Photograph CD-1831: From Sta 40+730/-24 m, looking NE. Compaction of the first 0.5 m lift (approx.) of fine and coarse filters material at El. 143.5 m with a 10-tonne smooth-drum compactor with vibration (6 passes) from Sta. 40+730 m to 0+830 m and from Sta. 0+175 m to 0+490 m.

Photograph CD-1832: From Sta 0+280/-25 m, looking N. Placement of a second 0.5 m thick lift of coarse filter from El. 143.5 m to 144 m with an excavator from Sta. 0+175 m to 0+280 m.

Photograph CD-1833: From Sta 0+390/-25 m, looking S. Damaged geomembrane near a deposition finger on Central Dike at Sta. 0+390 m.

QA DAILY REPORT

DATE May 9th 2018 1897439-1576-TM-Rev0

TO Patrice Gagnon, Pier-Éric McDonald
Agnico Eagle Mines Ltd, Meadowbank Division

CC Frédérick Bolduc, Alexandre Lavallée

FROM Samuel Barbeau **EMAIL sbarbeau@golder.com**

QA DAILY REPORT FOR MAY 8TH, 2018 – TSF SOUTH CELL CONSTRUCTION - MEADOWBANK (1897439)

1.0 WEATHER

- Temperature around -13°C, cloudy.

2.0 HEALTH AND SAFETY

- Cold weather and ice: apply caution when driving or walking on icy surfaces, wear appropriate clothing.
- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.
- Coactivity on the dikes: be aware of blind spots and safe spots, keep good communication and visual contact with the operators. It is recommended to call on the radio when entering Central Dike on either side when heavy equipment is working in the area.

3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

During the daily construction meeting and during the day the following discussions were held:

- Following the removal of the materials on the four deposition fingers to expose 1 m of liner in the upstream slope of Central Dike, the punctures noticed in the LLDPE liner will be clearly marked with paint and their locations surveyed.
- The QC personnel mentioned that the compactor was slightly tilted while compacting the fine filer yesterday. SANA's foreman reviewed with the compactor operator how to compact the filters uniformly.

4.0 DESCRIPTION OF CONSTRUCTION WORK PERFORMED AND QA OBSERVATIONS

The QA activities by Golder are based on periodic inspections performed by the QA Engineer in order to monitor the construction activities and progress of the structure of the South Cell of the TSF. This report must be read in

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conjunction with the QC Report. The following tables summarize the progress and observations made for each structure.

Table 1: QA observations for Saddle Dam 3

Activity or Area	Comments
None	

Table 2: QA Observations for Central Dike

Activity or Area	Comments
Upstream	■ Placement of a first 0.5 m thick lift of coarse filter from El. 143 m to 143.5 m on a length of approx. 5 m with an excavator at the location of the deposition finger at Sta 0+520 m and 0+660 m. ■ Placement of a first 0.5 m thick lift of fine filter from El. 143 m to 143.5 m upstream of the coarse filter with an excavator from Sta. 0+490 to 0+835 m. ■ Compaction of the first 0.5 m lift (approx.) of fine and coarse filters material at El. 143.5 m with a 10-tonne smooth-drum compactor with vibration (6 passes) from Sta 0+490 to 0+835 m. ■ Placement of a second 0.5 m thick lift of coarse filter from El. 143.5 m to 144 m with an excavator from Sta. 0+290 m to 0+500 m and from Sta. 0+835 to 0+930 m. ■ Placement of a second 0.5 m thick lift of fine filter from El. 143.5 m to 144 m upstream of the coarse filter with an excavator from Sta. 0+170 to 0+500 m and from Sta. 0+835 to 0+930 m. ■ Compaction of the second 0.5 m lift (approx.) of fine and coarse filters material at El. 144 m with a 10-tonne smooth-drum compactor with vibration (4 passes) from Sta 0+170 to 0+500 m.

5.0 FOUNDATION APPROVAL

No foundation approval was done during the reporting period.

Table 3: Details of the Foundation Approvals

Name	Structure	Sta. and Offset	Date of Approval	Comment

6.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 4 and Table 5 present the samples collected or tested by the QA and QC as well as PNG field results.

Table 4: Samples taken by the QC

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result

Table 5: Samples taken by the QA

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result

7.0 PHOTOGRAPH

Photograph CD-1834: From Sta 40+760/-23 m, looking NE. Placement of a first 0.5 m thick lift of coarse filter from El. 143 m to 143.5 m on length of approx. 5 m with an excavator at the location of the deposition finger at Sta 0+520 m and 0+660 m.

Photograph CD-1835: From Sta 0+830/-20m, looking N. Compaction of the first 0.5 m lift (approx.) of fine and coarse filters material at El. 143.5 m with a 10-tonne smooth-drum compactor with vibration (6 passes) from Sta 0+490 to 0+835 m.

Photograph CD-1836: From Sta 0+830/-20m, looking N. Placement of a first 0.5 m thick lift of fine filter from El. 143 m to 143.5 m upstream of the coarse filter with an excavator from Sta. 0+490 to 0+835 m.

Photograph CD-1837: From Sta 0+940/-25m, looking N. Placement of a second 0.5 m thick lift of coarse filter from El. 143.5 m to 144 m with an excavator from Sta. 0+290 to 0+500 m and from Sta. 0+835 to 0+930 m.

QA DAILY REPORT

DATE May 10th 2018 1897439-1576-TM-Rev0

TO Patrice Gagnon, Pier-Éric McDonald
Agnico Eagle Mines Ltd, Meadowbank Division

CC Frédérick Bolduc, Alexandre Lavallée

FROM Samuel Barbeau **EMAIL sbarbeau@golder.com**

QA DAILY REPORT FOR MAY 9TH, 2018 – TSF SOUTH CELL CONSTRUCTION - MEADOWBANK (1897439)

1.0 WEATHER

- Temperature around -11°C, sunny.

2.0 HEALTH AND SAFETY

- Cold weather and ice: apply caution when driving or walking on icy surfaces, wear appropriate clothing.
- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.
- Coactivity on the dikes: be aware of blind spots and safe spots, keep good communication and visual contact with the operators. It is recommended to call on the radio when entering Central Dike on either side when heavy equipment is working in the area.
- A blast is scheduled for 12h45 at Vault Pit.
- An artic fox was spotted on Central Dike near the equipment. The operators were advised of the presence of the fox and used extra caution.

3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

During the daily construction meeting and during the day the following discussions were held:

- An approx. 5-10 cm thick strip of snow had accumulated locally on the upstream side of the first lift of fine filter at elevation 143.5 m, near Sta. 40+750 m. The QA manager required that the snow be removed with an excavator before placing the second 0.5 m thick lift of fine filter from El. 143.5 m to 144 m.
- The QA manager reiterated the need to receive the Surveyor's daily report as the quantities are required to determine when to sample the coarse and fine filters.

4.0 DESCRIPTION OF CONSTRUCTION WORK PERFORMED AND QA OBSERVATIONS

The QA activities by Golder are based on periodic inspections performed by the QA Engineer in order to monitor the construction activities and progress of the structure of the South Cell of the TSF. This report must be read in conjunction with the QC Report. The following tables summarize the progress and observations made for each structure.

Table 1: QA observations for Saddle Dam 3

Activity or Area	Comments
None	

Table 2: QA Observations for Central Dike

Activity or Area	Comments
Upstream	■ Placement of a second 0.5 m thick lift of coarse filter from El. 143.5 m to 144 m with an excavator from Sta. 0+500 m to 0+835 m and from 0+930 to 40+730 m. ■ Placement of a second 0.5 m thick lift of fine filter from El. 143.5 m to 144 m upstream of the coarse filter with an excavator from Sta. 0+500 m to 0+835 m and from 0+930 to 40+730 m. ■ Compaction of the second 0.5 m lift (approx.) of fine and coarse filters material at El. 144 m with a 10-tonne smooth-drum compactor with vibration (4 passes) from Sta 0+500 m to 40+730 m. ■ Placement of a third 0.5 m thick lift of coarse filter from El. 144 m to 144.5 m with an excavator from Sta. 0+170 m to 0+335 m. ■ Placement of a third 0.5 m thick lift of fine filter from El. 143.5 m to 144 m upstream of the coarse filter with an excavator from Sta. 0+170 m to 0+335 m.

5.0 FOUNDATION APPROVAL

No foundation approval was done during the reporting period.

Table 3: Details of the Foundation Approvals

Name	Structure	Sta. and Offset	Date of Approval	Comment

6.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 4 and Table 5 present the samples collected or tested by the QA and QC as well as PNG field results.

Table 4: Samples taken by the QC

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result
FF-03-2018	2018-05-09		Fine filter	Central Dike, Sta. 0+835 m, El. 144 m.		
FF-05-2018	2018-05-09		Fine filter	Central Dike, Sta. 0+275 m, El. 144.5 m.		
FF-06-2018	2018-05-09		Fine filter	Central Dike, Sta. 0+775 m, El. 144 m.		
FF-07-2018	2018-05-09		Fine filter	Stockpile (SANA Crusher)		

Table 5: Samples taken by the QA

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result
FF-04-2018	2018-05-09		Fine filter	Central Dike, Sta. 0+835 m, El. 144 m.		

7.0 PHOTOGRAPH

Photograph CD-1838: From Sta 40+750/-31 m, looking NE. Placement of a second 0.5 m thick lift of fine filter from El. 143.5 m to 144 m upstream of the coarse filter with an excavator from Sta. 0+500 m to 0+835 m and from 0+930 to 40+730 m.

Photograph CD-1838: From Sta 0+835/-20 m, looking N. Placement of a second 0.5 m thick lift of coarse filter from El. 143.5 m to 144 m with an excavator from Sta. 0+500 m to 0+835 m and from 0+930 to 40+730 m.

Photograph CD-1840: From Sta 0+575/-15 m, looking NW. Compaction of the second 0.5 m lift (approx.) of fine and coarse filters material at El. 144 m with a 10-tonne smooth-drum compactor with vibration (4 passes) from Sta 0+500 m to 40+730 m.

QA DAILY REPORT

DATE May 11th 2018 1897439-1576-TM-Rev0

TO Patrice Gagnon, Pier-Éric McDonald
Agnico Eagle Mines Ltd, Meadowbank Division

CC Frédérick Bolduc, Alexandre Lavallée

FROM Samuel Barbeau **EMAIL sbarbeau@golder.com**

QA DAILY REPORT FOR MAY 10TH, 2018 – TSF SOUTH CELL CONSTRUCTION - MEADOWBANK (1897439)

1.0 WEATHER

- Temperature around -8°C, sunny.

2.0 HEALTH AND SAFETY

- Cold weather and ice: apply caution when driving or walking on icy surfaces, wear appropriate clothing.
- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.
- Coactivity on the dikes: be aware of blind spots and safe spots, keep good communication and visual contact with the operators. It is recommended to call on the radio when entering Central Dike on either side when heavy equipment is working in the area.
- The snow bank at the intersection of the saddle road and the west road blocks the views when driving southbound on the west road going toward the saddle road. The snow berm will be corrected in the following days.

3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

During the daily construction meeting and during the day the following discussions were held:

- The QA manager reiterated that the compaction of the filters must be done on the same day as the placement to prevent the filter from freezing before compaction. Yesterday a section of the third lift was placed but not compacted. The compactor operator had left the construction site. The foreman had to operate the compactor to complete the second lift but did not have the time to compact the section of the third lift on the same day as the placement.
- The QA manager reiterated the need to bring a portable nuclear gauge (PNG) on site for the QC program.

4.0 DESCRIPTION OF CONSTRUCTION WORK PERFORMED AND QA OBSERVATIONS

The QA activities by Golder are based on periodic inspections performed by the QA Engineer in order to monitor the construction activities and progress of the structure of the South Cell of the TSF. This report must be read in conjunction with the QC Report. The following tables summarize the progress and observations made for each structure.

Table 1: QA observations for Saddle Dam 3

Activity or Area	Comments
None	

Table 2: QA Observations for Central Dike

Activity or Area	Comments
Upstream	■ Placement of a third 0.5 m thick lift of coarse filter from El. 144 m to 144.5 m with an excavator from Sta. 0+335 m to 40+730 m. ■ Placement of a third 0.5 m thick lift of fine filter from El. 143.5 m to 144 m upstream of the coarse filter with an excavator from Sta. 0+335 m to 0+940 m. ■ Compaction of the third 0.5 m lift (approx.) of fine and coarse filters material at El. 144.5 m with a 10-tonne smooth-drum compactor with vibration (4 passes) from Sta 0+335 m to 0+900 m.

5.0 FOUNDATION APPROVAL

No foundation approval was done during the reporting period.

Table 3: Details of the Foundation Approvals

Name	Structure	Sta. and Offset	Date of Approval	Comment

6.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 4 and Table 5 present the samples collected or tested by the QA and QC as well as PNG field results.

Table 4: Samples taken by the QC

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result

Table 5: Samples taken by the QA

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result
CF-04-2018	2018-05-06	2018-05-10	Coarse filter	Central Dike, Sta. 0+980m, El. 143.5m	Gradation	Compliant[1]
					Water content	4.3%

[1]The fine part of the curve exceeds the recommended proportions. However, the material is acceptable provided it is well graded.

7.0 PHOTOGRAPH

Photograph CD-1841: From Sta 0+475/-14 m, looking N. Placement of a third 0.5 m thick lift of coarse filter from El. 144 m to 144.5 m with an excavator from Sta. 0+335 m to 40+730 m.

Photograph CD-1842: From Sta 0+380/-16 m, looking S. Placement of a third 0.5 m thick lift of fine filter from El. 143.5 m to 144 m upstream of the coarse filter with an excavator from Sta. 0+335 m to 0+940 m.

Photograph CD-1843: From Sta 0+460/-23 m, looking S. Compaction of the third 0.5 m lift (approx.) of fine and coarse filters material at El. 144.5 m with a 10-tonne smooth-drum compactor with vibration (4 passes) from Sta 0+335m to 0+900 m.

QA DAILY REPORT

DATE May 12th 2018 1897439-1576-TM-Rev0

TO Patrice Gagnon, Pier-Éric McDonald
Agnico Eagle Mines Ltd, Meadowbank Division

CC Frédérick Bolduc, Alexandre Lavallée

FROM Samuel Barbeau **EMAIL sbarbeau@golder.com**

QA DAILY REPORT FOR MAY 11TH, 2018 – TSF SOUTH CELL CONSTRUCTION - MEADOWBANK (1897439)

1.0 WEATHER

- Temperature around -11°C, sunny, cloudy and snowy.

2.0 HEALTH AND SAFETY

- Cold weather and ice: apply caution when driving or walking on icy surfaces, wear appropriate clothing.
- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.
- Coactivity on the dikes: be aware of blind spots and safe spots, keep good communication and visual contact with the operators. It is recommended to call on the radio when entering Central Dike on either side when heavy equipment is working in the area.
- No equipment was available today to correct the snow bank at the intersection of the saddle road and the west road that blocks the views when driving southbound on the west road going toward the saddle road. It will be corrected when equipment is available.

3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

During the daily construction meeting and during the day the following discussions were held:

- As the compacted sieved till (Type 1) stockpile is expected to remain frozen until August approximately, AEM asked if fine filter material (0-20 mm) mixed with 6% bentonite by mass and one layer of geotextile on the LLDPE liner could replace the compacted sieved till of the SD3 upstream toe liner tie-in, as it is planned to replace the compacted sieved till of the erosion protection layer.
- Following discussions with the Designer, the QA manager reiterated that the compacted sieved till class was required for the upstream toe liner tie-in for the following reasons:

- The impermeability required for that part of the design may not be obtained with the fine filter and bentonite mix.
- It is planned that water will be directly ponding on the SD3 toe liner tie-in. Last year, it was expected that the water elevation in summer 2018 would reach 142 m. If AEM has revised his water management plan, the Designer would require the details of the water management plan.
- With the possibility of a raise of the south cell if the in-pit deposition plans are delayed, the water level could increase significantly.

4.0 DESCRIPTION OF CONSTRUCTION WORK PERFORMED AND QA OBSERVATIONS

The QA activities by Golder are based on periodic inspections performed by the QA Engineer in order to monitor the construction activities and progress of the structure of the South Cell of the TSF. This report must be read in conjunction with the QC Report. The following tables summarize the progress and observations made for each structure.

Table 1: QA observations for Saddle Dam 3

Activity or Area	Comments
None	

Table 2: QA Observations for Central Dike

Activity or Area	Comments
Upstream	■ Placement of a third 0.5 m thick lift of fine filter from El. 144 m to 144.5 m upstream of the coarse filter with an excavator from Sta. 0+940 m to 40+730 m. ■ Compaction of the third 0.5 m lift (approx.) of fine and coarse filters material at El. 144.5 m with a 10-tonne smooth-drum compactor with vibration (4 passes) from Sta 0+900 m to 40+730 m. ■ Placement of a fourth 0.5 m thick lift of coarse filter from El. 144.5 m to 145 m with an excavator from Sta. 0+170 m to 40+730 m. ■ Profiling of the upstream slope (2H:1V) from El. 143 to 145 m with an excavator between Sta. 0+175 and 0+330 m and between Sta. 0+600 m and 0+715 m. The removed material was placed on the fourth 0.5 m thick lift of fine filter from El. 144.5 m to 145 m upstream of the coarse filter with an excavator from Sta. 0+170 m to 0+330 m and between Sta. 0+600 m and 0+715 m.

5.0 FOUNDATION APPROVAL

No foundation approval was done during the reporting period.

Table 3: Details of the Foundation Approvals

Name	Structure	Sta. and Offset	Date of Approval	Comment

6.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 4 and Table 5 present the samples collected or tested by the QA and QC as well as PNG field results.

Table 4: Samples taken by the QC

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result
FF-08-2018	2018-05-10		Fine filter	Stockpile (SANA Crusher)		
FF-09-2018	2018-05-11		Fine filter	Central Dike, Sta. 0+235 m, El. 145 m		
FF-10-2018	2018-05-11		Fine filter	Stockpile (SANA Crusher)		

Table 5: Samples taken by the QA

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result
FF-04-2018	2018-05-09	2018-05-11	Coarse filter	Central Dike, Sta. 0+980m, El. 143.5m	Gradation	Compliant
					Water content	3.26%

7.0 PHOTOGRAPH

Photograph CD-1844: From Sta 0+080/-49 m, looking SW. Placement of a fourth 0.5 m thick lift of coarse filter from El. 144.5 m to 145 m with an excavator from Sta. 0+170 m to 40+730 m.

Photograph CD-1845: From Sta 0+660/-20 m, looking N. Profiling of the upstream slope (2H:1V) from El. 143 to 145 m with an excavator between Sta. 0+175 and 0+330 m and between Sta. 0+600 m and 0+715 m. The removed material is placed on the fourth 0.5 m thick lift of fine filter from El. 144.5 m to 145 m upstream of the coarse filter with an excavator from Sta. 0+170 m to 0+330 m and between Sta. 0+600 m and 0+715 m.

QA DAILY REPORT

DATE May 13th 2018 1897439-1576-TM-Rev0

TO Patrice Gagnon, Pier-Éric McDonald
Agnico Eagle Mines Ltd, Meadowbank Division

CC Frédérick Bolduc, Alexandre Lavallée

FROM Samuel Barbeau **EMAIL sbarbeau@golder.com**

QA DAILY REPORT FOR MAY 12TH, 2018 – TSF SOUTH CELL CONSTRUCTION - MEADOWBANK (1897439)

1.0 WEATHER

- Temperature around -11°C, cloudy.

2.0 HEALTH AND SAFETY

- Cold weather and ice: apply caution when driving or walking on icy surfaces, wear appropriate clothing.
- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.
- Coactivity on the dikes: be aware of blind spots and safe spots, keep good communication and visual contact with the operators. It is recommended to call on the radio when entering Central Dike on either side when heavy equipment is working in the area.

3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

During the daily construction meeting and during the day the following discussions were held:

- Following discussion with AEM, the SD3 toe liner tie-in is expected to be built in August approximately, as the compacted sieved till (Type 1) stockpile is expected to remain frozen until then.

4.0 DESCRIPTION OF CONSTRUCTION WORK PERFORMED AND QA OBSERVATIONS

The QA activities by Golder are based on periodic inspections performed by the QA Engineer in order to monitor the construction activities and progress of the structure of the South Cell of the TSF. This report must be read in conjunction with the QC Report. The following tables summarize the progress and observations made for each structure.

Table 1: QA observations for Saddle Dam 3

Activity or Area	Comments
None	

Table 2: QA Observations for Central Dike

Activity or Area	Comments
Upstream	■ Profiling of the upstream slope (2H:1V) from El. 143 to 145 m with an excavator between Sta. 0+330 and 0+600 m and between Sta. 0+715 m and 40+730 m. The removed material was placed with material from the fine filter stockpile on the fourth 0.5 m thick lift of fine filter from El. 144.5 m to 145 m upstream of the coarse filter with an excavator from Sta. 0+330 m to 0+600 m and between Sta. 0+715 m and 40+730 m. ■ Compaction of the fourth 0.5 m lift (approx.) of fine and coarse filters material at El. 145 m with a 10-tonne smooth-drum compactor with vibration (4 passes) from Sta 0+170 m to 0+930 m.

5.0 FOUNDATION APPROVAL

No foundation approval was done during the reporting period.

Table 3: Details of the Foundation Approvals

Name	Structure	Sta. and Offset	Date of Approval	Comment

6.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 4 and Table 5 present the samples collected or tested by the QA and QC as well as PNG field results.

Table 4: Samples taken by the QC

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result

Table 5: Samples taken by the QA

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result

7.0 PHOTOGRAPH

Photograph CD-1846: From Sta 0+835/-25 m, looking N. Profiling of the upstream slope (2H:1V) from El. 143 to 145 m with an excavator between Sta. 0+330 and 0+600 m and between Sta. 0+715 m and 40+730 m. The removed material was placed with material from the fine filter stockpile on the fourth 0.5 m thick lift of fine filter from El. 144.5 m to 145 m upstream of the coarse filter with an excavator from Sta. 0+330 m to 0+600 m and between Sta. 0+715 m and 40+730 m.

Photograph CD-1847: From Sta 0+085/-48 m, looking SE. Compaction of the fourth 0.5 m lift (approx.) of fine and coarse filters material at El. 145 m with a 10-tonne smooth-drum compactor with vibration (4 passes) from Sta 0+170 m to 0+930 m.

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QA DAILY REPORT

DATE May 14th 2018 1897439-1576-TM-Rev0

TO Patrice Gagnon, Pier-Éric McDonald
Agnico Eagle Mines Ltd, Meadowbank Division

CC Frédérick Bolduc, Alexandre Lavallée

FROM Samuel Barbeau **EMAIL sbarbeau@golder.com**

QA DAILY REPORT FOR MAY 13TH, 2018 – TSF SOUTH CELL CONSTRUCTION - MEADOWBANK (1897439)

1.0 WEATHER

- Temperature around -12°C, sunny and cloudy.

2.0 HEALTH AND SAFETY

- Cold weather and ice: apply caution when driving or walking on icy surfaces, wear appropriate clothing.
- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.
- Coactivity on the dikes: be aware of blind spots and safe spots, keep good communication and visual contact with the operators. It is recommended to call on the radio when entering Central Dike on either side when heavy equipment is working in the area.
- A fresh snow layer makes surfaces slippery: apply caution when driving or walking on snowy surfaces.
- The snow bank at the intersection of the saddle road and the west road blocked the views when driving southbound on the west road going toward the saddle road. The snow bank was corrected with a loader.

3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

During the daily construction meeting and during the day the following discussions were held:

- The placement, compaction and profiling of the four lifts of coarse and fine filters from Sta. 0+170 m to 40+730 m at El. 143 m to El 145 m are completed.
- Following discussion with AEM, options were considered to replace the low quality till of the Protection Cover for the LLDPE Geomembrane on Saddle Dam 3, as the low quality till is also expected to remain frozen until August approximately. AEM asked whether the low quality till could be replaced by coarse filter material or

by fine filter material (0-20 mm) mixed with 6% bentonite by mass. The question was forwarded to the Designer.

- Regarding the rising of the protection layer on SD3, the QA manager asked for an update on the expected water level in the TSF South Cell.
- The QA manager required that the LLDPE geomembrane crest anchoring trench be re-excavated from Sta. 40+730 m to 0+830 m, as it was shallower and narrower than required by the design.
- Following discussion with AEM, the samples numbers were modified to follow the sequential number of the previous years.

4.0 DESCRIPTION OF CONSTRUCTION WORK PERFORMED AND QA OBSERVATIONS

The QA activities by Golder are based on periodic inspections performed by the QA Engineer in order to monitor the construction activities and progress of the structure of the South Cell of the TSF. This report must be read in conjunction with the QC Report. The following tables summarize the progress and observations made for each structure.

Table 1: QA observations for Saddle Dam 3

Activity or Area	Comments
Saddle road (access to SD3)	■ Snow removal on saddle road.

Table 2: QA Observations for Central Dike

Activity or Area	Comments
Upstream	■ Compaction of the fourth 0.5 m lift (approx.) of fine and coarse filters material at El. 145 m with a 10-tonne smooth-drum compactor with vibration (4 passes) from Sta. 0+930 m to 40+730 m. ■ Final rolling of the upstream slope in view of the LLDPE geomembrane installation from Sta. 0+170 m to 40+730 m. ■ Excavation of the LLDPE geomembrane crest anchoring trench from Sta. 40+730 m to 0+830 m.
Downstream	■ Profiling of the downstream slope (1.5H:1V) from El. 143 to 145 m with an excavator between Sta. 0+440 m and 0+530 m and between Sta. 0+745 m and 0+835 m.

5.0 FOUNDATION APPROVAL

No foundation approval was done during the reporting period.

Table 3: Details of the Foundation Approvals

Name	Structure	Sta. and Offset	Date of Approval	Comment

6.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 4 and Table 5 present the samples collected or tested by the QA and QC as well as PNG field results.

Table 4: Samples taken by the QC

Sample ID	Date Sampled	Date Tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result
CF-377-2018	2018-05-06	2018-05-09	Coarse Filter	Sta. 0+270m, El. 143.5m	Gradation	Compliant[1]
					Water content	2.3%
FF-383-2018	2018-05-09	2018-05-10	Fine filter	Central Dike, Sta. 0+835 m, El. 144 m.	Gradation	Compliant
					Water content	3.4%
FF-385-2018	2018-05-09	2018-05-10	Fine filter	Central Dike, Sta. 0+275 m, El. 144.5 m.	Gradation	Compliant
					Water content	2.6%
FF-386-2018	2018-05-09	2018-05-10	Fine filter	Central Dike, Sta. 0+775 m, El. 144 m.	Gradation	Compliant
					Water content	2.9%
FF-387-2018	2018-05-09	2018-05-10	Fine filter	Stockpile (SANA Crusher)	Gradation	Compliant
					Water content	3.6%
FF-388-2018	2018-05-10	2018-05-12	Fine filter	Stockpile (SANA Crusher)	Gradation	Compliant
					Water content	3.0%
FF-389-2018	2018-05-11	2018-05-12	Fine filter	Central Dike, Sta. 0+235 m, El. 145 m	Gradation	Compliant
					Water content	3.1%

FF-390-2018	2018-05-11	2018-05-12	Fine filter	Stockpile (SANA Crusher)	Gradation	Compliant
					Water content	2.9%

[1]The fine part of the curve exceeds the recommended proportions. However, the material is acceptable provided it is well graded.

Table 5: Samples taken by the QA

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result

7.0 PHOTOGRAPH

Photograph CD-1848: From Sta. 40+780/-15 m, looking N. Compaction of the fourth 0.5 m lift (approx.) of fine and coarse filters material at El. 145 m with a 10-tonne smooth-drum compactor with vibration (4 passes) from Sta 0+930 m to 40+730 m.

Photograph CD-1849: From Sta. 40+750/-17 m, looking NE. Final rolling of the upstream slope in view of the LLDPE geomembrane installation from Sta. 0+170 m to 40+730 m.

Photograph CD-1850: From Sta. 0+160/+20 m, looking SW. Profiling of the downstream slope (1.5H:1V) from El. 143 to 145 m with an excavator between Sta. 0+440 m and 0+530 m and between Sta. 0+745 m and 0+835 m.

Photograph CD-1851: From Sta. 0+910/-18 m, looking S. Excavation of the LLDPE geomembrane crest anchoring trench from Sta. 40+730 m to 0+830 m.

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QA DAILY REPORT

DATE May 15th 2018 1897439-1576-TM-Rev0

TO Patrice Gagnon, Pier-Éric McDonald
Agnico Eagle Mines Ltd, Meadowbank Division

CC Frédérick Bolduc, Alexandre Lavallée

FROM Marion Habersetzer **EMAIL mhabersetzer@golder.com**

QA DAILY REPORT FOR MAY 14TH, 2018 – TSF SOUTH CELL CONSTRUCTION - MEADOWBANK (1897439)

1.0 WEATHER

- Temperature around -13°C, sunny and cloudy.

2.0 HEALTH AND SAFETY

- Cold weather and ice: apply caution when driving or walking on icy surfaces, wear appropriate clothing.
- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.
- Coactivity on the dikes: be aware of blind spots and safe spots, keep good communication and visual contact with the operators. It is recommended to call on the radio when entering Central Dike on either side when heavy equipment is working in the area.
- A fresh snow layer makes surfaces slippery: apply caution when driving or walking on snowy surfaces.

3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

During the daily construction meeting and during the day the following discussions were held:

- The access to SD3 by the Saddle Road is ready and preparation works for the liner installation can begin.
- The removal of snow on the upstream side of SD3 has begun, however the existing LLDPE liner can only be cleared of snow using hand shovels.

4.0 DESCRIPTION OF CONSTRUCTION WORK PERFORMED AND QA OBSERVATIONS

The QA activities by Golder are based on periodic inspections performed by the QA Engineer in order to monitor the construction activities and progress of the structure of the South Cell of the TSF. This report must be read in

conjunction with the QC Report. The following tables summarize the progress and observations made for each structure.

Table 1: QA observations for Saddle Dam 3

Activity or Area	Comments
Snow removal (upstream side)	■ Removal of snow on the upstream slope of SD3 with an excavator above El. 143 m, from Sta. 20+640 to 20+760 m. ■ Removal of snow on the existing LLDPE liner between El. 142 m and 143 m with a hand shovel from Sta. 20+740 to 20+760 m. Some snow remains.

Table 2: QA Observations for Central Dike

Activity or Area	Comments
Upstream	■ Excavation of the LLDPE geomembrane crest anchoring trench from Sta. 0+830 m to 0+170 m.
Downstream	■ Profiling of the downstream slope (1.5H:1V) from El. 143 m to 145 m with an excavator between Sta. 0+835 m and 0+940 m

5.0 FOUNDATION APPROVAL

No foundation approval was done during the reporting period.

Table 3: Details of the Foundation Approvals

Name	Structure	Sta. and Offset	Date of Approval	Comment

6.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 4 and

Table 5 present the samples collected or tested by the QA and QC as well as PNG field results.

Table 4: Samples taken by the QC

Sample ID	Date Sampled	Date Tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result

Table 5: Samples taken by the QA

Sample ID	Date sampled	Date tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result

7.0 PHOTOGRAPH

Photograph SD-297: From Sta. 20+730/-10 m, looking SE. Removal of snow on the upstream slope of SD3 with an excavator, from Sta. 20+640 to 20+760 m.

Photograph CD-1852: From Sta. 0+500/-25 m, looking N. Excavation of the LLDPE geomembrane crest anchoring trench from Sta. 0+830 m to 0+170 m.

Photograph CD-1853: From Sta. 0+850/+3 m, looking S. Profiling of the downstream slope (1.5H:1V) from El. 143 to 145 m with an excavator between Sta. 0+835 m and 0+940 m.

QA DAILY REPORT

DATE May 16th 2018 1897439-1576-TM-Rev0

TO Patrice Gagnon, Pier-Éric McDonald
Agnico Eagle Mines Ltd, Meadowbank Division

CC Frédérick Bolduc, Alexandre Lavallée

FROM Marion Habersetzer **EMAIL mhabersetzer@golder.com**

QA DAILY REPORT FOR MAY 15TH, 2018 – TSF SOUTH CELL CONSTRUCTION - MEADOWBANK (1897439)

1.0 WEATHER

- Temperature around -10°C, sunny.

2.0 HEALTH AND SAFETY

- Cold weather and ice: apply caution when driving or walking on icy surfaces, wear appropriate clothing.
- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation.
- Coactivity on the dikes: be aware of blind spots and safe spots, keep good communication and visual contact with the operators. It is recommended to call on the radio when entering Central Dike on either side when heavy equipment is working in the area.
- A spill (about 10L of hydraulic oil) was noticed yesterday on Central Dike and cleaned up today. An environmental report was issued.
- A blast is planned at 12:45 in Pit E5.

3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

During the daily construction meeting and during the day the following discussions were held:

- Patrice Gagnon (AEM representative) leaves the site today and Pier-Éric McDonald will arrive on Thursday (May 17th). Until then, the Dike Supervisor (Olivier Jacques) will be in charge of the works.
- The available bentonite quantities are limited on site. As a result, it would be better to keep low-quality till as construction material in the upstream LLDPE liner protection on SD3, as stated in the design. In order to leave some time for the stockpiles to thaw, the installation of this protection cover has been postponed until August.

- The QA Manager pointed out that since the upstream toe liner tie-in on SD3 will only be done in August when the compacted sieved till (Type 1) is thawed, it will be important to have enough sand bags to secure the LLDPE liner in place until then.
- The QA Manager inspected visually the LLDPE rolls stored between Central Dike and the Rock Storage Facility. The new rolls are stored outside on 2 trailers, while old rolls are stored on the ground and are covered in snow. Those seem to be leftovers from last year's construction season and should not be used on the dikes this year. Most new rolls are in good condition, with some rolls on the blue trailer showing tears on their outer layers. It will be important before the LLDPE liner placement to discard the first few meters of the rolls to ensure that only intact, good quality material is used.

4.0 DESCRIPTION OF CONSTRUCTION WORK PERFORMED AND QA OBSERVATIONS

The QA activities by Golder are based on periodic inspections performed by the QA Engineer in order to monitor the construction activities and progress of the structure of the South Cell of the TSF. This report must be read in conjunction with the QC Report. The following tables summarize the progress and observations made for each structure.

Table 1: QA observations for Saddle Dam 3

Activity or Area	Comments
Snow removal (upstream side)	■ Removal of snow on the upstream slope of SD3 with an excavator above El. 143 m, from Sta. 20+620 m to 20+640 m.

Table 2: QA Observations for Central Dike

Activity or Area	Comments
Downstream	■ Profiling of the downstream slope (1.5H:1V) from El. 143 to 145 m with an excavator between Sta. 0+940 m and 0+990 m.

5.0 FOUNDATION APPROVAL

No foundation approval was done during the reporting period.

Table 3: Details of the Foundation Approvals

Name	Structure	Sta. and Offset	Date of Approval	Comment

6.0 SAMPLING, LABORATORY AND FIELD TESTING

Table 4 and

Table 5 present the samples collected or tested by the QA and QC as well as PNG field results.

Table 4: Samples taken by the QC

Sample ID	Date Sampled	Date Tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result

Table 5: Samples taken by the QA

Sample ID	Date Sampled	Date Tested	Fill Material Type	Location (Station/Offset Elevation)	Test	Testing Result

7.0 PHOTOGRAPH

Photograph CD-1854: From Sta. 0+960/-13 m, looking N. Profiling of the downstream slope (1.5H:1V) from El. 143 to 145 m with an excavator between Sta. 0+940 m and 0+990 m.

Photograph from the LLDPE storage site: View of new rolls stored on a trailer, showing tears.

Photograph from the LLDPE storage site: View of old rolls stored on the ground.

QA DAILY REPORT

DATE May 17th 2018 1897439-1576-TM-Rev0

TO Patrice Gagnon, Pier-Éric McDonald
Agnico Eagle Mines Ltd, Meadowbank Division

CC Frédérick Bolduc, Alexandre Lavallée

FROM Marion Habersetzer **EMAIL mhabersetzer@golder.com**

QA DAILY REPORT FOR MAY 16TH, 2018 – TSF SOUTH CELL CONSTRUCTION - MEADOWBANK (1897439)

1.0 WEATHER

- Temperature around -10°C, cloudy and windy

2.0 HEALTH AND SAFETY

- Cold weather and ice: apply caution when driving or walking on icy surfaces, wear appropriate clothing.
- Dust is still an issue on the construction field; be vigilant by staying out of the dust cloud near construction activities and road circulation. The personnel working on foot will wear a mask due to the toxicity of the dust (fine tailings dust).
- A blast is planned at 12:45 at Vault.
- A caribou was spotted on Saddle Road this morning. It was reiterated that in case of an encounter with wildlife, the lights on the vehicle and the engine must be switched off.

3.0 DISCUSSION AND DAILY CONSTRUCTION MEETING

During the daily construction meeting and during the day the following discussions were held:

- The final cleanup of the existing LLDPE liner for the installation of the new panels is planned for Saturday and Sunday. The QA Manager reiterated that the liner must be dry and free of dust on at least 1 m from the top to allow for welding of the new LLDPE liner.
- Since the ultramafic volcanic (UM) rockfill on the crest of SD3 is frozen, a dozer will be used to rip the anchoring trench.
- After discussion between AEM and the Designer, it was decided to replace the compacted sieved till (Type 1) in the LLDPE liner protection cover on SD3 with low quality till that will be sieved with an excavator, with a layer of geotextile on the LLDPE liner. The low quality till and the fine rockfill layers will remain as designed.

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4.0 DESCRIPTION OF CONSTRUCTION WORK PERFORMED AND QA OBSERVATIONS

The QA activities by Golder are based on periodic inspections performed by the QA Engineer in order to monitor the construction activities and progress of the structure of the South Cell of the TSF. This report must be read in conjunction with the QC Report. The following tables summarize the progress and observations made for each structure.

Table 1: QA observations for Saddle Dam 3

Activity or Area	Comments
Snow removal (upstream side)	■ Removal of snow on the upstream slope of SD3 above El. 142 m, from Sta. 20+620 m to 20+780 m. The snow was first removed with the excavator with a smooth lip bucket, and a hand shovel was used to remove the remaining snow on the LLDPE liner between El. 142 m and 143 m.
Upstream	■ Scarification of the frozen ultramafic volcanic (UM) rockfill on the crest with a dozer for the anchoring trench excavation between Sta. 20+605 m and 20+780 m. ■ Excavation of the LLDPE geomembrane crest anchoring trench with an excavator from Sta. 20+675 m to 20+780 m.

Table 2: QA Observations for Central Dike

Activity or Area	Comments
Upstream	■ Clean-up of the existing LLDPE with pressurized air stream in preparation for liner installation between Sta. 0+170 m and 40+780 m.

5.0 FOUNDATION APPROVAL

No foundation approval was done during the reporting period.

Table 3: Details of the Foundation Approvals

Name	Structure	Sta. and Offset	Date of Approval	Comment