monitoring, for each of the items listed above.monitoring, for each of the items listed above. | m) ~~Summary of the items referred to in Part D, Item 13 with respect to updated construction drawings for the all weather access roads;~~<br>~~n) Summary of the Quarry Rock Seepage Monitoring Program referred to in Part D, Item 20; and~~<br>o) ~~Status of the~~ Construction Summary Reports referred to in Part D, Item 25. | | o: will include these full reports here (rather than 90 days after completion – see related change in Part D, Item 25) |

| Schedule G. Conditions Applying to Waste Management and Waste Management Plans | | | |
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| CCME - Water Quality guidelines for total ammonia for the protection of aquatic life ($mg \cdot L^{-1}$ $NH_3$) | | | |
| Schedule J. Conditions Applying to General and Aquatics Effects Monitoring | | | |
| [See licence Schedule J for Table 1 Monitoring Groups] | | | |
| [See licence Schedule J for Group Reference] | | | |
| [See Table 2, Schedule J for detailed current monitoring requirements – comments by station to be set out below] | | | |

| Temp ($^{O}C$) | 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 |