AGNICO EAGLE
MELIADINE

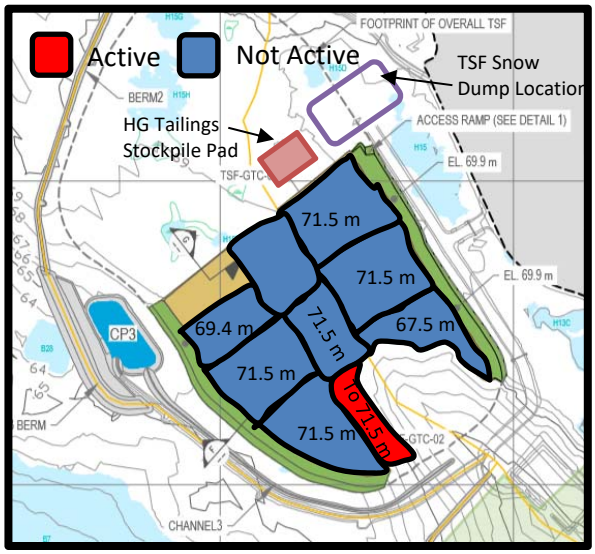
TSF WEEKLY INSPECTION FORM

Date: November 29, 2019	Time: 10:30
Weather: -14.3C; 39 km/h SW; drifting snow	Inspected by: Jennifer Pyliuk
Present: Pierre-Luc Sevigny	

TAILINGS PLACEMENT

Placement Area: Center Cell

	Y	N	NA
Adequate snow removal procedures?	☒	☐	☐
Lift heights respected?	☒	☐	☐
Proper compaction? (Speed, # of passes)	☐	☒	☐
Traffic management?	☐	☒	☐



Observations:

- Tailings placement occurring in the center area between sub-cell 4 and the esker to elevation 71.5 m.
- Little placement occurred at the TSF during the past week. When placement did happen, it was in the center cell area.
- The Church was observed to be approximately ¾ full. It is understood that tailings material to the east of the building have been in place "at least a week". It is noted that there has been no inclement weather during this time period. It is understood that both vehicle (haul truck) availability and driver availability have been issues. .
- Despite repeated warnings, all haul and light vehicle traffic was observed running across sub-cell 2 to reach the working area. This is exacerbating dust generation from the surface and is contrary to Section 5.0 of the Deposition Plan.
- No serious concerns were observed with the actual placement of tailings in the center cell at the time of the inspection and "fresh" (unfrozen) material was being placed. However, when asked how many passes with the compactor was occurring, the operator replied he was doing two (one forward and one backward). It is not clear as to why an operator was placed on a critical piece of equipment yet did not receive clear and correct directions as to what he was to be doing on that piece of equipment.
- It was reported that "pot-holes" were observed in the active area earlier in the shift. By the time of inspection however, this had been compacted over and were no longer visible.
- Incomplete compaction/Rough tie-in was observed between sub-cells 4 and 5 and the center cell, leaving a trail of rough, dust generating material.

Actions:

1. Placement should continue to focus on "filling in the holes" as issues regarding snow collection and removal will occur in these areas over the winter. Once placement in the center cell is completed, the next area of placement should be sub-cell 1. **All excess snow/ice must be removed from trenches, the tailings/ground surface and the side slopes prior to placement.** No additional lifts are to be placed on sub-cells 2, 3, 4 or 5 at this time.
2. **Winter placement conditions must be followed in order to achieve proper compaction and reduce settlement in the summer months**:
   a. **Tailings must be removed from the Church immediately** to avoid freezing of this material prior to placement. **Stockpiling in the Church should only occur in extreme conditions.**
   b. **Compaction of tailings must occur immediately following placement.** If compacted while unfrozen, the same number of passes (3 slow passes on high vibrate where "1 pass = 1 forward + 1 backward") applies. If frozen tailings material has to be placed, Engineering must be notified so that the least harmful placement location and compaction specifications can be chosen.
3. **It is unacceptable that the packer operator did not know how many passes he was required to complete and this raises serious questions about the amount of compaction that is being achieved.** If

Engineering support is required to brief operators or prepare additional presentation materials, we will gladly assist. In the absence of such a request however, it must be assumed that all operators working on the facility are properly briefed about the basic objectives of the facility and how to achieve them.

4. **There must be no vehicle traffic on the finished tailings surface.** Flash freezing of the surface will occur and erosion/dust generation will be at its peak. Traffic over snow will grind/compress the snow into the tailings surface and will make snow removal in these areas more difficult. **AEM has regulatory requirements to make every effort to control the dust generated from the TSF.**
5. Any unusual observations (ie. "pot-holes") can be signs of serious instabilities and should be reported immediately to the GE. If the GE is not on site, photographs should be emailed for a visual evaluation.
6. Snow should not be placed/stockpile anywhere but the designated snow dump location in Cell 2. The location of the snow dump was chosen based on experiences during freshet 2019.

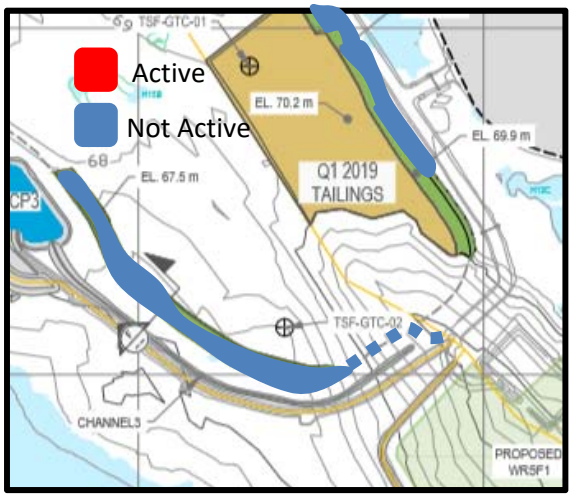
INSTRUMENTATION

	Y	N	NA
Ground temperature cables read?	☐	☒	☐
Issues/Problems with any cables/beads? (If YES, describe below)	☐	☒	☐

COVER MATERIAL PLACEMENT

Placement Area: None

	Y	N	NA
Adequate snow removal procedures?	☐	☐	☒
Lift heights respected?	☐	☐	☒
Proper compaction? (Speed, # of passes)	☐	☐	☒
Traffic management?	☐	☐	☒



Observations:

- None

Actions:

1. Fill in and compact trench through the berm at sub-cell 1 and re-establish the access road.
2. The west berm should be raised as soon as possible as the gap between the current berm and tailings is acting as a snow trap. This snow/ice must be removed prior to placing the next lift of waste rock.
3. Serious consideration should be given to the raising of the east berm as well, to a level just above the current tailings height for the winter period as a method of dust mitigation.

PHOTOGRAPHS

Photo 1: Tailings material backed up in the Church

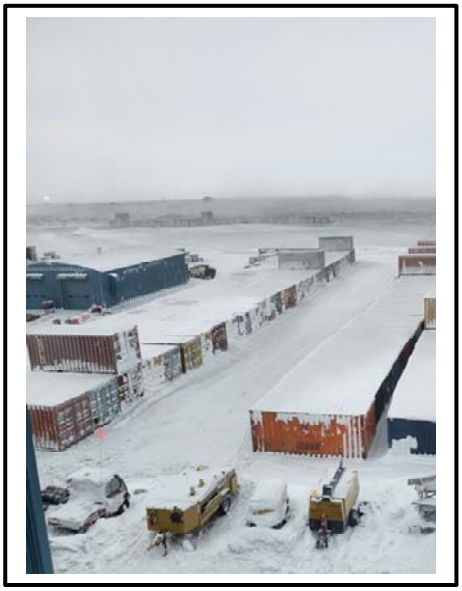


Photo 2: View from the MSB of dust from the TSF, haul truck running across sub-cell 2

Photo 3: Pushing unfrozen tailings in the center cell; view facing southeast

Photo 4: Line of uncompacted material between sub-cells 4/5 and the center cell; view facing north