

Appendix 4: 2BE-HAK0915 Compliance Assessment Sept 2015

Table 1. 2BE- HAK0915 Compliance Assessment, September 2015

Original	Amendment No. 1 ^a	Amendment No. 2 ^b	Compliance Status	Comment	Licence Conditions		
					PART B: GENERAL CONDITIONS		
✓			OK		1		The water use fees of \$30, 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.
✓			OK		2		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, containing the following information:
✓			OK		a		A summary report of water use and waste disposal activities;
✓			OK	A small spill (diesel, less than reportable quantity) was noted at camp July 17, 2015, in front of the generator day-tank, into the sand (location approximately N65°54'39.7" W 108°21'58.6"). This was removed prior to departure of camp.	b		A list of unauthorized discharges and a summary of follow-up actions taken;
✓			OK		c		Any revisions to the Plans required by the Licence including an updated estimate of Project Reclamation Costs, submitted in the form of an Addendum;
✓			OK	Experimental plots had been established at four sump locations in July 2015. The experimental plots included a combination of tundra transplants and seed castings. Monitoring updates have been provided on success.	d		A description of all progressive and or final reclamation work undertaken, including photographic records of site conditions before, during and after completion of operations;
✓			OK		e		Report all artesian flow occurrences as required under Part F, Item 3;
✓			OK		f		A summary of all information requested and results of the Monitoring Program; and
✓			NA		g		Any other details on water use or waste disposal requested by the Board by November 1 of the year being reported.
	✓		NA	No temporary camps established, used or abandoned in 2014/2015	h		A brief summary, including the location in degrees, minutes and seconds of all temporary camps established in use or abandoned during the year being reported.
✓			OK		3		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.
✓			OK		4		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, Item 1.
✓			OK		5		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.
✓			OK		6		The Licensee shall, for all Plans submitted under this Licence, implement the Plan as approved by the Board in writing.
✓			OK		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.
		✓	OK		8		The Licensee shall provide a notice to an Inspector and the Board that includes the coordinates of potential water sources to be used for the purposes outlined in Part C, Item 1 at least ten (10) days prior to exploration program or using the water sources. Any communication with respect to this Licence shall be made in writing to the attention of: (a) Manager of Licensing: Nunavut Water Board P.O. Box 119 Gjoa Haven, NU X0B 1J0 Telephone: (867) 360-6338 Fax: (867) 360-6369 Email: licensing@nunavutwaterboard.org (b) Inspector Contact: Water Resources Officer, INAC Nunavut District, Nunavut Region P.O. Box 100 Iqaluit, NU X0A 0H0 Telephone: (867) 975-4295 Fax: (867) 979-6445
✓			OK		9		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.
✓			OK		10		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.
✓			OK		11		This Licence is assignable as provided in Section 44 of the Act.
					PART C: CONDITIONS APPLYING TO WATER USE		
	✓	✓	OK	No drilling activities in 2014/2015	1		The Licensee shall obtain all water for Hackett River camp use from Camp Lake. Total domestic water use shall not exceed thirty (30) cubic metres per day. Drill water shall be obtained from lakes and ponds, proximal to the drilling targets as outlined in the application and shall not exceed two hundred and sixty nine (269) cubic metres per day. The volume of water for the purposes of this Licence shall not exceed two hundred and ninety nine (299) cubic metres per day.
✓			OK		2		Streams cannot be used as a water source unless authorized and approved by the Board in writing.
✓			OK		3		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, the following: volume required, hydrological overview of the water body, details of impacts, and proposed mitigation measures.
✓			OK		4		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.
✓			OK		5		The Licensee shall not remove any material from below the ordinary high water mark of any water body unless authorized.
✓			OK		6		The Licensee shall not cause erosion to the banks of any body of water and shall provide necessary controls to prevent such erosion.
✓			OK		7		Sediment and erosion control measures shall be implemented prior to and maintained during the operation to prevent entry of sediment into water.
		✓	OK		8		The Licensee shall provide a notice to an Inspector and the Board that includes the coordinates of potential water sources to be used for the purposes outlined in Part C, Item 1 at least ten (10) days prior to exploration program or using the water sources.

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					<u>PART D: CONDITIONS APPLYING TO WASTE DISPOSAL</u>		
✓			OK		1		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 approved by the Board in writing.
✓			OK		2		The Licensee shall not practice on-site land filling of domestic waste, unless otherwise approved by the Board in writing.
✓			OK		3		The Licensee is authorized to dispose of all acceptable food waste, paper waste and untreated wood products in an incinerator.
✓			OK		4		The Licensee shall provide to the Board documented authorization from all communities receiving wastes from the Hackett River Project prior to any backhauling of wastes to those communities.
✓			OK		5		The Licensee shall backhaul and dispose of all hazardous wastes, waste oil and non-combustible waste generated through the course of the operation in an approved waste disposal site.
✓			OK		6		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.
✓			OK		7		The Licensee shall contain all Greywater in a Sump located at a distance of at least thirty one (31) metres above the ordinary high water mark of any water body, at a site where direct flow into a water body is not possible and no additional impacts are created, unless otherwise approved by the Board in writing.
✓			OK		8		The Licensee shall dispose of all Toilet Wastes through collection in Pacto Toilets and Incineration or as otherwise approved by the Board. Any remaining residue generated through the course of the operation shall be backhauled and disposed of in an approved waste disposal site. As per the Incinerator Manufacturers Instructions, the Licensee shall ensure that no more than 1/5 of each batch contains Toilet Wastes.
	✓		OK		9		The Board has approved the Plan entitled "Sabina Gold & Silver Corp. Hackett River Camp Waste Management Plan" dated March 17, 2010.
✓			NC	Some monitored sumps were not between pH 6.0 and 9.5 in 2014 and 2015- see Annual Report and Drill Cuttings Management and Monitoring; A progressive reclamation study- experimental plots was initiated in 2015 for selected sumps (out of the pH range of 6.0 and 9.5); the 2016 monitoring program will include assessment of experimental plots and approved treatment of sumps out of the approved pH range	10		All Effluent discharged from Sumps where drill cuttings have been deposited shall have a pH between 6.0 and 9.5. If the pH limits are exceeded, the Licensee shall either treat the Effluent to the above levels, backhaul for proper disposal or as otherwise approved by the Board.
					<u>PART E: CONDITIONS FOR CAMPS, ACCESS INFRASTRUCTURES AND OPERATIONS</u>		
✓			OK		1		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.
✓			OK		2		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.
✓			OK		3		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.
✓			OK		4		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 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.
					<u>PART F: CONDITIONS APPLYING TO DRILLING OPERATIONS</u>		
✓			OK ¹		1		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.
✓			OK ¹		2		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.
✓			OK ¹		3		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.
✓			OK ¹		4		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.
✓			OK ²		5		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. 10 mg/L for lakes with background levels under 100 mg/L, or 10% for those above 100 mg/L).
✓			OK ¹		6		The Licensee shall establish water quality conditions prior to and upon completion of any drilling program through lake ice.
✓			OK ¹		7		The Licensee shall dispose of rock saw sludge collected from the settling container (as indicated in the application) through the process of collection, drying, and placement in plastic sample bags and deposited in an approved disposal facility. These materials are to not be used as a fill material.

Original	Amendment No. 1 ^a	Amendment No. 2 ^b	Compliance Status	Comment	Licence Conditions		
					<u>PART G: CONDITIONS APPLYING TO MODIFICATIONS</u>		
✓					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:
✓			OK		a		the Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications;
✓			OK		b		such Modifications do not place the Licensee in contravention of the Licence or the Act;
✓			OK		c		such Modifications are consistent with the NIRB Screening Decision
✓			OK		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
✓			OK		e		the Board has not rejected the proposed Modifications.
✓			OK		2		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.
✓			OK		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.
					<u>PART H: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING</u>		
✓			NA		1		The Board has approved the Plan entitled "Spill Contingency Plan Hackett River Exploration Project" revised September 16, 2009 that was submitted as additional information with the Application.
✓			OK		2		The Licensee shall prevent 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.
✓			OK		3		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.
✓					4		If during the term of this Licence, an unauthorized discharge of waste occurs, or if such a discharge is foreseeable, the Licensee shall:
✓			OK		a		Employ the Spill Contingency Plan;
✓			OK		b		Report the spill immediately to the 24-Hour Spill Line at (867) 920-8130 and to the Inspector at (867) 975-4295; and
✓			OK	Follow-up to Unauthorized Discharge #13-240 was submitted August 6, 2013	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.
	✓		OK	Updated in 2015	5		The Licensee shall implement the Plan entitled "Spill Contingency Plan Hackett River Exploration Project" dated May 2, 2013, that was originally approved by the Board.
					<u>PART I: CONDITIONS APPLYING TO ABANDONMENT AND RESTORATION OR TEMPORARY CLOSING</u>		
	✓	✓	OK	Revised in 2015 to address current camp care and maintenance status	1		The Licensee shall implement the Plan entitled "Abandonment and Restoration Plan Hackett River Exploration Project Xstrata Zinc Canada", dated April 29, 2013, that was originally approved by the Board.
✓			OK		2		The Licensee shall annually update the Project Reclamation Costs estimate provided with the Application and the Abandonment and Restoration Plan identified in Part I, Item 1, to be included within the Annual Report requirements of Part B, Item 2.
✓			OK		3		The Licensee shall complete all restoration work prior to the expiry of this Licence.
✓			OK		4		The Licensee shall carry out progressive reclamation of any components of the project no longer required for the Licensee's operations.
✓			OK		5		The Licensee shall backfill and restore all sumps to the pre-existing natural contours of the land.
✓			OK		6		The Licensee shall remove from the site, all infrastructure and site materials, including all fuel caches, drums, barrels, buildings and contents, docks, water pumps and lines, material and equipment prior to the expiry of this Licence.
✓			OK		7		All roads and airstrip, if any, shall be re-graded to match natural contour to reduce erosion.
✓			OK		8		All culverts shall be removed and the drainage opened up to match the natural channel. Measures shall be implemented to minimize erosion and sedimentation.
✓			OK		9		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.
✓			OK		10		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, January 2002. 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.
✓			OK		11		Drill holes and disturbed areas will be restored to natural conditions immediately upon completion of the drilling. The reclamation of drill holes must include the removal of any drill casing materials and the capping of holes with a permanent seal.
✓			OK		12		The Licensee may store drill cores 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.
✓			OK		13		All disturbed areas shall be contoured and stabilized upon completion of work and restored to a pre-disturbed state.

Original	Amendment No. 1 ^a	Amendment No. 2 ^b	Compliance Status	Comment	Licence Conditions		
					PART J: CONDITIONS APPLYING TO THE MONITORING PROGRAM		
✓			OK		1		The Licensee shall measure and record, in cubic metres, the daily quantities of water utilized for camp, drilling and other purposes.
✓			OK		2		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.
✓			OK		3		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.
✓			OK		4		The Licensee shall obtain representative samples of the water column below any ice where required under Part F, Item 6. Monitoring shall include but not be limited to the following: Total Suspended Solids pH Electrical Conductivity, Total Trace Metals as determined by a standard ICP Scan (to include at a minimum, the following elements: Al, Sb, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Li, Mn, Mo, Ni, Se, Sn, Sr, Ti, Tl, U, V, Zn), and Trace Arsenic and Mercury
✓			OK		5		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 in writing.
✓			OK		6		All analyses shall be performed in a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.
✓			OK		7		The Licensee shall include in the Annual Report required under Part B, Item 2 all data, monitoring results and information required by this Part.

NA- Not Applicable

NC - Non-compliant

a: as per 2BE-HAK0915 Amendment No. 1

b: as per 2BE-HAK0915 Amendment No. 2

1: No drilling activities occurred in 2014/2015.