

ATTACHMENT C

Compliance Status



2BB-BOS1217 Clauses and Compliance (As of January 2017)

Licence Effective August 2, 2012 to July 31, 2017

Clause		Compliance Status	Licence Item
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Part A: Scope, Definitions and Enforcement

A.1	~	N/A	This Licence allows for the use of water and the disposal of waste for an undertaking classified as Mining and Milling as per Schedule II of the Regulations for the Boston Advanced Exploration Project, located approximately 250 km southwest of Cambridge Bay within the Kitikmeot Region, Nunavut (see licence for full detail).
A.2	~	N/A	Definitions (see licence)
A.3	~	N/A	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; b. All inspection and enforcement services regarding this Licence will be provided by Inspectors appointed under the Act; and c. For the purpose of enforcing this Licence and with respect to the use of water and deposit or discharge 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 law.

Part B: General Conditions

B.1	✓	In Compliance	The water use fees, payable to the Receiver General for Canada, shall be sent to the Board annually in advance of any use in accordance with Section 9 of the Regulations.
B.2	✓	In Compliance	The Licensee shall furnish and maintain with the Minister, in the form that is satisfactory to the Minister, a security deposit in the amount of \$1.7 million dollars.
B.3	✓	In Compliance	The Licensee shall provide to the Board for assessment and approval in writing, within sixty (60) days of issuance of this Licence, a revised and updated restoration liability estimate for closure of the Boston Advanced Exploration Project, based on the NWB's Guide 4 and Guide 74, and using a recognized methodology such as RECLAIM® for preparing the estimate.
B.4	~	N/A	Notwithstanding Part B, Item 2, the Licensee shall provide such further or other amounts as may be required by the Board based on annual assessment of current restoration liability.
B.5	~	N/A	The security deposit shall be maintained until such time as the Minister is satisfied that the Licensee has complied with all provisions of the approved Abandonment and Restoration Plan. This clause shall survive the expiry of this Licence or renewals thereof.
B.6	✓	In Compliance	The Licensee shall file an Annual Report on the appurtenant undertaking with the Board no later than March 31st of the year following the calendar year being reported which shall contain the following information (see licence for full list):
B.7	✓	In Compliance	The Licensee shall notify the NWB of any changes in operating plans or conditions associated with this project at least thirty (30) days prior to any such change.
B.8	✓	In Compliance	The Licensee shall install flow meters or other such devices, or implement suitable methods required for the measuring of water volumes as required under Part J.
B.9	✓	In Compliance	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 Facility. All signs shall be located and maintained to the satisfaction of an Inspector.

B.10	✓	In Compliance	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.
B.11	✓	In Compliance	The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing.
B.12	✓	In Compliance	The Licensee shall review the Plans referred to in this Licence, as required by changes in 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.
B.13	~	N/A	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.
B.14	✓	In Compliance	Licensee shall ensure a copy of this Licence is maintained at the site of operations at all times. Any communication with respect to this Licence shall be made in writing to the attention of: Manager of Licensing (see licence for address) Inspector Contact (see licence for address)
B.15	✓	In Compliance	The Licensee shall submit one paper copy and one electronic copy of all reports, studies, and plans to the Board. Reports or studies submitted to the Board by the Licensee shall include a detailed executive summary in Inuktitut.
B.16	✓	In Compliance	The Licensee shall ensure that any document(s) or correspondence submitted by the Licensee to the Board is received and acknowledged by the Manager of Licensing.
B.17	~	N/A	This Licence is not assignable except as provided in Section 44 of the Act.

Part C: Conditions Applying to Water Use

C.1	✓	In Compliance	The Licensee shall obtain all water for domestic camp use from Aimaoktatuk (Spyder) Lake at SNP Station BOS-1 using the Water Supply Facility or as otherwise approved by the Board. Water use for drilling and associated uses shall be obtained from Aimaoktatuk Lake, Stickleback Lake or as required from sources proximal to the drilling targets. The total volume of water for the purposes of this Licence, from all sources shall not exceed 100 cubic meters per day.
C.2	✓	In Compliance	Streams cannot be used as a water source unless authorized and approved by the Board.
C.3	~	N/A	If the Licensee requires water in sufficient volume that the source water body may be drawn down the Licensee shall, at least thirty (30) days prior to commencement of use of water, submit to the Board for approval in writing, information on the water body that includes, but is not limited to: volume of water required, hydrological overview of the water body, details of impacts, and proposed mitigation measures.
C.4	✓	In Compliance	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.
C.5	✓	In Compliance	The Licensee shall not remove any material from below the ordinary high water mark of any water body unless otherwise approved by the Board in writing.

C.6	✓	In Compliance	The Licensee shall not cause erosion to the banks of any body of water and shall provide necessary controls to prevent such erosion.
C.7	✓	In Compliance	Sediment and erosion control measures shall be implemented prior to and maintained during the operation to prevent entry of sediment into water.

Part D: Conditions Applying to Waste Disposal

D.1	✓	In Compliance	The Licensee shall locate areas designated for waste disposal, at a minimum distance of thirty one (31) metres from the ordinary high water mark of any water body such that the quality, quantity or flow of water is not impaired, unless otherwise authorized by the Board.
D.2	✓	In Compliance	The Licensee shall not practice open burning or on-site land filling of domestic waste, unless otherwise approved by the Board in writing.
D.3	✓	In Compliance	The Licensee is authorized to dispose of all acceptable food waste, paper waste and untreated wood products in an incinerator.
D.4	✓	In Compliance	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.
D.5	✓	In Compliance	The Licensee shall provide to the Board, documented authorization from the receiving community, prior to the backhauling of any non-hazardous waste for disposal at that community.
D.6	✓	In Compliance	The Licensee shall backhaul and dispose of all hazardous wastes, waste oil and non-combustible waste generated through the course of the operation at an approved waste disposal site.
D.7	✓	In Compliance	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.
D.8	✓	In Compliance	All Minewater and surface drainage from decline, waste rock and ore stockpiles shall be pumped to a Containment Pond prior to discharge.
D.9	✓	In Compliance	All discharge from Containment Pond at Monitoring Station BOS-2 shall not exceed the following Effluent quality limits (see criteria in licence):
D.10	✓	In Compliance	The Licensee shall design and berm the Containment Ponds to prevent seepage. A report on seepage shall be included as part of the Geotechnical Engineer's annual report required by Part D, Item 17.
D.11	✓	In Compliance	Licensee shall direct all sewage and greywater to the Sewage Disposal Facility unless otherwise approved by the Board.
D.12	✓	In Compliance	The Licensee shall dispose of sludge removed from the Sewage Disposal Facility in a sump located a minimum of thirty-one (31) meters from the normal high water mark and such that they do not enter any water body, or as otherwise approved by the Board in writing under Part D, Item 13.
D.13	✓	In Compliance	The Board has approved the document entitled "Sewage Sludge Management Alternatives for the Hope Bay Project Ver. 1.0, June 2010". Should alternative methods of disposal and treatment of Sludge be considered, the Licensee shall submit to the Board for approval in writing, at least four (4) months prior to the change in Sludge disposal plans, a revised plan which shall address (see list in licence):
D.14	✓	In Compliance	The Licensee shall discharge all Effluent in such a manner to prevent surface erosion.

D.15	✓	In Compliance	All Effluent being discharged from the Sewage Disposal Facility, monitoring station BOS-3 shall meet the following Effluent quality standards (see criteria in licence):
D.16	✓	In Compliance	The Licensee shall ensure that effluent discharged from monitoring stations BOS-2 and BOS-3, is demonstrated to be non-acutely toxic in accordance with Part J, Item 3.
D.17	✓	In Compliance	An inspection of the earthworks, geological regime, and the hydrological regime of the Project is to be carried out annually during the summer by a Geotechnical Engineer. The Geotechnical Engineer's report shall be submitted to the Board within sixty (60) days of the inspection, with a covering letter from the Licensee outlining an implementation plan to respond to the Engineer's recommendations.
D.18	✓	In Compliance	The Licensee shall provide at least ten (10) days written notice to the Inspector prior to any planned discharges from the Bulk Fuel Storage Facility and the Landfarm at Monitoring Program Stations BOS-5 and BOS-6. This notice shall include the volume proposed for discharge and location, or intended use of effluent that meets the discharge criteria listed in Part D, Item 19.
D.19	✓	In Compliance*	All effluent from the Bulk Fuel Storage Facility and the Landfarm, at monitoring stations BOS-5 and BOS-6 respectively, shall meet the following Effluent quality standards (see criteria in licence):
D.20	✓	In Compliance*	The Licensee shall establish and confirm compliance with Effluent quality limits of Part D, Item 19 prior to discharge.
D.21	✓	In Compliance	All discharges shall be released in such a manner to minimize surface erosion. Upon confirming compliance required of Part D, Item 19, water to be released to the environment may be used for other industrial purposes upon written request to the Board, including use for dust suppression activities on roads and quarries as well as drilling.
D.22	✓	In Compliance	In the event that Effluent planned for discharge exceeds the limits provided in Part D, Item 15 or Item 19, the Licensee shall investigate the cause of the noted exceedance and report any findings, along with planned mitigation measures to meet these limits, prior to any discharge.
D.23	✓	In Compliance	The proponent shall ensure that any hazardous materials, including waste oil, receive proper treatment and disposal at an approved treatment facility.
D.24	✓	In Compliance	The Licensee shall maintain all constructed facilities, including the Sewage Disposal Facility, Landfarm, Bulk Fuel Storage Facility and the Containment Pond(s), to the satisfaction of an Inspector.

Part E: Conditions for Camps, Access Infrastructures and Operations

E.1	✓	In Compliance	The Licensee shall not erect camps or store material on the surface of frozen streams or lakes including immediate banks except what is for immediate use. Camps shall be located such as to minimize impacts on surface drainage.
E.2	✓	In Compliance	All activities shall be conducted in such a way as to minimize impacts on surface drainage and the Licensee shall immediately undertake any corrective measures in the event of any impacts on surface drainage.
E.3	✓	In Compliance	Winter lake and stream crossings, including ice bridges, shall be constructed entirely of water, ice or snow. The Licensee should minimize disturbance by locating ice bridges in an area that requires the minimum approach grading and the shortest crossing route. Stream crossings shall be removed or the ice notched prior to spring break-up.

E.4	✓	In Compliance	With respect to access road, pad construction or other earthworks, 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.
E.5	~	N/A	The Licensee submitted the document entitled "Sewage Treatment Plant Operation and Maintenance Plan for the Boston Camp, July 27, 2010". This Plan has been approved by the Board.
E.6	~	Not yet applicable	The Licensee shall submit to the Board for approval in writing, sixty (60) days prior to resuming exploration and commissioning of the Sewage Disposal Facility, a revised Operation and Maintenance Manual, required in Part E, Item 5, prepared in accordance with the "Guidelines for the Preparation of an Operation and Maintenance Manual for Sewage and Solid Waste Disposal Facilities in the Northwest Territories; 1996" and adapted for the use of a mechanical sewage treatment facility.
E.7	✓	In Compliance	The Licensee submitted the document entitled "Boston Land Treatment Area Management and Monitoring Plan, SRK Consulting (Canada) Inc., January 2012." The Board has approved the plan as submitted. This Plan is to be reviewed and updated annually if required, as per Part B, Item 14.
E.8	✓	In Compliance	The Licensee has submitted the document entitled "Water and Ore/Waste Rock Management Plan for the Boston Site, Hope Bay Project, Nunavut; SRK Consulting, July 2009." The Board has approved the Plan along with the additional information submitted as addendums to the Plan. This Plan is to be reviewed and updated annually if required, as per Part B, Item 14.
E.9	✓	In Compliance	The Licensee shall undertake the following measures during the construction/operation/ removal of the v-notch weir at the outflow of Stickleback Lake, to minimize disturbance to the creek channel and receiving waters (see licence for full list):

Part F: Conditions Applying to Drilling Operations

F.1	✓	In Compliance	The Licensee shall not conduct any land based drilling within thirty one (31) metres of the ordinary high water mark of any water body, unless otherwise approved by the Board in writing.
F.2	✓	In Compliance	The Licensee shall ensure that all drill waste, including water, chips, muds and salts (CaCl ₂) in any quantity or concentration from land-based and on-ice drilling, shall be disposed of in a properly constructed sump or an appropriate natural depression located at a distance of at least thirty one (31) metres from the ordinary high water mark of any adjacent water body, where direct flow into a water body is not possible and no additional impacts are created.
F.3	✓	In Compliance	If artesian flow is encountered, drill holes shall be immediately sealed and permanently capped to prevent induced contamination of groundwater or salinization of surface waters. The Licensee shall report all artesian flow occurrences within the Annual Report, including the location (GPS coordinates) and dates.
F.4	✓	In Compliance	Where drilling activity has penetrated below the permafrost layer, the NWB requests that the proponent record the depth of permafrost and location of the drill hole, to be included within the Annual Report.
F.5	✓	In Compliance	Drilling additives or mud shall not be used in connection with holes drilled through lake ice unless they are re-circulated or contained such that they do not enter the water, or are demonstrated to be non-toxic.

F.6	✓	In Compliance	For “on-ice” drilling where drill additives are not being used, return water released must be nontoxic, and not result in an increase in total suspended solids in the immediate receiving waters above the Canadian Council of Ministers for the Environment, Guidelines for the Protection of Freshwater Aquatic Life (i.e. 10mg/L for lakes with background levels under 100 mg/L, or 10% for those above 100mg/L).
F.7	✓	In Compliance	The Licensee shall establish water quality conditions prior to and upon completion of any drilling program through lake ice.

Part G: Conditions Applying to Modifications

G.1	✓	In Compliance	The Licensee may, without written consent from the Board, carry out Modifications to the Water Supply Facilities, Bulk Fuel Storage Facilities and Waste Disposal Facilities provided that such Modifications are consistent with the terms of this Licence and the following requirements are met: a. the Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications; b. such Modifications do not place the Licensee in contravention of the Licence or the Act; c. 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 d. the Board has not rejected the proposed Modifications.
G.2	✓	In Compliance	Modifications for which all of the conditions referred to in Part G, Item 1 have not been met can be carried out only with written approval from the Board.
G.3	✓	In Compliance	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.

Part H: Conditions Applying to Spill Contingency Planning

H.1	✓	In Compliance	The Licensee shall submit to the Board for approval, within sixty (60) days of issuance of the Licence, an update to the Spill Contingency Plan, submitted April 12, 2012, to address the current status of the Boston Advanced Exploration Project and all activity being suspended, moving into a state of care and maintenance for the Hope Bay Project. This Plan is to be prepared in accordance with the Spill Contingency Planning and Reporting Regulations developed under Section 34 of the Environmental Protection Act.
H.2	✓	In Compliance	Licensee shall submit to the Board for approval in writing, sixty (60) days prior to the resumption of exploration activity at the Hope Bay Regional Exploration Project, a revised Spill Contingency Plan that is specific to the scope of this Licence and prepared in accordance with the Spill Contingency Planning and Reporting Regulations developed under Section 34 of the Environmental Protection Act.
H.3	✓	In Compliance	The Licensee shall, if not approved by the Board, revise the Plan referred to in Part H, Item 1, and resubmit to the Board for approval within thirty (30) days of receiving notification of the Board's decision.

H.4	✓	In Compliance	The Licensee shall ensure that any chemicals, petroleum products or wastes associated with the project do not enter water. All sumps and fuel caches shall be located at a distance of at least thirty one (31) metres from the ordinary high water mark of any adjacent water body and inspected on a regular basis.
H.5	✓	In Compliance	The Licensee shall ensure that any equipment maintenance and servicing be conducted only in designated areas and shall implement special procedures (such as the use of drip pans) to manage motor fluids and other waste and contain potential spills.
H.6	✓	In Compliance	If during the term of this Licence, an unauthorized discharge of waste occurs, or if such a discharge is foreseeable, the Licensee shall: a. Employ the Spill Contingency Plan; b. Report the spill immediately to the 24-Hour Spill Line at (867) 920-8130 and to the Inspector at (867) 975-4295; and c. For each spill occurrence, submit to the Inspector, no later than thirty (30) days after initially reporting the event, a detailed report that will include 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.

Part I: Conditions Applying to Abandonment and Restoration or Temporary Closing

I.1	✓	In Compliance	The Licensee shall submit to the Board for approval in writing, within sixty (60) days of issuance of this Licence, a revised Abandonment and Reclamation Plan that is specific to the scope of this Licence and prepared in accordance with the Mine Site Reclamation Guidelines for the Northwest Territories (INAC), 2006 and consistent with the INAC Mine Site Reclamation Policy for Nunavut, 2002.
I.2	~	N/A	The Licensee shall complete all restoration work prior to the expiry of this Licence.
I.3	✓	In Compliance	The Licensee shall carry out progressive reclamation of any components of the project no longer required for the Licensee's operations.
I.4	✓	In Compliance	The Licensee shall backfill and restore to the satisfaction of an Inspector, all sumps to the pre-existing natural contours of the land.
I.5	✓	Not yet applicable	The Licensee shall remove from the site, all infrastructure and site material, including but not limited to, all fuel caches, drums, barrels, buildings and contents, docks, water pumps and lines, material and equipment before the expiry of this Licence.
I.6	✓	Not yet applicable	The Licensee shall re-grade all roads and airstrip, if any, to match the natural contour to reduce erosion.
I.7	✓	Not yet applicable	Licensee shall remove any culverts and restore the drainage to match the natural channel. Measures shall be implemented to minimize erosion and sedimentation.
I.8	✓	Not yet applicable	The Licensee shall, for all disturbed surfaces, in order to promote growth of vegetation and the needed microclimate for seed deposition, prepare the areas by ripping, grading, or scarifying the surface to conform to the natural topography.
I.9	✓	Not yet applicable	The Licensee shall reclaim areas that have been contaminated by hydrocarbons from normal fuel transfer procedures 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.

I.10	✓	In Compliance	The Licensee shall restore drill holes and disturbed areas to natural conditions immediately upon completion of the drilling. The reclamation of drill holes must include the removal of any drill casing materials and, if having encountered artesian flow, the capping of holes with a permanent seal, as referred to under Part F, Item 3.
I.11	✓	In Compliance	The Licensee may store drill core produced by the appurtenant undertaking in an appropriate manner and location at least thirty one (31) metres above the ordinary high water mark of any adjacent water body, where any direct flow into a water body is not possible and no additional impacts are created, or as directed by an Inspector.
I.12	✓	Not yet applicable	All disturbed areas shall be contoured and stabilized upon completion of work and restored to a pre-disturbed state.

Part J: Conditions Applying to the Monitoring Program

J.1	✓	In Compliance	The Licensee shall maintain Monitoring Program Stations at the following locations (see table of monitoring locations in licence):
J.2	✓	In Compliance	The Licensee shall measure and record, in cubic metres, the daily quantities of water used for Camp, drilling and for all other purposes from all sources.
J.3	✓	In Compliance	The Licensee shall measure and record, in cubic metres, the monthly and annual quantities in cubic metres of Minewater pumped from the underground.
J.4	✓	In Compliance	The Licensee shall measure and record, in cubic metres, the monthly and annual quantities in cubic metres of Sludge removed from the Sewage Disposal Facility.
J.5	✓	In Compliance	The Licensee shall measure and record, in cubic metres, the daily quantities of effluent discharged at Monitoring Program Stations BOS-2, BOS-3, BOS-5 and BOS-6.
J.6	✓	In Compliance	The Licensee shall provide the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all locations where sources of water are utilized for all purposes.
J.7	✓	In Compliance	The Licensee shall determine the GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all locations where wastes associated with camp operations and drilling operations are deposited.
J.8	✓	In Compliance	The Licensee shall sample at Monitoring Program Station BOS-2, once prior to discharge and weekly thereafter for parameters under Part D, Item 9.
J.9	✓	In Compliance	The Licensee shall sample at Monitoring Program Stations BOS-3 and BOS-4 monthly during discharge. Samples shall be analyzed for the following parameters (see criteria list in licence):
J.10	✓	In Compliance	The Licensee shall conduct toxicity testing on treated Sewage Disposal Facility Effluent at the point prior to entry into Aimaoktatuk (Spyder) Lake, Monitoring Station BOS-4, once annually during open water season in accordance with the following test procedures (see criteria list in licence):
J.11	✓	In Compliance	The Licensee shall sample at Monitoring Program Stations BOS-5 and BOS-6 monthly during removal of water from the facilities and analyzed for the following (see licence criteria):
J.12	✓	In Compliance	The Licensee shall utilize opportunistic sampling of seepage and runoff from the existing waste rock/ore storage locations, identified as monitoring station BOS-8, to be carried out initially during spring thaw, and at a minimum, monthly when flow is observed. These monitoring results are to be compared with previously reported kinetic testing results from the ARD Characterization Data Base, for the Boston Deposit.

J.13	✓	In Compliance	The Licensee shall analyze samples obtained under Part J, Item 12 in accordance with similar test methods as those used in previous kinetic testing for, at a minimum, the following parameters (see criteria list in licence):
J.14	✓	In Compliance	The Licensee shall obtain representative samples of the water column below any ice where required under Part F, Item 7. Monitoring shall include but not be limited to the following (see criteria list in licence):
J.15	✓	In Compliance	The Licensee shall submit to an analyst for approval, within three (3) months of the issuance of the Licence, a revised Quality Assurance and Quality Control Plan. The plan shall include analysis of field blanks and certified reference material, and replicate sampling in order to assess accuracy, precision and field contamination.
J.16	✓	In Compliance	The Licensee shall annually review the approved Quality Assurance/Quality Control plan of Part J, Item 15 and modify it as necessary. Proposed modifications shall be submitted to an Analyst for approval.
J.17	✓	In Compliance	All sampling, sample preservation and analyses shall be conducted in accordance with methods prescribed in the current edition of Standard Methods for the Examination of Water and Wastewater, or by such other methods approved by the Board.
J.18	✓	In Compliance	All analyses shall be performed in a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.
J.19	✓	In Compliance	An Inspector may impose additional monitoring requirements.
J.20	✓	In Compliance	A Monitoring Program monthly summary report shall be submitted to the Board for review, within thirty (30) days following the month being reported. This summary shall include, at a minimum, the monitoring results of Part J.
J.21	✓	In Compliance	The Licensee shall include in the Annual Report required under Part B, Item 2, all data, monitoring results and information required by this Part.
J.22	~	N/A	The Monitoring Program and compliance dates specified in the Licence may be modified at the discretion of the Board.

*Note: TMAC Resources Inc. is requesting that the NWB consider an errata be made to Part D Item 19 of the Existing Type B Water Licence 2BB-BOS0712 for the effluent discharge criteria of Lead. This is in line with direction provided by INAC on July 18, 2015 (see Inspection Report for supporting information).



WATER LICENCE INSPECTION FORM

☒ Original
☐ Follow-Up Report

Licensee	Licensee Representative
TMAC Resources	John Roberts
Licence No. / Expiry	Representative's Title
2BB-BOS1217	VP Environmental Affairs
Land / Other Authorizations	Land / Other Authorizations
Date of Inspection	Inspector
18/07/15	Eva Paul
Activities Inspected	<input type="checkbox"/> Construction <input checked="" type="checkbox"/> Reclamation <input checked="" type="checkbox"/> Fuel Storage
<input checked="" type="checkbox"/> Camp <input type="checkbox"/> Drilling <input type="checkbox"/> Mining	<input type="checkbox"/> Other:
<input type="checkbox"/> Roads/Hauling <input checked="" type="checkbox"/> Other: Water discharge	

Conditions:	A - Acceptable	C - Concern	U - Unacceptable	NA - Not Applicable	NI - Not Inspected			
Water Use	Condition	Comment	Site Conditions	Condition	Comment	Haz/Mat Management	Condition	Comment
Intake/Screen	NA		Water Management Structures	C	1	Storage	A	
Flow Measure. Device	NA		Culverts / Bridges	NI		Spills	A	
Source:	NA		Drainage	A		Spill Plan	A	
Water Use:	NA		Erosion / Sediment	A				
Recirculation (y/n)	NA		Mitigation Measures	A		Administrative		
			Reclamation Activities	C	3	Records	A	
			Materials Storage	A		Reports	A	
			Signage	A		Plans	A	
						Notifications	A	
Waste Disposal			Monitoring			Other		
Waste Water	C	1	Sample Collection / Analysis	A				
Solid Waste	A							
Hazardous Waste	C	2						

*The number in the comments field will correspond with specific comments provided below.

Samples taken by Inspector:	Location(s): BOS-2 Containment Pond
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

SECTION 1	<input checked="" type="checkbox"/> Comments (s.1)	<input checked="" type="checkbox"/> Non-Compliance with Act or Licence (s.2)	<input checked="" type="checkbox"/> Action Required (s.3)
<p>Boston Camp remains in Care and Maintenance. I attended site by helicopter with John Roberts and Claire Brown. No water is being used, and the only waste being deposited is compliant site water. Monitoring is being carried out as per the licence conditions, and discharges are of compliant waste water from the containment berms and portal.</p> <p>1. While the licence indicates that all surface drainage from the waste rock and ore stockpiles shall be pumped to a Containment Pond prior to discharge, that does not appear to be the way the site was constructed. TMAC is monitoring seeps off the ore stockpiles but the contact water is not contained. This is consistent with the 2009 Water and Ore-Waste Rock Management Plan. Currently TMAC is using the Containment Pond (BOS-2) to hold water from the fuel berms while awaiting sampling results. The discharge criteria set in the licence for BOS-5 and BOS-6 is unachievable with respect to lead; I suspect there was a conversion error at the time of writing of the licence. Please see attached Appendix 1 – Authorization to Discharge Lead at 0.01mg/L with respect to BOS-5 and BOS-6 discharges.</p> <p>2. While the licence does not stipulate a timeline for the backhaul of hazardous waste, it would be preferable that the contaminated soil in the landfarm that is not suitable for bioremediation be backhauled. However, it is understood that there currently isn't the equipment at Boston to undertake this work, and the landfarm does not pose an obvious risk to water.</p> <p>3. Remediation of drill holes as per the licence is required. TMAC/Geotech current drilling practices have been excellent, however there is a legacy of badly-managed drill holes (Orbit 25 spill being the extreme case). Wetlands are forming where past drilling practices impacted the permafrost and caused subsidence (visible along the airstrip), as well as from the cuttings sump adjacent to the airstrip. It is understood that there currently isn't equipment at Boston to undertake this work, however, worsening of the state of these holes is likely.</p>			
SECTION 2	<input type="checkbox"/> Comments	<input checked="" type="checkbox"/> Non-Compliance with Act or Licence	<input type="checkbox"/> Action Required
<p>Part I Item 3. Progressive reclamation of components no longer required.</p> <p>Part I Item 4. Backfill and restore sumps.</p> <p>Part I Item 10. Restore drill holes.</p>			



SECTION 3

☐ Comments

☐ Non-Compliance with Act or Licence

☒ Action Required

1. Please clarify what obligations remain with respect to the Orbit 25 spill, and to whom they fall.
2. An interim solution to the worst-impacted legacy drill sites is required. TMAC has committed to investigating the issue of thermokarsts and ponding as a result of past drilling practices. The investigation will be two-fold: 1) to review practices across the circumpolar Arctic to determine if a solution already exists; and 2) to examine local impacts (rates of change, and experimentation with various treatments) to determine a course of action for future work. Corrective measures will be implemented when access to Boston site improves.
3. When renewal of the Boston licence is sought, please ensure that the application reflects the care and maintenance status, and the actual layout/function of the site, so that the new licence has terms and conditions relevant to the activity on-site.

Licensee or Representative

Inspector's Name

John Roberts

Eva Paul

Signature

Signature

Date

Date

20/07/2015

20/07/2015

Office Use Only:

Follow-up report to be issued by Inspector

☐ Yes ☒ No

Att: Appendix 1. Authorization to Discharge Lead at 0.01mg/L



Appendix 1. Authorization to Discharge Lead at 0.01mg/L

20 July 2015

BOS-5 and BOS-5: For the duration of Licence 2BB-BOS1217

The discharge parameters in the Boston Licence with respect to lead are inconsistent with parameters set by the Board for other similar and proximal projects. The criteria for BOS-5 and BOS-6 (fuel storage and landfarm) is 1ug/L (equivalent to 0.001mg/L) for discharge. In contrast, the discharge criteria set throughout the Doris licence with respect to lead is consistently 0.01mg/L, with the exception of TL-4 (discharge from the Tailings Impoundment Area) which is 0.2mg/L.

The parameter of 1ug/L is found to be unreasonable, and difficult for TMAC to achieve. It's even possible that it was a conversion error at the time of writing. As there is a relatively small volume of water being treated and discharged during this care and maintenance phase, I authorize TMAC to match the discharge criteria set for LUP-27 and 28 in the 2AM-DOH1520 licence for discharges (0.01mg/L) with respect to lead. No other changes or additional criteria are imposed.

Please request that the NWB review and standardize the discharge criteria when this licence is renewed.

(Sent electronically)

Eva Paul

Water Resources Officer

PO Box 100

Iqaluit, NU X0A 0H0

Phone: 867-975-4548

Mobile: 867-222-6590

Fax: 867-979-6445

E-mail: Eva.Paul@aadnc-aadnc.gc.ca

CC: Phyllis Beaulieu, Manager of Licensing, NWB
Erik Allain, Manager of Field Operations, AANDC