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December 20, 2019

Ms. Ashlynn Winton
New Mexico Environment Department
Ground Water Quality Bureau – Water Protection Division
Mining Environmental Compliance Section
Harold Runnels Building
1190 Saint Francis Drive
Santa Fe, NM 87502

Subject: Monthly Construction Update, November 2019, in Partial Fulfillment of item #4, "Request for Additional Information and Conditional Approval of Construction Quality Management Plan Phase I Construction, Mt. Taylor Mine Reactivation Rev. 0, 6/15/2018 for Conditions 31 and 32 of Discharge Permit 61"

Dear Ms. Winton,

Rio Grande Resources is pleased to submit the November 2019 Monthly Construction Update, attached with this letter. This Monthly Construction Update is sent as requested in item #4 of the NMED letter dated 9/11/18: Request for Additional Information and Conditional Approval of Construction Quality Management Plan Phase 1 Construction Mt Taylor Mine Reactivation Rev. O, 6/15/2018 for Conditions 31 and 32 of Discharge Permit 61.

If you have any questions, please contact me at (505) 287-7971 or by email at bruce.norquist@ga.com. A hard-copy of this document is also being sent by regular mail.

Sincerely,

A handwritten signature in black ink that reads "Bruce Norquist".

Bruce Norquist
Facilities Manager, Mt. Taylor Mine
Rio Grande Resources Corporation

CC: David Otori, NMMMD (via email)

This construction update report provides details of construction activities that occurred in November, 2019. It is being prepared and sent as partial fulfillment of the 9/11/18 letter from NMED, "Request for Additional Information and Conditional Approval of Construction Quality Management Plan Phase I Construction Mt Taylor Mine Reactivation Rev 0, 6/15/2018 for Conditions 31 and 32 of Discharge Permit 61." It provides an update of ongoing activities, forecast of future activities and discusses schedule delays and proposed plan changes.

Milestones to the Beginning of November 2019:

- 1) Construction Design Package – Completed 1/18/18
- 2) Contract Bid Award – Awarded 4/11/18, Contractor Selected and Notified
- 3) RGR Preparation Work on the MWTU ponds (1, 2, 3, 4, 5, 6, 7 and 8) – May and June, 2018
- 4) Construction Contractor Mobilization to Site – Began 5/8/18
- 5) Reshaping of Waste Rock Pile – Began 5/14/18, Completed 7/12/18
- 6) Delivery of HDPE Liner Materials to Site – Completed 6/7/18
- 7) Disposal Cell Floor Clay Liner Construction –
 - Began construction of the clay floor liner by 7/13/18
 - Initial liner floor area 80% completed by 8/1/18
 - Task completion delayed because original clay source was exhausted
 - Initial liner floor area completed 10/22/18
 - The disposal cell clay liner remains open and uncompleted because of the need for expansion to accommodate unexpected excessive quantities of contaminated materials excavated from the MWTU ponds, ore pad and ore pad retention pond
 - Contaminated soils being excavated have been nearly 4 times greater than estimated
 - The final configuration of the disposal cell cannot be determined until the full extent of remaining contaminated soils is known
 - At the end of June 2019, the existing disposal cell was filled to 100% of as-then designed capacity
 - A plan for eastward expansion of the disposal cell was presented to MMD and NMED. At the end of June, NMED informed RGR that eastward expansion would not be allowed without a permit modification
- 8) Contaminated Sediment and Soil Placement in Disposal Cell – Began 8/15/18, in-progress
 - This task could not start until a suitable amount of disposal cell floor had been constructed
 - Resumed placement of contaminated materials on 3/12/19, once weather warmed sufficiently to achieve compaction
 - Majority of contaminated materials to date have come from the MWTU ponds
- 9) South Stormwater Pond Excavation - began 8/2/18
 - Excavation was 40% complete by 8/13/18 and 100% completed by 10/20/18
 - The task was stopped to prioritize excavation work of MWTU Pond No.3 as well as to control stormwater runoff during the monsoon season
 - Task completion was delayed due to difficulties in ripping a persistent sandstone lens
 - Task completion was also delayed due to the radiological scanning and cleanup verification process

- 10) South Stormwater Pond Concrete Structures – completed
 - Run-down chute base, wing walls and South Force Main concrete pipe pad –completed 10/4/18
- 11) South Stormwater Pond – Clay Liner and Protective Soil Cover – 100% Complete
 - Construction of 2-ft Clay Liner began 10/24/18 and completed by 11/19/18
 - Pre-clay liner radiation cleanup verified complete by 10/22/18
 - Placement of 6-inch protective soil cover began 11/19/18 and completed by 11/27/18
 - The SSWP was made functional and ready to receive stormwater runoff by 12/5/18
- 12) South Stormwater Pond (SSWP) – Other Construction Completed
 - Placement of rip-rap at toe of run-down chute completed by 11/26/18
 - Installation of overflow structure started 11/29/18, finished by 12/21/18
 - Installation of the concrete cloth (rundown channel) completed 4/22/19
 - Installation was delayed because of continued freezing weather conditions
- 13) New Septic System - Started 7/11/18, 100% Completed 8/7/18
- 14) Service Road Fill – 100% Completed 8/13/18
- 15) Waste Rock Pile (WRP) –
 - Placement of clay cover soil on outer slopes – Began 8/15/18
 - Completed placement of all clay cover soil by 11/20/18
 - Final compaction of all clay cover soil on the out-slopes completed 12/5/18
 - Conducted Radon Flux Test on the south and west out-slopes on 4/25/19
 - South and west out-slopes are the only completed portions of the WRP cap
 - Results of the Radon Flux test were available on 5/7/19
 - Average flux rate was 1.23 pCi/m²s; maximum flux rate was 3.12 pCi/m²s
 - Maximum flux rate was well below the permitted limit of 20.0 pCi/m²s
 - Erosion blankets cover and protect nearly all of the south and west slopes
 - Erosion blankets and straw waddles placed on south slope – May 2019
 - Erosion blankets and straw waddles placed on west slope – June 2019
 - Reached full capacity of the disposal cell in June 2019
 - Requested approval for upward expansion in July 2019
 - Received approval for upward expansion in August 2019
 - Began filling expanded area with contaminated materials in August 2019
 - Vegetation Test Plot Plan
 - Created stockpiles of construction material in Borrow Area A
 - General fill
 - Clayey soil for liner material
 - Growth Media soil for the Vegetation Test Plot Plan
 - Majority of available soil is suitable for this use
 - Material sampling and characterization is in progress
- 16) MWTU Pond No. 3 – 100% Completed
 - Excavation – Began 9/10/18, 100% Complete by 10/5/18
 - Backfilling to design grade
 - Radiation cleanup verified complete, approval to backfill received on 10/24/18
 - Repair and Upgrade of Concrete Hydraulic Structures 100% Completed
 - Refurbishment of hydraulic structures were completed by 12/12/18.

Existing Mining Operation

- Placement and finish grading of the 6-inch Clay Sub-liner
 - Began 11/27/18; Completed by 12/14/18; slowed by winter weather
- Liner Installation – 100% Completed
 - i. Began 12/17/19, completed 12/26/18
- Backfilling of Liner Trench – started 1/9/19; completed 1/15/19
 - Work delayed from December due to cold weather and associated compaction issues
- Water Filling for Leak Location Survey of Primary Liner
 - RGR crews began work on the clean-water delivery system on 12/4/18
 - RGR began filling MWTU Pond No.3 with clean water on 1/17/19
 - Could not start until after the anchor trench backfilling had been completed
 - RGR crews completed water filling on 2/19/19 for the final leak test
 - The leak test for the primary liner was performed on 2/26/19; no leaks were detected
 - The liner was considered fully commissioned for water storage by 2/28/19
 - Installed power for the LDCS pump system (sump) in early March 2019

17) MWTU Pond No. 2

- Began excavation of contaminated sediments 9/19/18, completed 10/19/18
- Restarted excavating and hauling contaminated soil from MWTU Pond 2 on 3/12/19
- By the end of May 2019, all remaining contaminated soils had been excavated
- Results of confirmatory soil sampling were received in early July 2019
- ERG provided a Final Status Survey (FSS) report by 7/10/19
 - Results showed that cleanup efforts were successful
- NMED gave approval to begin Pond 2 reconstruction activities (7/25/19)
- Cleanup efforts resulted in a much deeper pond than planned
 - Approximately 9,000 cu. yds. of contaminated sediment and soil had been removed, nearly 4 times more than originally planned
- Reconstruction of the pond began in August 2019 with backfilling of the floor and sides
- Earthworks contractor finished filling and reconstructing the pond to the subgrade design elevation in September 2019
- Approximately 50% of the clay sub-liner had been completed by the end of September
- Refurbishment of concrete structures was completed

18) Stormwater Drainage System – North Alignment

- Began excavation 10/30/18
- Task was significantly delayed because of a lack of material availability
 - Several of the primary manholes had long procurement lead-times
- By 12/13/18, manhole MH26 was set in place
 - By 12/18/18, MH26 was connected to the south site drainage system and the SSWP
- By 1/23/19 the north alignment drainage system was connected and fully functional
- North alignment commissioned by the end of January 2019
- By 3/31/19 a new concrete rundown for manhole 27 was completed
- By 4/3/19 a new rundown above manhole 28 was completed

19) Stormwater Drainage System – South Alignment

- A contractor was awarded the bid-work by the end of March 2019
- Manhole structures were fabricated and delivered on site by the end of March
- Job mobilization was completed by 4/9/19 and excavation work began by 4/10/19

- A 2-day delay occurred almost immediately when it was discovered the existing drainage pipe for connection was not at the expected grade
- Snow and rain caused additional delays
- By 4/16/19, the first manhole structure was excavated and the first 60 feet of trench was excavated
- Another delay occurred when several unknown utility lines were encountered
 - Rain and snow caused additional delays
- By 4/19/19, the base for the first manhole was poured
- A delay occurred when an unknown buried power cable was severed
- By 4/26/19, the first barrel of manhole 23 was placed and 40 feet of pipe installed
- By 4/30/19 connection was made to the existing storm drain
- By end of May, all trenching, main pipe installation and manhole installation had been completed
- By end of June, the south force main system installation was completed

20) Ore Stockpile Removal

- RGR began contract negotiations with a licensed receiving facility in early 2019
- A bid for hauling ore was awarded in early March 2019
- Contracts were still in legal review at the end of April 2019
- In April, preparation of the ore pile for hauling began
- By 6/10/19 all milling and haulage agreements were signed
- On 6/25/19, the first loads of ore were hauled to the mill
- Currently operating 5 trucks per day, 5 days a week

21) Phase II Reactivation Projects

- Surface piping upgrades - A consultant was selected to perform integrity testing of the MWTU facility piping in February 2019
- Consultants for revising the Water Treatment Plant (WTP) design were contacted in February 2019
 - Discussed selenium treatment problems; an industry-wide issue
 - RGR's WTP engineering group informed RGR about a major design change required for the previously submitted WTP plan
 - The adsorptive media process technology was found to not be currently viable
 - The technology vendor is insolvent and no other vendors provide this technology
 - NMED informed RGR to wait to submit new water treatment designs until the application for DP-61 renewal is made
- RGR is in communication with a hoist engineering consultant
- Refurbishment of the facility is proceeding
 - Heating and air handling units were made operational
 - Water supply lines were made operational

22) Connection to Surface Water Drains

- A holding tank was installed for WP5 by end of March 2019
- By end of June 2019, electrical power equipment had been installed for WP5
- Completed installation of all major piping and electrical apparatus for WP5 in August 2019
- WP5 pump system was completed and made functional by mid-October
- North Force Main system – RGR's professional engineer set up for pressure test (API "Recommended Practice 1110")

23) MWTU Pond No.'s 1, 4, 5, 6, 7 and 8

- By end of May, all of the sediments on the side-slopes of ponds 4 and 8 had been removed
- Excavation of contaminated sediments and soils from pond 8 was completed in August 2019
- By the end of September 2019, contaminated sediments had been fully removed from ponds 1, 4, and 7
- Removal of contaminated soils from ponds 1, 6, and 7 was completed

November 2019 Milestones

1) MWTU Pond No.2

The liner installation crew arrived on site 11/11/19. By 11/15/19 the liner installation was completed. The secondary liner was tested for leaks and passed. Following that, the anchor trenches were backfilled. By the end of the month, pond 2 was ready to be filled with water in advance of the primary leak location survey. An escape ladder was built into the west side of the pond liner.

2) Other MWTU Ponds

By the end of November, contaminated soils only remained in pond 1.

Pond 1 – A persistent hotspot remained in the east side of the pond. A minor hotspot remained on the north side. By the end of the month about 80% of the contaminated soils on the east side had been removed.

Pond 5 – Completed excavation of contaminated soils. The pond was ready for the final status survey (FSS).

Pond 8 – a small hotspot of contaminated material was found in the berm. This was removed and pond 8 was made ready for the final status survey.

3) Ore Pile Removal

Removal and transportation of the ore pile material to the mill continued. There are currently 5 trucks per day operating 5 days per week.

4) Waste Rock Pile (WRP) – Disposal Cell

Filling of the disposal cell continued with placement of contaminated materials excavated from the MWTU ponds. By the end of the month, the remaining cell capacity had been filled. Shaping activities progressed with a focus on the east and north sides. Several days of rain and mud slowed this progress.

5) Waste Rock Pile Vegetation Test Plot Plan

On hold until the spring construction season.

6) Borrow Area A

A stockpile of contaminated soil was removed and placed in the disposal cell. This stockpile was created from the scraping of the surface prior to excavation work.

7) Phase II Activities

-Facility Refurbishment

By the end of the month, all wind bracing repairs to the hoist house and hoist house shop were completed.

All plumbing repairs to the facility bathrooms were completed.

Repairs to the Service building heating system did not get completed because of unavailability of critical original manufacture parts (pump). Availability of the recirculating pump has been problematic; it has been on backorder for over 9 weeks.

8) WP5 Well Connections

North Force Main (NFM) – a pressure test was performed on the pipeline by RGR’s professional engineer (API Recommended Practice 1110). The pipeline initially passed a 3-hour test. However, upon re-test, the pipeline failed the DP-61 mandated 14-hour test. RGR has been working on remedies, but has not identified any leaks. There was some discussion that the HDPE segment of the pipeline may be expanding during the tests, causing pressure loss. The test does not allow for any pipe pressure loss, which can be affected by pipe expansion.

South Force Main (SFM) – a pressure test was conducted on the SFM. The pipeline failed the API “Recommended Practices 1110” test. The line was excavated and one of the joints was found to be leaking. RGR is currently working to correct the problem. The barge has been built and is awaiting the commissioning of the SFM pipeline.

The WP5 well was pumped all month, at a rate of about 500 gallons per day. Because the NFM has not passed its pressure test, the water is being trucked to pond 3.

9) Investigation of Potential Diesel Spill

On 11/4/19, RGR’s diesel tank removal contractor arrived on site to begin pumping the diesel product from the above-ground storage tanks (ASTs). Their task was to pump, clean, dismantle and remove the ASTs from the site. By 11/8/19 all of the diesel product from the 7 ASTs was pumped out and disposed of off-site. They cleaned the tanks for dismantling and vacuumed the attendant lines below. They began dismantling the tanks and all attached lines. The tanks were prepared for off-site removal, but poor weather prevented the physical removal of the tanks from the site by the end of the month.

By 11/18/19, the diesel remediation consultant arrived on site and conducted a utility location survey. By the end of the month the consultant sent a draft work plan to RGR for review.

RGR was finalizing a draft diesel release report. This report summarizes the work RGR performed in its investigation of the potential diesel release reported 7/3/19.

Forecasted Activities

- 1) MWTU Pond No. 2 Excavation, Reshaping and Liner Installation
 - Filling of pond 2 with water and performing the primary liner leak location survey anticipated for late February
- 2) Removal of Contaminated Sediments from MWTU Ponds 1 and 4 through 8
 - Anticipate removing all contaminated materials from Pond 1 in December
 - Anticipate conducting “Final Status Surveys” on Ponds 1, 4, 5, 6, 7 and 8 in December and January
- 3) Disposal Cell Expansion (Upwards)
 - Anticipate completing shaping activities in December
 - Anticipate commencing capping activities in the spring construction season; cold weather prevents compaction work from being effective
- 4) Ore Pile Removal
 - Anticipating 1 to 1.5 years to complete
 - Work through winter may slow because of weather and related safety conditions
- 5) Connection to Surface Water Drains
 - WP5 transfer line system commissioning on hold until NFM system passes pressure test; no estimated date, particularly with the onset of the winter season
 - As a temporary measure, all pumped well water will continue to be trucked to Pond No.3
- 6) Vegetation Test Plot Plan
 - Working towards plan approval
 - RGR does not anticipate the test plot plan area to be seeded in 2019 because of:
 - Completion of the reference area study late in the fall season
 - Unapproved test plot plan
 - Slopes are already protected by erosion control blankets
- 7) Potential Diesel Release
 - Anticipate removing the tanks from the site in mid-January

Critical Path Items

- 1) Approval for eastward expansion of the disposal cell
 - This has become a critical path due to the amount of contaminated soil still expected to be removed from the ore pad and ore pad retention pond, site debris and other yet-to-be identified contaminated soils on site

Plan Changes

- Upward expansion of the disposal cell has been approved (8/16/19)
- No new variances issued in November 2019

Drawing Variances

VARIANCE #	Drawing			Variance Subject	Date
	Sheet #	Drawing #	Title		
2018-5	ST2, 5, 7, 9, 10, 11	See Tables 2018-5.1 and -5.2. GS00-GC130, 132, 133, 134	Storm Manholes	Constructibility issues of the reinforced concrete storm manholes - design diameters not large enough to accept drain pipe sizes. STMH20-23, 27, 28, 29; MH01-04	7/23/18
2018-6	ST19A	GS00-GC119-02	Force Main North Plan View	concrete valve vault, elbow, and coordinates	9/14/18
	ST19B	GS00-GC120-02		concrete valve vault, elbow, coordinates, elevati	
	ST20	GS00-GC121-02		elbow, elevations	
2018-8	SW00	GSSW-GC01-01	South Storm Water Pond and Waste Rock Pile-Cover Sheet and Key Drawing	deletion of reference to ore storage	9/19/18
	SW02	GSSW-CS504-01	Waste Rock Pile and Disposal Cell Survey Layout and Control Points	deletion of reference to ore storage	
	SW03	GSSW-CB101-01	South Storm Water Pond and Waste Rock Pile-Site Plan	deletion of reference to ore storage	
	SW06A	GSSW-CB104-01	South Storm Water Pond and Waste Rock Pile-Site Plan	deletion of reference to ore storage	
	SW06B	GSSW-CB105-01	Waste Rock Pile and Disposal Cell Earthwork and Grading Plan - South	deletion of reference to ore storage	
2018-11	MW02	MW00-CX501-00	Pond Liner Details	Delete seaming of geomembranes edges in the anchor trench, extend geomembrane to the top of the outer trench wall.	12/21/2018

Construction Specification Variances

VARIANCE #	Specification		Section		Approval	
	Number	Title	Number	Title	By	Date
2018-1	MW-CB01-00	EARTHWORK FOR POND CONSTRUCTION	2.2.1	Waste Pile Slopes	A.K. Kuhn	6/7/2018
2018-2	MW-CB01-00	EARTHWORK FOR POND CONSTRUCTION	2.2.2	Mine Debris Pit	A.K. Kuhn	6/7/2018
2018-3	MW-CB01-00	EARTHWORK FOR POND CONSTRUCTION	2.2.3	Disposal Cell on the Waste Pile	A.K. Kuhn	6/8/2018
2018-4	MW-CB01-00	EARTHWORK FOR POND CONSTRUCTION	2.2.4 (new)	Shaft Muck Excavation, Placement and Compaction	A.K. Kuhn	6/8/2018
2018-7	GS-GC02-00	DRAINAGE AND HYDRAULIC CONTROL STRUCTURES, Rev	2.7	Manholes, Catch Basins, and Vaults	A.K. Kuhn	9/14/18
2018-9	MW-CB01-00	EARTHWORK FOR POND CONSTRUCTION	2.2.3	Disposal Cell on the Waste Pile	A.K. Kuhn	10/15/2018
2018-10	MW-CX01-00	INSTALLATION OF GEOMEMBRANE POND LINERS	2.5	Mechanical Connections	A. K. Kuhn	11/21/2018
			3.11	Rub Sheets at Inflow Points	A. K. Kuhn	11/21/2018
			Also Drawing Sheet HY-18, Note 7		A. K. Kuhn	11/21/2018

Delays and Changes to Project Schedule

General Comments:

A major project delay occurred in June when NMED informed RGR that it could not proceed with eastward expansion of the disposal cell. Eastward expansion of the disposal cell is necessary to provide storage capacity for additional contaminated materials. Without the ability to expand the disposal cell eastward for placing these contaminated materials, RGR will not be able to proceed with much of the remaining Phase I work. Because of the dependence of subsequent work on the removal of contaminated materials, RGR will also have to delay completion of many Phase II and III projects. These include lining of the MWTU ponds and ore pad runoff pond, cleaning up and reconstructing the ore pad, installing process piping for the water treatment plant, commissioning of the water treatment system and dewatering the mine. Ultimately, these delays impact mining activities.

Phase I work tasks to date have generally been delayed due to:

- Excavation of excessive amounts of contaminated materials in the MWTU ponds and waste rock pile and excessive amounts of debris encountered during excavation
- In-field radiological measurements heavily influenced by “shine”
- Need for radium soil sampling (long analyses time) instead of fast continuous gamma scanning during cleanup efforts
- Weather conditions
- Equipment mechanical failures contributed to slower moving of materials.
- Encounters with unknown utility lines during construction
- Approvals for plan changes caused by unforeseen conditions
- Longer task durations resulting from increased work effort to properly conduct cleanup activities and accommodate regulations

Plan Changes:

- 1) MWTU Pond No. 3 was the first MWTU pond to be lined, instead of MWTU Pond No.2
 - It was initially believed that both MWTU Ponds 2 and 3 could be lined by the 12/1/18 deadline
 - This belief changed when it became apparent that the contractor was unable to mobilize sufficient resources to complete excavation, backfilling and lining of more than 1 pond by the deadline
 - Because of heavy monsoonal rains in August and September 2018, control of stormwater would become problematic if MWTU Pond No.2 was taken offline
 - A decision was made to prioritize the completion of Pond No.3 to meet the deadline and plans were put into place
 - In September, the contractor believed it could finish one pond ahead of the deadline
 - Dependent on weather; temperatures would need to be above freezing for compaction and moisture could not be on the liner during installation. There was a physical need to get the liner installed before winter weather set in.
- 2) Shortening of the storm drainage system south alignment to accommodate the eastward expansion of the disposal cell (May 2019)

Delays:

- 1) Ability to line a single MWTU Pond (Pond No.3) by the deadline of 12/1/18 was impacted for the following reasons:
 - A significant delay of the liner installation occurred due the greater amount of contamination needing to be removed and subsequent increase in backfill volume needed to reach design grade
 - Schedule slip first began with the excavation process of Pond 3 when excessive quantities of contaminated materials were encountered
 - Original estimate of 2,500 cu. yds.; actually excavated 9,000+ cu. yds.
 - This significantly lengthened excavation time and ultimately contributed to pushing back the liner installation task into late December
 - Refurbishment of the hydraulic structures was also delayed because of this

- Schedule slip increased further because of increased radiological sampling and analysis time during the cleanup verification process
 - Schedule was originally based on continuous correlated gamma scanning
 - Wide-area “shine” rendered gamma scanning unreliable as a confirmatory cleanup tool
 - Schedule was impacted because of the need to perform radium soil sampling
 - Each radium soil sampling and analysis campaign required 9 days of time for return of results before work could continue; with 3 cleanup campaigns, this resulted in 27 days of unanticipated schedule slip
 - Through the course of work activities, it became apparent that the contractor was unable to mobilize sufficient resources to complete more than one excavation and construction task at a time
 - Because of excessive quantities of contaminated materials as well as excessive radiological sampling time, nearly 1 full month of delay was added to the schedule
 - Difficulties in procuring specialized and sole-source materials during upgrades of the hydraulic structures
 - Design complexity of forming and pouring new concrete hydraulic structures. Each required specialized forming, pouring of concrete and cure time
 - There were 9 individual concrete pours. Each pour required 3 to 4 days duration for forming, pouring and curing for a total of 1-1/2 months of work in concrete work alone
 - This level of work effort was not accounted for in the original schedule. Ultimately this caused a 2-week delay
 - Water stop materials were sole-sourced and had a long lead time.
 - Another week of schedule slip occurred because of late scheduling by the contractor; the liner installer could not mobilize by the time needed with the short notice given
 - Four more days of delay occurred due to winter weather and the Christmas holiday
 - While the geomembranes had been fully installed in Pond 3, completion and commissioning were delayed another 3 weeks because backfilling of the anchor trench has not yet been completed
 - The cause of the delay in anchor trench backfilling was primarily due to persistent winter weather on site since 12/26/18;
 - Compaction could not be performed in freezing weather
 - The delay in backfilling of the anchor trench delayed final commissioning of Pond No.3
 - Filling of the pond could not proceed until the anchor trench was backfilled
 - In turn, the final leak test of the primary liner could not be conducted until Pond No.3 was filled with water
 - Generally, winter weather was the most significant delay in commissioning of the liner. However, project delays from prior activities had contributed strongly to the schedule slip of the liner installation.
- 2) Excavation of contaminated sediments from MWTU Ponds 1, 4, 5, 6, 7 and 8 delayed by
- Other priority work tasks (i.e. MWTU Pond No.3)
 - Cold weather, contributed to decreased excavation efficiency
 - Safety issues related to equipment operation on steep slopes and multiple crews working in small areas
 - Regulatory cancellation of plans for the eastward expansion of the disposal cell

3) Stormwater Drainage System Schedule

- Significant delays due to availability of materials, procurement management issues and lack of contractor's ability to commit additional resources
 - Originally anticipated that work crews and materials would be on-site by late August
 - Materials did not arrive on site until 10/23/18
 - Manhole structures – long fabrication lead time
 - Contractor procurement issues
 - Need for more specialized and different equipment than that of regular earthmoving
- Cold weather conditions during construction

4) Construction of the Disposal Cell Clay Cap

- Originally a Phase II activity
- Anticipated to be partially constructed in late 2019 depending on completing the upward expansion of the disposal cell
 - Construction of the disposal cell clay cap was intended to occur after the excavation and subsequent placement of all contaminated sediments from the MWTU ponds and contaminated soils from the ore pad and retention pond

5) Removal of the Low-grade Ore stockpile

- Delayed by lengthy legal review of the contracts and attendant negotiations between RGR and the mill

Note: After discussion with MMD and NMED in July 2018, the task of removing low-grade-ore and ore pad materials was deleted from the Phase I implementation plan. Under the Phase I plan the low-grade ore material would have been temporarily placed in the disposal cell. While deleted from the Phase I implementation plan, RGR has committed to removing the low-grade ore materials from the site and shipping to a licensed receiver.

6) Restart of Phase I Activities in 2019

- Resumption of Phase I work was delayed in January and February due to winter weather and cold temperatures
 - Specified compaction of fills could not be achieved because of freezing temperatures

7) Connection to Surface Water Drains

- The delay in completing this part of the project occurred because of:
 - i. Need to finish constructing the Force Main piping system
 - ii. Preparation and setup for the Force Main piping integrity tests
 - iii. Installation of electrical and power facilities

8) Earthwork Soil Sampling

- Return of soil sample analysis results has been slow due to high seasonal demand at commercial laboratories. Analysis time for the hydraulic conductivity tests was particularly affected by this seasonal demand

9) MWTU Pond 2

- Delays occurred in the repair of the hydraulic structures due to previous work commitments by the concrete contractor in September 2019. Because of the uncertainty in completion dates, the schedule for the liner installation was also pushed back by about 3 weeks.