

TSF WEEKLY INSPECTION FORM

Date: November 13, 2019	Time: 12:30
Weather: -18.6C; 33 km/h NW; overcast	Inspected by: Jennifer Pyluk
Present: Alex Plasse	

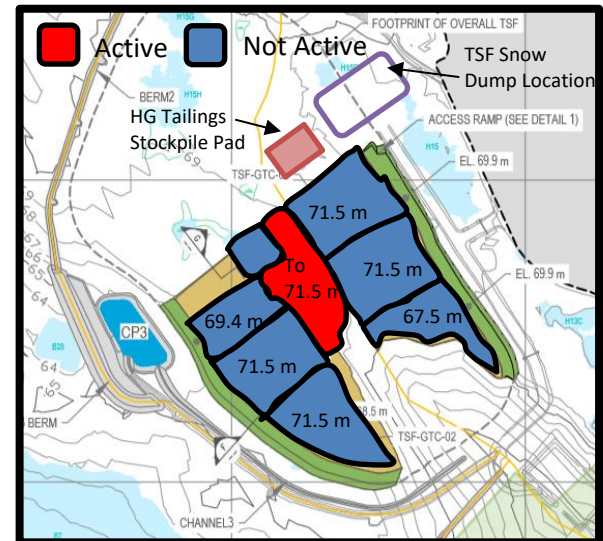
TAILINGS PLACEMENT

Placement Area: Center Cell

	Y	N	NA
Adequate snow removal procedures?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lift heights respected?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper compaction? (Speed, # of passes)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Traffic management?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Observations:

- Active tailings placement occurring over the past week in the center cell to approximate elevation 70.3 m.
- Considerable dust was observed to be generated from the surface of recently placed tailings material. This is expected to be due to the rough surface of the tailings material. At the time of inspection, tailings were being placed in a frozen or near-frozen condition and compaction was not occurring immediately after placement due to staffing issues. This resulted in a tracked surface only and dusty conditions.
- It was observed that compaction specifications were not being obtained, particularly in the top 4-6", due to the placement of tailings material in the frozen (and dried) condition. It is noted that placement of already frozen material in the center cell is preferable from a stability standpoint however.
- Dust generation was also observed on the surface of sub-cells 3 and 2, particularly in the area around the recently completed extension of the historical GTC. Track marks and tire tracks were clearly visible throughout this location and the remainder of these sub-cells.
- Snow removal was occurring from the side slopes of sub-cell 5, with mounds on sub-cell waiting collection and removal to the designated snow dump area in Cell 2. It was noticed that some snow had been placed on the west side of the LG stockpile, which is outside of the designated snow dump location.
- Sea cans with what are assumed to be unplaced filter cloths were seen on sub-cell 6, which appeared to have restricted the placement area.



Actions:

- 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. These locations are the center cell, sub-cell 1 and between sub-cells 4/5. **Any excess snow/ice must be removed from trenches or the tailings/ground surface prior to placement.** No additional lifts are to be placed on sub-cells 2, 3, 4 or 5 at this time.
- Winter placement conditions must be followed in order to achieve proper compaction and reduce settlement in the summer months:
 - Tailings should 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.
 - Compaction of tailings should also occur immediately following placement.** If compacted while unfrozen, the same number of passes (3 slow passes on high vibrate) 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.
- There should 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.
- 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.

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5. **Filter cloths should be placed as soon as possible** to avoid additional work to separate the cloths prior to placement if they are all frozen together.

INSTRUMENTATION

	Y	N	NA
Ground temperature cables read?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Issues/Problems with any cables/beads? (If YES, describe below)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

COVER MATERIAL PLACEMENT

Placement Area: **None**

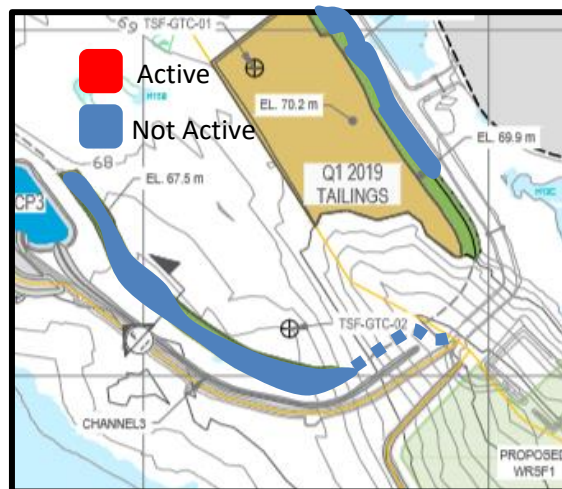
	Y	N	NA
Adequate snow removal procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Lift heights respected?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper compaction? (Speed, # of passes)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Traffic management?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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.**



PHOTOGRAPHS

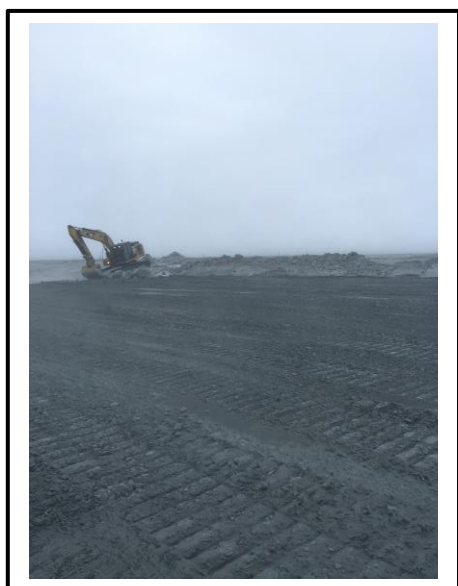


Photo 1: Recently placed tailings in center cell; view facing southwest

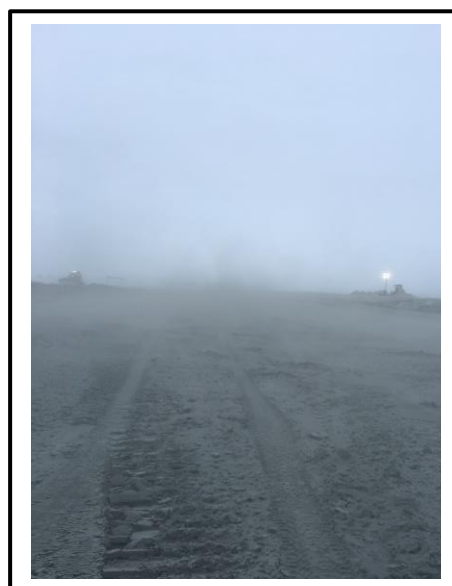


Photo 2: Recently placed tailings in center cell and dust; view facing north



Photo 3: Track marks and tire tracks around historical GTC extension sub-cell 3; view facing southeast



Photo 4: Sea cans causing snow to build up and restricting placement area in sub-cell 6; view facing west