NWB Annual Report Year being reported: 2017

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

Expiry Date: November 18, 2036

Project Name: Roberts Bay Long Term Monitoring

Licensee: Indigenous and Northern Affairs Canada (INAC)

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 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, and 2016. The next LTM event (year 10) is scheduled for 2019. Future events will occur in 2024 and 2034.

Licence Requir	ements: the	license	e must provi	ide the fol	lowing in	formatio	n in accod	dance	
	Part B	▼ Item	1						
A summary rep obtaining water waste manager	r; sewage aı		_			_			
W	ater Source(mall quantitiene SWMF	es from Ro	berts Lak	e and por	nded water	near	
W	ater Quantity		.05/day	Actual (y Allowabl Quantity U y Allowabl uantity Us	lsed Dom e Drilling	estic (cu.m (cu.m)	า)	
Ac F F	Solid W Sewage Drill Wa Greywa Hazarde Other: dditional Deta Refer to the Roberts Bay	vaste Dispose e e e e e e e e e e e e e e e e e e	d/or Disposa Bay Long 7 TM Report for in 2017. The penerated in	Term Monior details.		·	·		
A list of upoutb	معنسمط طنمما	haraa a	nd a aumma	any of follo	uu un aati	lana taka	.		
Da Da Ad	oill No.: ate of Spill: ate of Notifica	No spills ation to a	(as	s reported	to the Spi	II Hot-line	e)		
Revisions to th	e Spill Cont	ingency	Plan						
	/A - not applicab							•	
Ac	dditional Deta	ails:							
1	N/A								

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Revisions to	the Abandonment and Restoration Plan
	N/A - not applicable
_	Additional Details:
	N/A
Dragragaiya	Reclamation Work Undertaken
	Additional Details (i.e., work completed and future works proposed)
	No progessive reclamation work was undertaken in 2017.
	As per the <i>Roberts Bay Long Term Monitoring Plan</i> (2009, 2017), future LTM events are scheduled for 2019, 2024, and 2034 (years 10, 15, and 25 respectively).
Results of the	e Monitoring Program including:
	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 2017. Any solid waste generated is removed from site at the completion of LTM activities.

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

	No additional sampling requested by an Inspector or the Board	
	Additional Details: (date of request, analysis of results, data attached, etc)	
	N/A	
Any other debeing report	ails on water use or waste disposal requested by the Board by November 1 of the yeard.	r
	No additional sampling requested by an Inspector or the Board	
	Additional Details: (Attached or provided below)	
	N/A	
Any respons	es or follow-up actions on inspection/compliance reports	
	No inspection and/or compliance report issued by INAC	
	Additional Details: (Dates of Report, Follow-up by the Licensee)	
	N/A	
Any additioı	al comments or information for the Board to consider	
	Physical observations of the SWML conducted during the last LTM event (2016) indicate that the SWML at Roberts Bay is in acceptable condition and is currently performing as designed to contain enclosed waste. Thermal observations indicate that the waste in the SWMF continues to remain frozen year round.	
Date Submit Submitted/F Contact Info	epared by: Jean Allen, Contaminants Specialist, INAC	

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GPS Coordinates for water sources utilized

	La	titude		Longitude			
Source Description	o Deg	Min	, Sec	o Deg	Min	, Sec	
Surface water sample locations at Roberts Bay (ROB):							
ROB-6 (SE of SWMF)	68	10	43.9	106	33	25.2	
ROB-7 (SW of SWMF)	68	10	47.8	106	32	34.9	
ROB-8 (NE of SWMF)	68	10	54.0	106	33	23.6	
ROB-9 (Roberts Lake)	68	10	15.1	106	33	21.1	
ROB-10 (SE of SWMF)	68	10	48.5	106	33	26.9	

GPS Locations of areas of waste disposal

Location Description (type)	Latitude			Longitude			
	o Deg	, Min	, Sec	o Deg	, Min	Sec ,	
N/A							