NWB Annual Report Year being reported: 2021

License No: 1BR-ROB1536 Issued Date: November 19, 2015 Expiry Date: November 18, 2036

Expiry Bute. Movember 10, 2000

Project Name: Roberts Bay Long Term Monitoring

Licensee: Crown-Indigenous Relations and Northern Affairs Canada

(CIRNAC) Contaminated Sites

Mailing Address: PO Box 2200

Iqaluit NU X0A 0H0

Name of Company filing Annual Report (if different from Name of Licensee please clarify relationship between the two entities, if applicable):

N/A

General Background Information on the Project (*optional):

Roberts Bay and Ida Bay are abandoned mine sites located approximately 115 km southwest of Cambridge Bay, on the north coast of mainland Nunavut. Exploration for silver at Roberts Bay and for silver and gold at Ida Bay were carried out at the Robert Lakes Area between 1965 and 1972. The Roberts Bay site was an active silver mine in the early 1970s and was the subject of exploration in the 1980s and 1990s.

Remedial activities were conducted between 2008 and 2010, and included demolition of remaining site structures, securing mine openings, and disposal of non-hazardous waste and contaminated soils. A non-hazardous waste landfill referred to as the Solid Waste Management Facility (SWMF) was constructed over the former tailings pond at Roberts Bay, to contain non-hazardous material and to encapsulate and stabilize tailings water. Thermistors were installed in the SWMF to monitor permafrost freezeback, all of which were replaced in 2016.

As per departmental commitments to monitor the SWMF post-closure, a 25-year long term monitoring (LTM) program was initiated at Roberts Bay in 2010 and includes visual inspection, thermal monitoring, surface water sampling, soil sampling (as required), and natural environment monitoring. Refer to the *Roberts Bay Long Term Monitoring Plan (2009, 2017)* for additional information.

Past LTM events occurred in 2010, 2012, 2014, 2016, and 2019. The next LTM events (Year 15 and Year 25) are scheduled for 2024 and 2034, respectively.

nce Requii	rements: the	e iicer	isee mu	ist pro	ovide the following information in accodance			
	Part B	•	tem 1	•				
mmary rer	ort of water	r IISA	and was	to dis	sposal activities, including, but not limited to: n			
					anagement; drill waste management; solid and			
rdous was	ste managei	ment.						
W	Water Source(s):		1		te and ponded water near the SWMF (See GPS			
۱۸	Water Quantity:			Coordinates Page) 0.05/day				
VV				lay	Actual Quantity Used Domestic (cu.m)			
					Quantity Allowable Drilling (cu.m)			
					Total Quantity Used Drilling (cu.m)			
W	/aste Manag	emen	t and/or	Dispos	sal			
	☑ Solid Wa	ste Disp	osal					
	☐ Sewage							
	□ Drill Waste □ Greywater □ Hazardous							
	\square Other:							
<u>A</u>	dditional Det	ails:						
	Roberts Bay CIRNAC wa	/ 201: as not	9 <i>LTM F</i> onsite i	Repor	Term Monitoring Plan (2009, 2017) and the for details. 21. Thus, no water samples were collected ated in 2021.			
of upout		hove	a and a	01110011	mary of follow-up actions taken.			
		No sp			(as reported to the Spill Hot-line)			
	Date of Spill:							
	Date of Notification to an Inspector: Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)							
	N/A							
sions to th	e Spill Con	tinaer	ncv Plan					
	o Spill Continge				or approved $lacktriangle$			
<u>A</u>	dditional Det	ails:						
1	N/A							

Revisions	to the Abandonment and Restoration Plan
	N/A - not applicable ▼
	Additional Details:
	N/A
D	
Progressi	/e Reclamation Work Undertaken Additional Details (i.e., work completed and future works proposed)
	No progessive reclamation work was undertaken in 2021.
	As per the <i>Roberts Bay Long Term Monitoring Plan</i> (2009, 2017), future LTM events are scheduled for 2024, and 2034 (Years 15, and 25 respectively).
Results of	the Monitoring Program including: The CRS Co. ardinates (in degrees, minutes and seconds of letitude and langitude) of
	The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each location where sources of water are utilized;
	Details attached ▼
	Additional Details:
	Additional details regarding water sources can be found in the Roberts Bay Long Term Monitoring Plan (2009, 2017).
	The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each location where wastes associated with the licence are deposited;
	Not Applicable (N/A) ▼
	Additional Details:
	Remediation was completed in 2010 and the only structure remaining at the site is the SWML. No waste was deposited on site in 2021. Any solid waste generated is removed from site at the completion of LTM activities.

Results of any additional sampling and/or analysis that was requested by an Inspector

No additional sar	mpling requested by an Inspector or the Board
Additional Det	tails: (date of request, analysis of results, data attached, etc)
N/A	
Any other details on water being reported.	use or waste disposal requested by the Board by November 1 of the year
	npling requested by an Inspector or the Board
Additional Det	tails: (Attached or provided below)
N/A	
Any responses or follow-u	p actions on inspection/compliance reports
-	d/or compliance report issued by INAC
Additional Det	tails: (Dates of Report, Follow-up by the Licensee)
Any additional comments	or information for the Board to consider
Physical obs (2019) indicand is curre Thermal obs	servations of the SWML conducted during the last LTM event ate that the SWML at Roberts Bay is in acceptable condition ntly performing as designed to contain enclosed waste. servations indicate that the waste in the SWMF continues to en year round.
	January 18, 2022 Selma Al-Soweydawi, Contaminants Specialist, Tel: 867-975-4732 Fax: 867-975-4560