

Appendix E

2022 Inuit Environmental Advisory Committee Meetings



AGNICO EAGLE

Memo

To	Nancy Duquet Harvey – Agnico Eagle
From	Nicole Bishop and Hannah Visty – ERM
Cc:	Alex Buchan – Agnico Eagle; Hannah Visty – ERM
Date	August 22, 2022
Subject	Meeting Summary – Inuit Environmental Advisory Committee for the Hope Bay Project, August 3-5, 2022

1. INTRODUCTION

The Hope Bay Project (the Project) maintains several licenses, permits, Project certificates, and management plans used to guide compliance monitoring and reporting, quantify effects, and trigger mitigation required related to Project operations.

To share information on environmental programs and gain input on the development of the approach and methodology for compliance monitoring, Agnico Eagle and ERM engage with the Hope Bay Project Inuit Environmental Advisory Committee (IEAC) on a regular basis.

This memorandum summarizes the information presented, feedback received, and action items presented at the August 3rd and 4th Hope Bay site visit by the IEAC.

Information presented in this report was provided by Agnico Eagle, ERM, and Minnow (consultant to Agnico Eagle), and by the Hope Bay Project IEAC members who participated in the meeting. The information is presented in a way that protects the confidentiality of individual participants. Agnico Eagle and ERM would like to thank all participants for their contribution and sharing of information and knowledge.

1.1 Meeting Participation

Current members of the Hope Bay Project IEAC were invited to participate in the meeting. The IEAC, which was formed under the Hope Bay Project's Inuit Impact and Benefit Agreement (IIBA) with the Kitikmeot Inuit Association (KIA), is comprised of Inuit who are Elders and/or active land users with extensive knowledge of wildlife and the environment in the Hope Bay area. The names and roles of workshop participants are listed in Table 1.

Table 1: Meeting Participants

Name	Role
George Angohiatok	IEAC Member and Knowledge Holder
Jimmy Haniliak	
Clarence Kaiyogana	
Lawrence Otokiak	
Peter Kapolak	
Randy Klengenberg	
John Roesh	KIA
Nancy Duquet Harvey	Agnico Eagle Mines (AEM)
Sandra Eyegetok	AEM
Nicole Bishop	Project Manager (ERM)
Hannah Visty	Wildlife Biologist, Consultant (ERM)
Kim Connors	Fisheries Biologist, Consultant (Minnow)
Jose Audet-LeCouffe	Federal Department of Fisheries and Oceans (DFO)
Chris Sharpe	DFO

2. MEETING SUMMARY

Meeting participants arrived at Hope Bay site on August 3rd, 2022. The group was provided with an itinerary, a short presentation reviewing the wildlife monitoring program and visit agenda (by ERM), and a presentation on the fisheries offset projects (by Minnow). The group also toured the fish fence (part of the fisheries offsetting work at Roberts Bay outflow) and flew over the marine shoals and jetty in Roberts Bay. On August 4th, the group toured site facilities including the waste management area, water treatment plant, Tailings Impoundment Area (TIA), developments in the Madrid area, and the remediated Windy Camp. The group also stopped at potential locations for height of land surveys to discuss methods. A summary of the main topics of discussion and comments provided by the IEAC are noted below.

2.1 Proposed Fisheries Offsetting Plan and Roberts Lake Outflow Monitoring

Kim (Minnow) presented on the fisheries offsetting plan, including proposed measures in Cambridge Bay as well as the conclusion of the offset monitoring at the fish fence in Roberts Lake Outflow in 2022. A tour of the fish fence followed. Discussion comments and concerns from these activities are summarized below.

Cambridge Bay Proposed Offsetting Measures

- Proposed offset measures to increase access to habitat in Grenier Lake East Outflow for a longer period of time during the ice-free season (fish would have a longer period of access to suitable overwintering habitat)
- It was discussed that without changes to the culvert invert elevations and sizes, access to habitat may not change sufficiently (the culverts are dry or perched for a portion of the year)
- IEAC inquired about the possibility of building a bridge (and removing the culverts), or changing the size of the culverts. One potential issue is the on-going ownership of the bridge or maintenance of the culverts (e.g., would the Hamlet of Cambridge Bay become responsible?).
 - Installation of a bridge or changing the invert elevation/size of the culverts was not initially proposed as a primary offsetting option because it could potentially affect the hydrology of Freshwater Creek (main outflow from Grenier Lake) as well as the Grenier Lake East Outflow. This change in flow may impact/alter Freshwater Creek fish productivity.
 - **Action item:** Further hydrology assessment will be conducted to understand the potential impacts of removing culverts/installing a bridge on the amount of flow in each of the Grenier Lake outflows (i.e., Freshwater Creek and the East Outflow).

Marine Infrastructure Updates

- Options were presented for updating the current marine infrastructure: either expanding the current marine jetty or building a road to a new location for a cargo dock further north. The original plan was to build a new cargo dock further north.
- Additional marine shoals would be placed as offsets, near the existing marine shoals but possibly deeper to account for different habitats.
- The plan for offsetting with marine shoals and testing the effectiveness was supported/agreed upon by participants.
- Both options for marine infrastructure updates (expansion of existing jetty vs cargo dock at new location) are still being considered. Detailed plans were not presented, and no strong opposition to either possibility was raised. However, some IEAC participants indicated that a smaller footprint or affected area would be preferred.
 - It was noted that a potential archeological site (historic Inuit camp site) is located near where the possible road would be built if the new cargo dock location is chosen.

Roberts Lake Outflow Monitoring

- Monitoring at Roberts Lake Outflow is concluding, with 10 years having passed since the offsetting works (channel enhancements in the boulder garden) were conducted. Results from previous years of monitoring showed that 90% of Arctic Char which entered the enhanced boulder garden area made it successfully into Roberts Lake, with similar results for lake trout. Prior to enhancements, fish were getting stuck/stranded in the boulder garden area and were unable to make it into Roberts Lake.

- Final monitoring data are being collected in 2022. A fish fence and remote camera systems were installed in early July and will remain in place until September.
- DFO inquired about whether results changed when monitoring method switched from human counting to camera analysis. A direct comparison between the methods has not been made as the study was not designed to directly compare the different methods.
- The group watched the installed camera's live video feed and examined the outflow channels.
- Sandra (AEM) inquired about the materials used for the fish fence—e.g., why were rebar/metal used instead of TK methods?

2.2 Roberts Bay Tour

The group toured the waste management facility, the jetty in Roberts Bay, the airstrip, and the quarry, all led by Nancy (AEM). Discussion topics and IEAC comments are summarized below.

Waste Treatment Plant

- Waste is brought to Roberts Bay and sorted, then placed in seacans for removal
- Sea Cans: 475 left site in 2021 and mainly contained recycling, metals and hazardous waste. The sorting of contents of each sea can is done in the ship.
- Waste burning: Burnings are done once a day and include sod, paper and wood.
- Composter for waste management: A composter will be coming to site this year which will save 1,000L of diesel per day, as it is much more fuel efficient.

Jetty

- Concerns were brought up about the tires and metal from jetty bumpers leeching into the water and not providing proper sediment control.
- KIA proposed adding an armor and a deeper installation of the tires for a more secure structure.
- **Action item:** Identifying alternate mitigation methods to update the jetty bumper area.
- IEAC supported reducing the footprint for the road when creating the new cargo dock (i.e., expanding the current jetty location)

Airstrip

- The group viewed the airstrip and the new fueling station which allows Hope Bay to refuel airplanes at site.
- Plan to extend the airstrip for 1,000 feet.
- IEAC inquired about the reason behind the extension. It is to accommodate larger planes which can transport cargo both in and out of site.

Quarry

- The group viewed the quarry and heard about plans for a new quarry west of the airstrip, as well as consolidation of new core samples into specific pad areas.

- Concerns were raised about whether existing core from Doris exploration will be moved to new areas. Only new core will be consolidated, existing core remains where it is.

2.3 Water Treatment Plant

The water treatment plant tour was provided by an onsite technician who works in the plant.

Discussion topics included:

- Visual samples of pre- and post- treatment water were shown, and the treatment process was discussed
- Concerns about the water discharge into the ocean were addressed:
 - Water must pass testing results from a lab before being cleared to go into the ocean
 - Currently there are challenges with new regulations for ocean discharge where the water from Hope Bay is too salty for freshwater testing but is not salty enough to pass testing of new plankton type in ocean testing. For the time being, water is being discharge into TIA.
- IEAC asked if any water is being discharged into Doris Creek. No water discharged into creek since first day of operations.
- Resulting sludge from water treatment is discharged into the TIA.

2.4 TIA

The group toured the TIA, led by Nancy, including the north dam and the temporary dam placed to divide the tailings output from the water treatment holdings. Discussion included:

- Planned updates to the TIA include an emergency overflow system into Doris Lake if a catastrophic rain event/flooding threatened to break the dam. This system would be functional in time for Madrid operations.
- The tailings were in the process of being moved to help reinforce a temporary dam area
 - The temporary dam separates the underground water being discharged into the TIA,. The water is being kept separate from the tailings discharge in order to prevent mixing the two types of water which cannot pass the new testing regulations when blended.

2.5 Madrid Developments

The group saw several updates in the Madrid area, including plans for changing the portal location. Discussion included:

- The new Madrid portal will be located at the Naartok crown pillar recovery area.
- The existing Madrid portal has not been fully sealed but is not active and will likely not be used any more.
- The area outside of the existing Madrid portal had seepage and water was too salty, damaging the plants. IEAC was concerned that water is contaminated, as it is running down towards Windy Lake.

- Water testing indicates that seepage no longer has the high salt contents. Water quality in Windy Lake does not show any sign of contamination.
- Damaged tundra is growing back, mats placed to help remediate area and encourage new growth.
- **Action item:** Provide water quality treatment results for the seepage monitoring, along with a memo on the existing Madrid portal site remediation.

2.6 Windy Camp Remediation

Windy camp has been vacant but was not removed/remediated by past site owners for many years.

- Agnico took the camp down in July, about 90% complete.
- The IEAC wanted to know why doors and windows were not provided to the community. Miscommunication between onsite AEM and community reps—doors and windows were taken to waste management.
- Some debris still present where buildings were removed, but final clean-up is still in progress.

2.7 Height of Land Locations

Height of Land surveys along Windy Road will be conducted during periods of high caribou activity through site (e.g., during migration). The surveys will inform the need for mitigations at site if groups of caribou are in proximity to site. The group visited three potential survey locations identified previously by the onsite Inuit environmental tech, Joseph Tikhat Jr., and Hannah (ERM). Discussion included:

- The first location was agreed to by everyone to be a suitable survey site. Since it is a waste rock site, it will be built up more in future. Consistent viewing from most sides is anticipated.
- The second location provided a good view of Windy Lake, as well as most areas south of site.
 - **Action item:** Check elevation at survey locations.
- The third stop was also agreed upon to be a good location. Site may need some access management to safely get surveyors over to look out point.
- Methods for the surveys were discussed:
 - Surveys would be triggered when caribou activity is high. The specific triggers need to be worked out to determine that many caribou are moving through, rather than several sightings of the same caribou (e.g., some males hang out in area post-calving until fall).
 - Collar data can also help determine presence. HTO mentioned possibility of providing additional collar data which is currently not available to AEM.
 - Based on existing data, most caribou move through the area during winter migration November/December, pre-calving May/June, and post-calving August/Sept
 - Surveys would be conducted by Inuit, provided by HTO. Agnico would need to contact HTO to send someone for 1-2 weeks' monitoring when threshold/triggers are met.

- The survey would take place few times a week and would be conducted by an Inuit person
- **Action item:** Draft a protocol for triggering Height of Land surveying, and a Standard Operating Procedure with methods for the IEAC to review.

3. GENERAL DISCUSSION AND QUESTIONS

The group reviewed various topics from the course of the visit and the IEAC provided general comments and feedback.

- The proposed fisheries offsetting measures in Cambridge Bay were discussed further, the IEAC indicating their preference to remove existing culverts.
- DFO was satisfied with the events and talks.
- IEAC member mentioned seeing loose plastic around site, suggested clean-up is needed.
- IEAC member noted caribou tracks just south of the caribou crossing ramp on Windy Road.
Action item: Agnico to investigate whether caribou crossing ramp is actively used in 2022 (based on camera data and sign, e.g., tracks). Results will be included in the annual report and determine whether ramp needs to be relocated.
- The IEAC spoke to acknowledge Ikey (IEAC member, recently passed) and a moment of silence was held. \
- The next meeting will be scheduled for the 1st week of November.

4. SUMMARY OF ACTION ITEMS

Several action items were noted throughout the course of the site visit and have been summarized below.

Action Item	Party Responsible	Due Date
Further assessment will need to be conducted to understand the potential impacts of modifying or removing culverts at Cambridge Bay fisheries offsetting site.	AEM / Minnow	Targeted study (Open-water Season 2023)
Identifying alternate mitigation methods to update the jetty bumper area.	AEM	To be discussed at next IEAC meeting (Nov 2022)
Provide water quality treatment results for the seepage monitoring, along with a memo on the existing Madrid portal site remediation.	AEM	Next IEAC meeting in 2022
Check elevation at height of land survey locations	ERM	To be incorporated into monitoring SOP (Nov 2022)

Action Item	Party Responsible	Due Date
Draft a protocol for triggering Height of Land surveying, and a Standard Operating Procedure with methods for the IEAC to review.	ERM	Provided prior to next IEAC meeting (Nov 2022)
Agnico to investigate whether caribou crossing ramp is actively used in 2022 (based on camera data and sign, e.g., tracks). Results will be included in the annual report and determine whether ramp needs to be relocated.	AEM / ERM	To be included in the next WMMP Report (March 2023) and update provided to IEAC in 2023.