

Appendix 47

Whale Tail TAG minutes meeting June 2018

Meadowbank Terrestrial Advisory Group – Meeting #1
June 19-20, 2018
09:00 – 16:00
Winnipeg, MB
Radisson Hotel, Winnipeg Downtown
Meeting Chair: Ryan Vanengen

Record Keeper: Corey De La Mare

Attendees:

Agnico Eagle:	Ryan Vanengen, Jamie Quesnel, Jamie Katalak, Karen Yip
GN:	Stephen Atkinson, Lauren Perrin, Alex Chaikine.
KivIA:	Jeff Tulugak, Jeff Hart, Kim Poole, Gabriel Karlik
NTI:	Raymond Mercer
Baker Lake HTO:	Hugh Nateela, James Taipanak
KWB:	Qovik Netser
Golder Associates:	Corey De La Mare, Chris Shapka
ERM:	Greg Sharam

	Action Item Summary	Responsibility	Due Date
01	Develop concordance table for Project Certificate Terms and Conditions and Commitments for insertion back into the TEMP and a working live edit version of the TEMP	Golder	Prior to next TAG mtg
02	Agnico Eagle to provide meeting notes, summary with action items, outcomes, and presentations to all participants for distribution	Agnico Eagle	Prior to next TAG mtg
03	Further discussion on ZOI when Mitch will be present to discuss collar data/ZOI analysis. Timing of calls needs to be established	Agnico Eagle / GN	TBD
04	Updates to TEMP (see summary of updates in below meeting notes)	Golder (<i>unless otherwise noted</i>)	30 days prior to next TAG mtg
	<ul style="list-style-type: none"> Commitment #1 – use this commitment as a section for the TEMP – could it be stand alone or an Appendix but referred to within the TEMP, it is technically every 5 years? KivIA agrees, GN to discuss and follow-up 	GN – follow-up required	Added to TEMP
05	Viewshed analysis update – 1.5 km on road and 4 km on HOL. Determine proportion of areas. Overlay caribou collaring data. Identify points along the road to give a coverage of detection of caribou.	Golder	Prior to next TAG mtg
06	Commitment #14: Whale Tail 3 topics – group size around haul road, consistent definition of group, potential bias of observations. Viewshed comment about haul road vs road side (stopping points vs scan).	Golder	Ongoing
07	Ask GN about collar deployment - #'s, collar type, sex, fix rates, herds, where collared, how collared, when?, collaring objectives, etc.	GN	
08	Agnico Eagle to discuss with internal departments what roadside flag options we can come up with between transportation as they may be a source of disturbance	Agnico Eagle	

	Action Item Summary	Responsibility	Due Date
	to caribou crossing the road (HTO refers Agnico to look at the airport and BL road markers)		
09	KivIA to lead a working group prior to mitigation to discuss planning and actions. The group in Rankin is with NTI, GN, HTO, and Agnico Eagle	KivIA	
10	Agnico Eagle will put together an overview of the migration mitigation story in the annual report going forward	Agnico Eagle	Annual Reporting
11	GN to provide a summary of research with an emphasis on the Lorillard and Wager Bay herds; encouraged to collaborate and share clear objectives for GN research	GN	Next TAG mtg
12	Straw dog of potential studies/analyses to address questions/concerns. Ensure there is some tracking of progress for the various sub-components of Commitment #1	Golder /AE	
13	Agnico Eagle to determine out how to get the information on flight logs or traffic patterns for incorporation into the TEMP. Using the management plans which is required for exploration (could be included in Traffic Management Plan)	Agnico Eagle	
14	Submit draft v6 TEMP 30 days before TAG meeting. Final TEMP v6 will go through live edit in January. January 15-16 may be the best dates for next TAG meeting. TEMP v6 by December 15 (or before then, say December 1). Provide a version in Track Changes and a full pdf	Agnico Eagle	30 days prior to next TAG mtg
15	Agnico Eagle to provide an updated ToR to the GN/HTO/KivIA and a schedule for completing the ToR by September 15, 2018 (as per T&C # 27)	Agnico Eagle	Completed on October 24,2018

Items
Day 1 – June 19
Introductions and Agenda Overview (RV)
- Refer to Agnico Eagle presentation
- ToR have not been finalized
Project History, Project Certificate T&C (RV)
- Covered timing and updates to the TEMP
- Ryan presented the history of monitoring at the project and the updates made at the hearing to the TEMP
TEMP Changes Review and Proposed Monitoring Studies (CD and CS)
- Refer to Agnico Eagle presentation made by Golder - presentation with PC T&Cs and changes to the monitoring plan
- Updates to TEMP
<ul style="list-style-type: none"> Update blasting radius in the boxes to 4 km – and provide provision for 5 km during calving Commitment #1 – use this commitment as a section for the TEMP Commitment #21 and #22: traffic monitoring commitment to be added

<ul style="list-style-type: none"> Update raptor nest management plans and distance triggers for new development vs. existing (1.5 km to 1.0 km).
<ul style="list-style-type: none"> Define project tolerant animals and non-essential vehicles <ul style="list-style-type: none"> Project Tolerant – specify definition from IR, ensure that decisions with TAG are based on those representatives on-site (HTO, KivIA, DOE).
<ul style="list-style-type: none"> Define danger zone for blasting
<ul style="list-style-type: none"> Commitment #10 – some language around Environment supervisor “may” vs “will”. Need clarity on what may cause supervisor to actually initiate adaptive management/mitigation. Outcome could be based on a collaborative decision between HTO, KivIA and on-site environment personnel. Perhaps define the “what-ifs” through examples (i.e., we did this..... when we saw this.....). Another example can be “specific automatic measures” which should be explicitly stated.
<ul style="list-style-type: none"> Commitment #11 – sensitive seasons, didn’t put in the 500 m to 1 km based on calving and post-calving season.
<ul style="list-style-type: none"> Frequency of Commitment #33, movement and deflection we could alter based on Project phase or some other type of development/operational adjustment. Otherwise, can put this in as is.
<ul style="list-style-type: none"> Commitment #34 – convoying is in decision trees, we have used convoys in the past, but can we gather some information on decisions of when/how to convoy but then follow-up in terms of testing of convoys in terms of caribou response (i.e., how long of a break is needed to allow caribou to cross). FYI, convoys are being considered as a normal operation
<ul style="list-style-type: none"> Commitment #37 – collars deployed for monitoring caribou herds, not so much for EA and monitoring. What is the appropriate number? Analysis of what’s been done or what’s ideal.
<ul style="list-style-type: none"> Aircraft buffers are recommended rather than mandatory, in the case of recommended just state that it is based on safety and pilot decisions.
<ul style="list-style-type: none"> - Agnico Eagle commitment to 1:4 slopes at caribou crossings, but there is some challenges with materials. Additional hard rock quarries have been added as in some casesesker material hauling is longer than hard rock hauling. TEMP has 1:2 slope but the design is 1:4 for the majority of the road, if there are areas that are important for caribou crossing, we can identify them and then top-dress the slopes for caribou crossings – this will be discussed with operations in consultation with onsite HTO and KIA
<ul style="list-style-type: none"> - Discussion on how we could improve our ability to protect the lead group? Meet with the elders to get some advice. It is possible to use the collar data (KivIA comment)
<ul style="list-style-type: none"> - Briefing about the monitoring, one of the observations is that there needs to be more communication between the people making the calls at camp as there are caribou near town
KivIA CARMA Poster Presentation and Discussion (KP)
<ul style="list-style-type: none"> - Kim went through poster
<ul style="list-style-type: none"> - Learning: communication needs to increase about caribou collaring – types of collars, where they are being applied, and programming so that we can ensure that collaring addresses our data needs. Needs to follow the MOU language about timing and communication about collaring using Agnico Eagle funds
<ul style="list-style-type: none"> - Learning: maps should be put out more frequent from the GN during the spring/fall migration. Requested maps daily but not provided – how often are location data uploaded?
Operational Protocols: A Day in the Life during Migration (JK and CS)
<ul style="list-style-type: none"> - Presented photos and experience
<ul style="list-style-type: none"> - Discussion about flags potentially being a deterrent for flags
<ul style="list-style-type: none"> - Working together was highly effective in order to inform decision making and ensure the protection of caribou

- General agreement that road operators are following protocols and following shut-down protocols
- Discussion about range finders and their utility for training and accurately identifying the distances of caribou from the road
- Discussion about how the HTO closed the road – asked people to not use the road, and most folks were quite respectful of that – only a few passed by. Noted that HTO had reports that it was chaos along the road with animal parts being left behind, so the HTO decided to close the road if people can't be responsible
- Point made about disturbance of caribou by moving rather than stopping; David Simaiak (in a previous meeting) suggested that Agnico Eagle might be better off to keep traffic on the road and proceed rather than completely closing the road. He was questioning that Agnico Eagle had to stop, when hunters are permitted to use the road
- Are staff listening and following protocols? In general, they follow the protocols to the point where they are constantly asking on the radio about road status. Are there other mechanisms for communication? SPOT Tracker for texting through phone may be an idea. Having a really good digital camera with a good lens would be helpful
Day 2 – June 20
Update of GN Caribou Research in relation to Meadowbank and/or Kivalliq
- Refer to GN presentation
- Described the research being conducted by the GN on caribou – collaring, aerial surveys, building a best practice guide (this guide is being reviewed by the GN)
- Structure – Wildlife Research, Report to Amy Robinson of EA Section, Lauren reports to Amy who is the manager of Land Use Planning. Christie Rowe is their top boss, who then reports to Steve Pinksen for Environment. Mitch and others are regional biologists so they report to manager of research section.
Discussion on Behaviour Monitoring, ZOI Analysis, as per T&C No. 008 – 29
- Focus on what you can control. Caribou interact during migration (winter and near-winter conditions), so movement analysis based on deflection/turns from collar data. On-site focus could be on the bins: blasting, roads (traffic) and some discussion on what we can do on the roads to promote crossing (e.g., flags vs no flags, slopes, traffic amount/type). Finally, note that migration are the key seasons and caribou behavior and selection at that time is different. Collar data can be used for movement analysis, particularly now that we have more collars deployed
- Focus studies will include: <ol style="list-style-type: none"> 1. Determine caribou blast radius protection zone (Whale Tail Pit and 1 selected quarry depending on the road)* 2. Physical Road effects analysis on movements during migration * - what are the road conditions to allow for the caribou to cross/ crossing rates 3. ZOI deflection (looking at behavioural changes using collars, supported by survey data) <ul style="list-style-type: none"> *use same field data collection and reconyx cameras – program technicians, biologists to collect consistent data
Blast Radius Study
Study Design Buckets: <ul style="list-style-type: none"> - 1.) Blasting – pulse effect on caribou behavior. - 2.) Roads – flag effect, road type, traffic type/convoy, etc. Use of observers/cameras, etc. - 3.) Collars – movement analysis for deflection/direction/tortuosity, etc.
- Sample size discussion – Bin the data into 500 m or km, how much data do we need. So from 0 - 5 km we have 10 bins: 0 – 500 m; 500 – 1000 m, 1000 – 1500 m, etc. The more the better, wind direction and herd

<p>size likely matter so collect that information. Thought 5 times, but factor in other conditions. Blasts in the pit are daily, sometimes twice daily</p>
<ul style="list-style-type: none"> - No consensus on number of “sample points” however does response type approach seems to be the best study design; could be repeated samples at different distances from the blast
<p>TAG Terms of Reference Review</p>
<ul style="list-style-type: none"> - Sept 22, 2017 – exhibit 51 is the starting point
<ul style="list-style-type: none"> - Agnico Eagle went through the changes to the draft TOR
<ul style="list-style-type: none"> - Review committee, evidence-based decisions are requirements to go into the TOR to satisfy the KivIA. Review committee only pertains to 4 specific items – frequency of monitoring, GSTs, intensifying mitigation and blasting
<ul style="list-style-type: none"> - Discussion on Quorum, how do we achieve this? For discussion or making decisions, currently we don’t have decision makers in the room right now