



## **Meliadine Division**

Saline Effluent Discharge to Marine Environment, Rankin Inlet, Technical Meeting January 11-12, 2021

**UPDATE ON TECHNICAL COMMENTS AND COMMITMENTS** 

**JANUARY 2021** 



We have summarized the current status of resolution with certain interveners on this file and also on the following agreed minutes with certain interveners:

- Kivalliq Inuit Association (KivIA) / Agnico Eagle Meeting Minutes of November 25, 2020;
- Kivalliq Wildlife Board (KWB) / Agnico Eagle Meeting Minutes of November 27, 2020;
- KivIA / Agnico Eagle Meeting Minutes of December 3, 2020;
- CIRNAC/Agnico Meeting Minutes of December 4, 2020;
- Environment Climate Change Canada (ECCC) / Agnico Eagle Meeting Minutes of December 7, 2020; and
- Health Canada (**HC**) / Agnico Eagle Meeting Minutes of December 11, 2020.

As suggested by the Board, in recent weeks, Agnico Eagle has engaged in bilateral dialogue regarding technical issues with several key parties to this process and we are pleased to report on the following resulting resolutions which reflect a greater degree of consensus on technical matters than previously.

As set out in Table 1 below, Agnico Eagle has met with Crown-Indigenous Relations and Northern Affairs (CIRNAC), Environment Climate Change Canada (ECCC), Government of Nunavut (GN), HC, KivIA, the KWB and Sayisi Dene First Nation (SDFN) inrecent weeks. Once approved by both parties, Agnico Eagle will submit minutes detailing topics discussed with the NIRB that we request to be posted to the NIRB registry.

Table 1: Summary of the Technical Meetings with Interveners

Interveners	Technical Meeting	Status of the Meeting Minutes
CIRNAC	December 4 <sup>th</sup> , 2020	Approved
ECCC	December 7 <sup>th</sup> , 2020	Approved
GN - Water	December 8 <sup>th</sup> , 2020	Approved
GN - Terrestrial	December 11 <sup>th</sup> , 2020	Approved
НС	December 11 <sup>th</sup> , 2020	Approved
KivIA - Water	December 3 <sup>rd</sup> , 2020	Approved
KivIA - Terrestrial	November 25 <sup>th</sup> , 2020	Approved
KWB	November 27 <sup>th</sup> , 2020	Approved
SDFN	December 17 <sup>th</sup> , 2020	Under Review

As a result of those engagements, we are pleased to report our understanding of the current status of outstanding technical comments as of today's date as follows in Table 2 and Table 3, including details on next steps and the path to further resolution.



Table 2: Summary of the Technical Comments Status and Commitments

Interveners	Numbers of TCs	Resolved TCs	Outstand TCs	Number of commitments
BLHTO	3	3	0	0
CIRNAC	10	10	0	3
DFO	2	2	0	0
ECCC	2	2	0	0
GN	8	8	0	3
НС	1	1	0	1
KivlA	17	17	0	2
КНТО	0	0	0	0
KWB	4	1	3	4
SDFN	4	1	3	2
TC	3	3	0	0
NTI	1	1	0	0
NIRB	0	0	0	0
Total	55	49	6	15

<u>Table 3: Detailed Technical Comments Status and Commitments</u>

ID	Theme/ Subject	Status	Commitments
BLHTO- TRC-01	Terrestrial Wildlife/ Caribou	Resolved	
BLHTO- TRC-02	Process	N/A	TC address to NIRB
BLHTO- TRC-03	Process	N/A	TC address to GN
CIRNAC-TRC-01	Clarification of Underground Mine Groundwater Inflows	Resolved with commitment	Agnico Eagle commits to updating the Groundwater Management Plan to clarify discrepancies between 2014 FEIS groundwater inflows prediction and 2020 FEIS Addendum.
CIRNAC-TRC-02	Surface Contact Water Discharge via Waterline to Melvin Bay		Agnico Eagle provided a Hydrodynamic model sensitivity analysis with low TDS level and Adaptive Management Plan. Agnico Eagle commits to updating the Groundwater Management Plan to provide further details on the Meliadine Gold Mine project activity of mixing and treating various contact water sources at site 30 days after approval of the issuance of the amended Project Certificate. 006, Amendment 001.
CIRNAC-TRC-03	SETP Increased Treatment Capacity and Relevant Contingency Plan	commitment	Agnico Eagle commits to updating the Water Management Plan to include the multiple options for the management of the increased volume of sludge.
CIRNAC-TRC-04	Process Modifications to Avoid Non-ComplianceIssues	Resolved with commitment	Agnico Eagle provided a scenario of the volume of non- compliant water that could potentially be discharged to the ocean from the time a sample is collected and a result is reported by the laboratory and a response is initiated/actioned.



CIRNAC- TRC-05	Water Quality and Load Balance Conceptual Model	Resolved		
CIRNAC- TRC-06	Waterline Failure Modes and Potential Effects Assessment	Resolved		
CIRNAC-TRC-07	Potential Impacts of Saline Water to Ice-Rich Soils	Resolved with commitment	rationale	gle provided a technical memorandum on the for a low environmental impact classification for a se environmental impact scenario.
CIRNAC-TRC-08	Monitoring and Prevention of Waterline Spills Using Fiber Optic Leak Detection System	Resolved with commitment	operatio	gle commits to providing additional details on the nof the fiber optic leak detection system with a xample where it is in operation.
CIRNAC-TRC-09	Annual Waterline Shutdown and Restart Plan	Resolved with commitment	maintena existing r	gle commits to integrate the operation and ince component of the Waterline system into an nanagement plan. This plan will be submitted 60 days ne commissioning of the Waterline.
CIRNAC-TRC-10	Closure and Reclamation Plan Related to Burial of the Waterline	Resolved		
DFO-TRC- 01	Waterline PipeInstallation	Resolved		
DFO-TRC- 02	Construction/Installation of discharge waterline and diffuser	Resolved		
ECCC-TRC- 01	Monitoring in the Marine environment	Resolved		
ECCC-TRC- 02	Drainage reductions	Resolved		
GN-TRC-01	Potential impacts from effluent spill to terrestrial surfacewater	Resolved		
GN-TRC-02	Bioaccumulative potential of contaminants in treated effluent	Resolved		
GN-TRC-03	Identification of marine and avian wildlife receptors in vicinity of treated effluent discharge consumed as country foods	Resolved		
GN-TRC-04	Consumption of marine and avian wildlife and country foods by Nunavummiut	Resolved		
GN-TRC-05	Terrestrial Wildlife/Caribou Behavioral Monitoring	Resolved	1 to 2	See 6.1-3 below



	GN-TRC-06  Terrestrial Wildlife/ Caribou Monitoring	·		Recommended T&C: The Proponent establish a Terrestrial Advisory Group (TAG) for the Meliadine Project. The purpose of the TAG is to provide the Proponent and NIRB with advice relating to the revision, implementation and reporting for the Terrestrial Environment Management and Monitoring Plan (TEMMP) for the Meliadine Project. Membership of the TAG shall include organizations with regulatory responsibilities for terrestrial wildlife and relevant wildlife co-management organizations. A terms of reference for the TAG is to be developed within 6 months after the issuance of the Project Certificate based on agreement amongst the members.
GN-TRC-06			1.1-3	Recommend Commitment: Agnico Eagle Mines (AEM) will revise the Terrestrial Environment Management and Monitoring Plan (TEMMP) for the Meliadine Project to include details of the AWAR Road Survey, Caribou Collaring, and Caribou Behavioral Monitoring programs before 2021 annual report, as requested by the GN in its Technical Review Comment 6 (parts 1.1 to 1.3) during NIRBs review of the FEIS Addendum. All of the revisions will consider the advice provided by the Terrestrial Advisory.
			2	See Commitment above
			3 & 4	Proposed commitments: AEM shall revise the Terrestrial Environment Management and Monitoring Plan (TEMMP) for the Meliadine Project to update a decision tree that specifies the frequency of AWAR road surveys that will be conducted when caribou in specified group sizes are observed within specified distances of the Project's AWAR as per comments by the Terrestrial Advisory Group.
GN-TRC-07	Reliability of the 2014 FEIS as a basis for assessing the Project amendment	Resolved	1	Proposed commitments:  AEM will evaluate a Hunter access monitoring program to capture and estimate levels of public traffic using the AWAR during the months of June, July and August. The design of this program will be consistent with advice provided by the Terrestrial Advisory Group.



		2	Proposed commitments:  (1) AEM will evaluate developing the following tables with advice provided by the Terrestrial Advisory Group:  - A table showing the number and timing of AWAR road surveys that were conducted during the year.  - A table linking all observations of greater than 50 caribou (by date, time, location and distance from Project) to a documented road closure, as required under the TEMMP or mine.  (2) It its annual report AEM will provide information demonstrating that each observation of more than 50 caribou near the Project, as recorded in the road survey and incidental observation datasets, resulted in the mitigation actions as prescribed in the Project's Road Management Plan and the TEMMP. This will be presented in a table format showing the date of each observation of more than 50 caribou, location, distance from the Project, and the mitigation response that was applied.
Terrestrial Wildlife /Caribou Protection Measures	Resolved	1 to 3	See above commitment 7-2 (2).
Human Health Risk Assessment(HHRA)	Resolved	Provide	standalone HHRA for the Project
Socio-economic benefits to Inuit	Resolved		
20,000 m3/day alternative and the discharge of surface contact water	Resolved with commitment		Adaptive Management Plan Framework as part of nical Meeting
HDPE pipe capacity	Resolved		
HDPE pipe capacity  Mid and far field water quality in Melvin Bay	Resolved Resolved		
Mid and far field water quality in Melvin Bay Divergence from SWTP design criteria			
Mid and far field water quality in Melvin Bay Divergence from SWTP	Resolved		
Mid and far field water quality in Melvin Bay  Divergence from SWTP design criteria  Water balance model	Resolved Resolved		
Mid and far field water quality in Melvin Bay  Divergence from SWTP design criteria  Water balance model scenarios  Saline water and surface water storage facilities on	Resolved Resolved		
	Protection Measures  Human Health Risk Assessment (HHRA)  Socio-economic benefits to Inuit  20,000 m3/day alternative and the discharge of surface	Protection Measures  Human Health Risk Assessment (HHRA)  Socio-economic benefits to Inuit  20,000 m3/day alternative and the discharge of surface  Resolved  Resolved  Resolved with commitment	Terrestrial Wildlife /Caribou Protection Measures  Human Health Risk Assessment(HHRA)  Socio-economic benefits to Inuit  20,000 m3/day alternative and the discharge of surface  Resolved With Commitment Provide the Tech



KivlA-IR-10	Clarification of recent caribou behaviour and experience in Alberta	Resolved	
KivIA-IR-11	Terrestrial Wildlife/ Mitigation of the potential impact of the waterlines on caribou	Resolved	
KivlA-IR-12	AWAR length varies from 25 km to 30 km to 34 km.	Resolved	
KivIA-IR-13	Width of the AWAR and the water pipeline cover.	Resolved	
KivIA-TC- 14	Annual confirmatory ocean discharge monitoring	Resolved with commitment	Conduct validation monitoring post discharge during a period of 3 years
KivIA-TC- 15	Spill management for covered waterline	Resolved	
KivlA-TC- 16	Terrestrial Wildlife /Monitoring of effects of AWAR and waterlines on caribou movement	Resolved	
KivIA-TC- 17	Optimal side slope of the berms on the waterline covering	Resolved	
KWB-TC-01	Terrestrial Wildlife /Caribou	Partially Resolved	Discuss noise monitoring during the technical meeting. If Project is deemed approved, KWB, GN, Agnico Eagle and other interested parties work on regional and cumulative impact assessment of the project over the life of the project. This could be completed as part of a project specific Terrestrial Advisory Group.
KWB-TC-02	Spill Mitigation and Management for the Terrestrial Environment and Freshwater Ecosystems	Partially Resolved	KWB to provide location of section more sensitive to spill into lake to discuss potential additional mitigations
KWB-TC-03	Hunting and Inuit Land Use	Unresolved	Discuss of the no-hunting / no-shooting zone in T&C no. 48 during the Technical Meeting
KWB-TC-04		Resolved	Commitment to include selfish monitoring as part of Community Base Monitoring Program
SDFN-TRC- 01	Terrestrial Wildlife /Caribou Crossings/Deflections	Unresolved	Provide a report presenting the data that underlies the assumption that caribou do cross the road successfully
SDFN-TRC- 02	Terrestrial Wildlife /Trends for Caribou within FEIS Predictions	Unresolved	Refer to SDFN-TRC-01 commitment
SDFN-TRC- 03	Terrestrial Wildlife /Spills or Accidental Release of Treated Groundwater	Unresolved	Collect opinion form a wildlife vet to confirm that caribou will not drink salt water, and will not be harmed.



SDFN-TRC- 04	Reclamation Plan	Resolved	
TC-TRC-01	Engineered diffuser located in Melvin Bay	Resolved	
TC-TRC-02	Construction of waterlines above, across and through waterways	Resolved	
TC-TRC-03	Construction of waterlines across the Meliadine River	Resolved	
NTI-TRC-01		Resolved	