

Appendix 7: 2020 Annual
Geotechnical Report Agnico Eagle
Responses and Action Table

Annual Geotechnical Inspection Recommendation (Tetra Tech, 2020)		Priority Level (AEM 2021)	Recommendation (s) to be Implemented?	AEM Response to Recommendation	Additional Action(s) Required	Responsible Department(s)	Expected Date of Implementation	Status (End of 2021)	Comment/Additional Action(s) Required	
1.	Inspection and Monitoring	The GTCs and survey monitoring points should continue to be monitored following the schedule and procedures developed in the OMS manual.	High	Already Implemented	AEM will continue to monitor the dikes as per the schedule and procedures in the OMS manual.	N/A	N/A	Complete	AEM continues to monitor the dikes as per the schedule and procedures in the OMS manual.	
3.	Dike Repair/Maintenance	The upstream slope of Dike D-CP1 should be surveyed to determine the amount of Run of Mine Rockfill remaining in the eroded area above the esker sand and gravel dike zone. It may be required to fill the eroded area with Run of Mine Material.	Medium	Yes	D-CP1 was surveyed in October 2020 and compared to the as-built to determine the depth of the eroded surface. The results of this survey will be provided to the Design Engineer to assess if immediate remediation is warranted.	Yes	Engineering	Pre-freshet 2021	Complete	Pre-freshet 2021
		Minor erosion marks observed on the slope of Jetty 1 due to wave erosion from historic high water levels. The erosion is somewhat greater than was observed in 2019. The fines are being washed out leaving the coarse material. The erosion is undercutting the fill up to 0.3 m in the southeast corner and may result in a slump of the surface fill in the area. The pump house is well back from the area; however, the heat tracing cables should be pulled back from the eroded area	Low	Yes	AEM will pull back the heat tracing cables from the area in question.	Yes	Engineering/Water Management	Pre-freshet 2021	On-going	Planned to be done for Q3 2022

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1.	Channel 1	No recommendations.	NA	NA	No	NA	NA	NA	NA	
2.	Channel 2	No recommendations.	NA	NA	No	NA	NA	NA	NA	
3.	Channel 3	Monitor the cracking and subsidence in the native ground above Channel 3 to determine if they impact the channels performance.	Low	Already Implemented	The area in question will be continue to be monitored during open water season 2021 as part of the site-wide geotechnical monitoring program.	Continue to monitor channel performance.	Engineering/Environment	Open Water 2021	Complete	AEM will repairs Channel 3 as per the recommendations of the 2021 Geotechnical Inspection
4.	Channel 4	Monitor the cracking and subsidence in the native ground above Channel 4 to determine if they impact the channels performance.	Low	Already Implemented	The area in question will be continue to be monitored during open water season 2021 as part of the site-wide geotechnical monitoring program.	Continue to monitor channel performance.	Engineering/Environment	Open Water 2021	Complete	AEM repaired Channel 4 as per the recommendations of the 2021 Geotechnical Inspection
5.	Channel 5	No recommendations.	NA	NA	NA	NA	NA	NA	NA	
6.	Channel 7	No recommendations.	NA	NA	NA	NA	NA	NA	NA	
7.	Berm 2	Berms 2 and 3 cover materials are susceptible to erosion and some minor erosion was observed during the inspection. Erosion of the slopes should be monitored, and considertaion should be given to placing coarser material on Berm 3 to reduce the potential for erosion if it becomes substantial	Low	Already Implemented	The area in question will be continue to be monitored during open water season 2021 as part of the site-wide geotechnical monitoring program.	Continue to monitor berm performance.	Engineering/Environment	Open Water 2021	Complete	Berm 2 performance does not appear to be impacted and monitoring will continue as per the recommendations of the 2021 Geotechnical Inspection
8.	Berm 3	Berms 2 and 3 cover materials are susceptible to erosion and some minor erosion was observed during the inspection. Erosion of the slopes should be monitored, and considertaion should be given to placing coarser material on Berm 3 to reduce the potential for erosion if it becomes substantial	Low	Already Implemented	The area in question will be continue to be monitored during open water season 2021 as part of the site-wide geotechnical monitoring program.	Continue to monitor berm performance.	Engineering/Environment	Open Water 2021	Complete	Berm 3 performance does not appear to be impacted and monitoring will continue as per the recommendations of the 2021 Geotechnical Inspection
9.	Pond CP3/Berm CP3	It is recommended that an OMS manual be developed for the collection pond.	Medium	Yes	AEM Meliadine is currently developing an OMS for all water management infrastructure on site.	Develop OMS for all water management infrastructure on site.	Water Management	Q4 2021	On-going	OMS for all water management infrastructure to be completed by Q4 2022
		The CP3 road slumping adjacent to Channel 3 should be monitored	Low	Already Implemented	The area in question will be continue to be monitored during open water season 2021 as part of the site-wide geotechnical monitoring program.	Continue to monitor road performance.	Engineering/Environment	Open Water 2021	Complete	The road adjacent to Channel 3 will be repaired as per the recommendations of the 2021 Geotechnical Inspection
		The slumping on the CP3 access road should be clearly marked and traffic avoided	Low	Yes	The area in question will be barricaded preventing traffic from causing further slumping of the road crest	Install barricade in areas of CP3 access road which are experiencing slumping	Engineering/E&I	Open Water 2021	Complete	The road adjacent to Channel 3 will be repaired as per the recommendations of the 2021 Geotechnical Inspection
10.	Pond CP4/Berm CP4	It is recommended that an OMS manual be developed for the collection pond.	Medium	Yes	AEM Meliadine is currently developing an OMS for all water management infrastructure on site.	Develop OMS for all water management infrastructure on site.	Water Management	Q4 2021	On-going	OMS for all water management infrastructure to be completed by Q4 2022
		Thaw settlement has occurred in the original ground above the pond rockfill slope protection. The settlement and the impact on the pond should be monitored in future years to determine if remedial action is required.	Low	Already Implemented	The area in question will be monitored during open water season as part of the site-wide geotechnical monitoring program.	Continue to monitor pond performance.	Engineering/Environment	Open Water 2021	On-going	AEM will perform repairs to the area in question as per the recommendations of the 2021 Geotechnical Inspection
11.	Pond CP6/Berm 6	It is recommended that an OMS manual be developed for the collection pond.	Medium	Yes	AEM Meliadine is currently developing an OMS for all water management infrastructure on site.	Develop OMS for all water management infrastructure on site.	Water Management	Q4 2021	On-going	OMS for all water management infrastructure to be completed by Q4 2022
		Thaw settlement and erosion is observed between WRSF3 and CP6. The erosion could be mitigated by covering the eroded area with coarse rock	Low	No	The area between CP6 and WRSF3 will continue to be monitored for erosion. If the performance of either CP6 or WRSF3 appear to be compromised, the addition of waste rock in this location will be considered	No	N/A	N/A	Complete	AEM performed repairs to the area in question in Q3 2021
12.	Saline Pond 1	No recommendations.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
13.	Saline Pond 3	The pond should continue to be monitored for signs of settlement	Medium	Already Implemented	The area in question will be continue to be monitored during open water season 2021 as part of the site-wide geotechnical monitoring program.	Continue to monitor pond performance.	Engineering/Environment	Open Water 2021	Complete	Saline Pond 3 performance does not appear to be impacted and monitoring will continue as per the recommendations of the 2021 Geotechnical Inspection
14.	Saline Pond 4	The settlement and cracking above the overburden slopes should be monitored	Low	Already Implemented	The area in question will be continue to be monitored during open water season 2021 as part of the site-wide geotechnical monitoring program.	Continue to monitor pond performance.	Engineering/Environment	Open Water 2021	Complete	Saline Pond 4 performance does not appear to be impacted and monitoring will continue as per the recommendations of the 2021 Geotechnical Inspection

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1.	Inspection and Monitoring	The ground temperatures should continue to be monitored in the TSF and the foundation using the GTCs presently installed.	Medium	Already Implemented	Temperatures in the TSF and foundation will continue to be monitored on a monthly basis.	No	Engineering	N/A	N/A	Monitoring with continue.
		It is recommended that the tailings be tested to determine their unfrozen content curve below 0°C to determine how much of the tailings remain unfrozen.	Low	Yes	AEM continues to work with the Design Engineer to develop an adequate test program to determine the unfrozen content curve. The test program will be implemented during 2021.	Discuss sampling plan with design engineer and potentially implement testing.	Engineering	Q4 2021	Not Started	AEM continues to work with the Design Engineer to develop an adequate test program to determine the unfrozen content curve. The test program will be implemented during 2021.

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1.	Site Roads	No recommendations.	N/A	N/A	No	N/A	N/A	N/A	N/A	
2.	Borrow Sources (Wesmeg, Meliadine North, Meliadine, Tiriganlaq, SP2 Temporary)	The borrow areas should be monitored for future erosion and thaw settlement. The need for further reclamation can be assessed in future years.	Low	Already Implemented	The areas in question will be monitored during open water season 2021 as part of the site-wide geotechnical monitoring program.	No	N/A	N/A	N/A	N/A
3.	Ore Stockpiles	No recommendations.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4.	Crusher Ramp	No recommendations.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5.	Saline Water Treatment Plant (SWTP)	A structural assessment of the plant and possibly the building should be carried out if it is determined that significant settlement has occurred since it was last releveled.	Low	No	There is no plans at this time to restart the SWTP at this time	Potential assessment by structural engineer if additional significant settlement observed and operations to be enhanced.	N/A	N/A	Not Complete	The SWTP was not in operation during 2021 and there are currently no plans to recommission the facility.
6.	Operation Landfill	It is recommended that the landfill be covered in stages with intermediate cover to avoid blowing debris.	Medium	Yes	The landfill management plan is currently under review and will include a plan to progressively cover the landfill	Update Landfill management plan	Environment/E&I	Q4 2021	Complete	N/A
		A program to separate burnable debris could reduce the landfill requirements. The landfill is nearing its current design capacity. A plan must be developed to raise the landfill berms.	Medium	Already Implemented	Burnable debris was removed from the landfill, and the landfill berm was raised in October 2020, increasing the landfill storage capacity	No	N/A	N/A	Complete	N/A

7.	Emulsion Plant Pad	It is recommended that the pad settlement and erosion should continue to be monitored.	Low	Already Implemented	The area in question will be monitored during open water season 2021 as part of the site-wide geotechnical monitoring program.	No	N/A	N/A	Complete	Emulsion Pad performance does not appear to be impacted and monitoring will continue as per the recommendations of the 2021 Geotechnical Inspection
8.	Landfarm	No recommendations.	N/A	N/A	N/A	No	N/A	N/A	N/A	N/A
9.	Cyanide Storage Pad(s)	No recommendations.	N/A	N/A	N/A	No	N/A	N/A	N/A	N/A
10.	Emulsion Plant Storage	No recommendations.	N/A	N/A	N/A	No	N/A	N/A	N/A	N/A
11.	Industrial Fuel Storage	No recommendations.	N/A	N/A	N/A	No	N/A	N/A	N/A	N/A
12.	Incinerator Pad	No recommendations.	N/A	N/A	N/A	No	N/A	N/A	N/A	N/A
13.	Mine Site Fuel Farm	No recommendations.	N/A	N/A	N/A	No	N/A	N/A	N/A	N/A
14.	Paste Plant Ramp	No recommendations.	N/A	N/A	N/A	No	N/A	N/A	N/A	N/A
15.	Portal 1/Portal 2	No recommendations.	N/A	N/A	N/A	No	N/A	N/A	N/A	N/A
16.	Industrial Pad	No recommendations.	N/A	N/A	N/A	No	N/A	N/A	N/A	N/A
17.	Exploration Camp/Road	No recommendations.	N/A	N/A	N/A	No	N/A	N/A	N/A	N/A

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1.	Culverts	Repair Culvert damage (km 7.4)	Low	No	Culvert will continue to be monitored to assess need for repairs	No	N/A	N/A	N/A	
		Install culverts and/or raise road (km 8.8)	Low	Yes	Rockfill will be added to raise elevation of road in this area prior to freshet 2021. Area will be monitored over 2021 freshet	Raise road	E&I/Engineering	Q2 2021	Complete	Road was raised by E&I in Q2 2021
		Install a culvert at this location to reduce the risk of overtopping (km 19.5)	Low	No	Rockfill will be added to raise elevation of road in this area prior to freshet 2021. Area will be monitored over 2021 freshet	Raise road	E&I/Engineering	Q2 2021	Complete	Road was raised by E&I in Q2 2021
		Consider installation of a culvert in this area to reduce risk of overtopping (km 21.2 to 21.5)	Low	Already Implemented	This area will continue to be monitored over 2021 freshet and need for additional culvert will be assessed.	No	N/A	N/A	N/A	N/A
		Consider installation of larger diameter culvert(s) to reduce the risk of overflow (km 21.7)	Low	Already Implemented	This area will continue to be monitored over 2021 freshet and need for additional culvert will be assessed.	No	N/A	N/A	N/A	N/A
		Install larger culvert (km 22.3)	Low	No	This area will continue to be monitored over 2021 freshet and need for additional culvert will be assessed.	No	N/A	N/A	N/A	N/A
		Consider installation of a culvert in this area to reduce risk of overtopping (km 22.7)	Low	Already Implemented	Rockfill will be added to raise elevation of road in this area prior to freshet 2021. Area will be monitored over 2021 freshet	Raise road	E&I/Engineering	Q2 2021	Complete	Road was raised by E&I in Q2 2021
		Clear culvert inlet of road fill material. Consider extending culvert to prevent road fill from entering culvert (km 25.8)	Low	Yes	When feasible, inlet of this culvert will be cleared. Water level and erosion during freshet will be monitored to assess need for extending the culvert	Clear culvert inlet	E&I	Open water 2021	Complete	Culvert will continue to be cleared by E&I as part of freshet management plan
		Culverts should be replaced at a lower elevation (km 26.2)	Low	No	This area will continue to be monitored over 2021 freshet and need for additional culvert will be assessed.	No	N/A	N/A	N/A	N/A
		Inlet of the lower culvert should be cleared and possibly extended (km 26.8)	Low	Yes	When feasible, inlet of this culvert will be cleared. Water level and erosion during freshet will be monitored to assess need for extending the culvert	Clear culvert inlet	E&I	Open water 2021	Complete	Culvert will continue to be cleared by E&I as part of freshet management plan
		Monitor riprap and add more protection if erosion occurs (km 27.1)	Low	Already Implemented	This area will continue to be monitored for erosion, and riprap added as needed.	No	N/A	N/A	N/A	N/A
		A culvert could be installed to reduce the risk of overflow (km 28.7)	Low	No	This area will continue to be monitored over 2021 freshet and need for additional culvert will be assessed.	No	N/A	N/A	N/A	N/A
		Install additional culverts in the area (km 29.6)	Low	No	This culvert no longer exists. It was removed during the construction of infrastructure around Tiriganiaq Open Pit 2 in late 2020.	No	N/A	N/A	N/A	N/A
2	Bridge	Replace or repair damaged gabion. Place additional riprap on exposed geotextile.(M-5 Bridge)	Low	Yes	Gabion was not replaced in 2020. M-5 bridge was inspected as part of annual geotechnical inspection in 2020 and will continue to be monitored for settlement and/or erosion in 2021. A structural assessment of the bridge is planned for summer 2021	Continue to monitor performance of gabion at M-5 bridge in 2021. Perform a structural assessment of the bridge to determine if repairs or replacement of the gabion is required	Engineering	Open water 2021	Not Complete	Not complete, site visit was cancelled due to COVID-19

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1.	Itivia Fuel Farm	No recommendations.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
2.	Culverts	Monitor ponding of water upstream of inlets and consider lowering culverts to reduce ponding (km 1.8)	Low	Already Implemented	This area will continue to be monitored over 2021 freshet and need for additional culvert will be assessed.	No	N/A	N/A	N/A	N/A
		The culverts should be cleared of snow and ice prior to freshet. Additional culverts could be installed in low road area to the northwest, alternatively, the low area in the road could be raised, but would result in a large flooded area.	Medium	Yes	The culverts will be cleared of snow and ice as part of the freshet management plan. The performance of culverts will be assessed throughout 2021 to determine need to install more culverts/raise road.	Clear culvert of snow and ice	E&I/Water Management	Pre-freshet 2021	Complete	Culvert will continue to be cleared by E&I as part of freshet management plan.