PERMIT REVISION 13-2 TO PERMIT NO. CI002RE
MT. TAYLOR MINE
EXISTING MINING OPERATION

MINING AND MINERALS DIVISION
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

Permit Revision 13-2 ("Revision 13-2" or "Revision") to Permit No. CI002RE is issued by the Director of the Mining and Minerals Division ("MMD") of the New Mexico Energy, Minerals and Natural Resources Department ("EMNRD") to:

Rio Grande Resources Corporation ("RGR");
whose correct address is: P.O. Box 1150
Grants, NM 87020

("Permittee") for the Mount Taylor Mine ("Mine") located in Cibola County, New Mexico.

This Permit Revision 13-2 approves RGR's April 5, 2013 application to transition from standby status to operating (herein termed active) status, and incorporates the updated Closeout Plan for the Mine, Permit No. CI002RE (November 2013). This Revision also approves the joint financial assurance ("FA") held by EMNRD and the New Mexico Environment Department ("NMED") for the updated Closeout Plan in the amount of $7,606,477.00 in the form of an Irrevocable Standby Letter of Credit No. MB60516318, as amended, issued by Bank of the West. The following sections of Permit No. CI002RE are added or revised to read as follows:

Section 1 (Revision 13-2). STATUTES AND REGULATIONS

This Permit is issued pursuant to the New Mexico Mining Act, NMSA 1978, §69-36-1, et seq. (Repl. Pamp. 1993) ("Act") and is subject to: all applicable requirements of the Act and New Mexico Mining Act Rules Title 19, Chapter 10, Parts 1 through 14 NMAC ("Rules"), and any other regulations, which are now, or hereafter in force under the Act; and all such requirements and regulations are made a part of this Permit by this reference.

Section 1A (Revision 13-2). PERMIT REVISION PACKAGE

A. The Permit Revision Package ("PRP") is comprised of the following documents:

1. April 2013, *Application for Revision 13-2, Standby to Active Status,* consisting of:

   a. *Application*
      i. *Text, Tables and Figures*
      ii. *Appendix A - Drawings*
      iii. *Appendix B - Calculations*
      iv. *Appendix C - Other Permits*
      v. *Appendix D - Ion Exchange Plant Design*

   b. *Closeout/Closure Plan (CCP)*

i. *CCP Text, Tables and Figures*
ii. *CCP Appendix A - Drawings*
iii. *CCP Appendix B - Engineering Analysis*
iv. *CCP Appendix C - Technical Specifications*
v. *CCP Appendix D - Soil Investigation, Radiological Investigation, Lab Test Results*
vi. *Original Closeout Plan Soil Data*

2. April 2013, *Public Notice, Revision 13-2*
3. November 2013, *Revised Application for Revision 13-2, Standby to Active Status*
4. November 2013, *Revised Closeout/Closure Plan, Revision 13-2*
5. April 2014, *Errata and Addenda for Revision 13-2*
6. July 2015, *Revision 2 Addendum to Application for Revision 13-2, (Molybdenum-Selenium treatment)*
7. July 2015, *Revision 2 Addendum to Closeout/Closure Plan for Revision 13-2 (Mo-Se treatment)*
8. April 2017, *Mt. Taylor Mine Reactivation Plan – Phases, Tasks, and Sequence; Draft Rev. A*
9. May 2017, *Mt. Taylor Mine Closeout/Closure Plan, Rev. 1 – Clarification of Plans for Ore Pad Removal*
10. June 2017, *Mt. Taylor Mine Reactivation Plan – Phases, Tasks, and Sequence; Revision B - Supplements to Draft Rev. A*

Section 2 (Revision 13-2). PERMIT AREA AND DESIGN LIMITS

A. The permit area is comprised of: Section 5 in T12N-R7W N.M.P.M.; S 1/2 Section 18, Section 19, W 1/2 Section 29, Section 30, N 1/2 and SE 1/4 Section 31, NW1/4 and S 1/2 Section 32 in Tl3N-R7W N.M.P.M.; E 1/2 Section 24, NE 1/4 Section 25 in Tl3N-R8W, N.M.P.M.; the pipeline corridor from the N ¼ corner Section 24 to the point of discharge in T14N-R8W (total length 20,200 feet, width 4 feet); and the access road from NE/NW/NW Section 24 to center of Section 24 of T13N-R8W (total length 4,100 feet, width 50 feet), in Cibola County, New Mexico - and pictured in Figure 1-3, *Mine Permit Area* of the permit application.

B. The approved design limits for individual units are identified in Figure 1-2 of the PRP, in the Mount Taylor Mine Closeout/Closure Plan ("CCP") dated July 2012, as revised (Revision 1), dated November 2013. The existing units include:

1. Service and Support Area including the Mine Shafts, Manway and Production.
2. South Waste Rock Pile.
3. Mine Water Treatment Unit Area.
4. Ore Stockpile Area.
5. Borrow Area.
6. South Storm Water Pond.
7. North Storm Water Pond.
8. County Road 334 Area.

Section 3 (Revision 13-2). **FINDINGS OF FACT**

A. The PRP and updated CCP are complete and contain all the information required, with the conditions outlined in this revision document, as required by §19.10.5.503.F.1, §19.10.5.506.B.1-4 NMAC, §19.10.5.506.J.1-6 NMAC.

B. The Permittee has paid the permit revision application fee of $5,000.00 as required by §19.10.2.201.J NMAC.

C. The Permittee has provided written information stating the name and official business address of the applicant and its agent for service of process, as required by §19.10.5.503.F.2 NMAC.

D. The Permittee has provided the required signature and certification, as required by §19.10.5.503.F.3 NMAC.

E. The Permittee is in compliance with §19.10.2 NMAC regarding fees.

F. The Permittee agrees to meet applicable federal and state environmental standards and regulations while on active status. On July 29, 2016 the Secretary of the Environment Department provided a written determination that indicated environmental standards of the Department are expected to achieve compliance if carried out as described in the closeout plan as required by §19.10.5.506.J.5 NMAC.

G. The Permittee agrees to comply with the applicable requirements of the Act, the Rules and the Permit during active status, as required by §19.10.5.503.F.6 and §19.10.5.506.J.6 NMAC.

H. Public notice for the application for revision of the Permit to transition from standby to active status was provided as required by §19.10.9 and §19.10.5.503.F.5 NMAC. Public notice for the updated Closeout Plan was provided as required by §19.10.9 and §19.10.5.506.J.1 NMAC.

I. Public notice of the public hearing was published by MMD on October 21, 2015 for the public hearing held on December 4, 2015, as required by §19.10.9.904.B NMAC.

J. The Permittee has provided satisfactory financial assurance to complete the Closeout Plan in the amount of **$7,606,477.00** (updated for inflation to 2016); as required by §19.10.5.506.J.2 NMAC. The financial assurance instrument is in the form of Irrevocable Standby Letter of Credit No. MB60516318, as amended (3/31/2017), issued by the Bank of the West, Global Trade Services, 13300 Crossroad Parkway North, City of Industry, CA 91746, and is in a form acceptable to the Director.

K. The approved Post-Mining Land Uses ("PMLU") for the Permit area are grazing and

commercial. The commercial PMLU areas are identified in the PRP, Mt. Taylor Mine CCP Revision 2 (July 2015), in Drawing MT13-CL-04, *Revision 2, Facility Disposition Plan*, as *"Facilities to Remain"* and indicated as *"Wells to Remain"* (see footnote to Table 5.1 in Revision 13-2, Appendix B). The CCP, subject to conditions in this permit revision, demonstrates that the work to be done will reclaim disturbed areas within the Permit area to a condition that allows for the re-establishment of a self-sustaining ecosystem on the Permit area following closure, appropriate for the life zone of the surrounding areas, unless conflicting in the areas designated as grazing and commercial PMLU pursuant to §19.10.5.507.A NMAC.

Section 5 (Revision 13-2). AGENCY RIGHT OF ENTRY

The Permittee shall allow the authorized representatives of the Director to enter as provided for in §19.10.5.503.F.6, §19.10.11.1101, and §19.10.12.1210 NMAC.

Section 6 (Revision 13-2). PERMIT COVERAGE

This Permit shall be binding on any person or persons conducting mining and reclamation operations under this Permit.

Section 8 (Revision 13-2). COMPLIANCE WITH THE PERMIT AND OTHER PERMITS

The Permittee shall conduct mining and reclamation operations only as described in the approved PRP, the Permit, and any revisions or modifications approved by the Director. The Permittee shall comply with any and all conditions that are incorporated into the PRP. Future submittals required by this Permit shall be presented in both electronic and written form to the Director for approval.

The Permittee will comply with the requirements of NMED discharge permit ("DP") 61 and meet applicable environmental standards as required by the Secretary of the Environment Department pursuant to §19.10.5.506.J.5 NMAC.

Section 9 (Revision 13-2). GENERAL OBLIGATIONS AND CONDITIONS

This Permit is subject to the following conditions:

A. The Permittee may be subject to enforcement action according to §19.10.11 NMAC for failing to conduct reclamation and closeout operations as described in the Closeout Plan or for failing to submit any of the following:

    1) annual reports as required by §19.10.5.510 NMAC;
    2) annual fees as required by §19.10.2.202 NMAC.

B. The Permittee shall include in the annual reports, information required by §19.10.5.510 NMAC. In addition, the following information shall be included:

    1) the status of closure activities for each unit;

2) any maintenance and repair work conducted for any closure component;
3) the date the work was done;
4) vegetative monitoring data as described in Appendix A of this Revision 13-2;
5) vegetative monitoring data collected on revegetated areas; and
6) meteorological data, if applicable.

C. The Permittee shall notify MMD 30 days prior to performing any permanent closeout/reclamation activities at the mine site.

D. MINE WATER TREATMENT UNIT AREA

The following conditions apply to the Mine Water Treatment Unit Area ("MWTU") and Ore Pad Runoff Retention Pond, as identified on Drawing MT13-AC-02, *Revision 2, Mine Reactivation Plan Mine Water Treatment (MWTU) Upgrades*. These conditions are required to mitigate the disturbances and provide for stabilization within the Permit area that will minimize future impact to the environment and protect air and water resources in accordance with §19.10.1.7.R.(1) NMAC.

The conditions are also required to reclaim the Permit area to a condition that allows for re-establishment of a self-sustaining ecosystem as required by §19.10.5.507.A NMAC.

1. Building Demolition and Removal

All MWTU facilities (illustrated on Drawing MT13-CL-04, *Revision 2, Facility Disposition Plan*, and listed in Appendix B of this Revision), shall be demolished, removed or buried. Demolition, removal and/or burial shall be accomplished by meeting the following conditions, which may be modified with MMD approval following final demolition and burial design.

a) Where footings, slabs, walls, pavement, manholes, vaults, stormwater controls, and other foundations are not demolished, they shall be covered with cover material to a minimum thickness of 24 inches, or greater thickness if needed to achieve the revegetation and erosion resistance standards.

b) Covered footings, slabs, walls, pavement, manholes, vaults, stormwater controls and other foundations shall be revegetated in accordance with Appendix A.

2. Pond Reclamation

At mine closeout the MWTU pond sediments shall be removed and placed within a lined disposal cell located within the South Waste Rock Pile Area ("SWRP") as shown on Drawing MT13-CL-13, *2013 Rev.1 Appendix A, Final Site Grading Plan*, and on Drawing MT13-CL-10, *2013 Rev.1, Appendix A, Final Grading and Cover Sections, SWRP Area*. The following conditions may be modified following final pond reclamation design, with MMD approval.

a) During pond sediment excavation, the site will be monitored for radiation in

accordance with the reclamation and post-reclamation radiation monitoring plan required in Section L.

b) Pond sediments shall be removed and placed in the lined disposal cell in the South Waste Rock Pile until the remaining pond surface has radiation levels that meet the requirements of Section L.

c) Remaining pond liners will be consolidated; demolished hydraulic controls and associated demolished concrete may be placed in the ponds before the pond berms are pushed into the ponds.

d) If necessary the ponds and other areas of the MWTU will be covered with sufficient cover material to achieve the performance standard for mine site radiation levels as described in Section L. The cover material may be derived from the berms surrounding the ponds or additional cover material may be required to be placed, in order to achieve the reclamation performance standard in Section L.

3. **Surface Shaping and Stormwater Management**

a) The Permittee shall regrade the MWTU in a manner that promotes positive drainage and eliminates, to the extent practicable, ponding on the final surfaces. The Permittee shall construct the surfaces to a final grade to direct stormwater to water management conveyances as shown on Drawing MT13-CL-13, *Appendix A, Final Site Grading Plan* in the CCP. RGR shall provide other erosion controls if required by the MMD. All final slopes shall be regraded to no steeper than a 3:1 slope gradient.

b) Designed channels for drainage control and sediment containment will be established on the reclaimed areas. The designed channels will be constructed to minimize the gradient and reduce flow velocities. These water diversion structures will be designed for a 100-year, 24-hour storm event or an alternative criterion approved by the MMD in consultation with other state or federal agencies.

4. **Cover Placement Plan**

a) Suitable cover material for the MWTU shall be placed or remain in place at a minimum thickness of 24 inches, or greater cover thickness if needed to achieve the performance standard for mine site radiation levels as described in Section L, achieve revegetation and erosion resistance, and to demonstrate that the cover material is protective of ground water as required by NMED. Test plot studies required in Section 9.M.3 shall be designed to demonstrate that the 24-inch thick cover will meet these requirements.

b) All areas used for cover material sources shall be graded for stormwater control, ripped to a minimum depth of 12 inches, and revegetated per the requirements of Appendix A. All slopes and high walls created by excavation of cover materials shall be no steeper than a 3:1 slope gradient.

5. **Revegetation Plan**

The MWTU shall be revegetated in accordance with revegetation standards set forth in Appendix A.

6. **Post-Mining Land Use**

The approved PMLU for the MWTU shall be grazing, in compliance with §19.10.5.507.A NMAC.

E. SOUTH WASTE ROCK PILE AREA

The following conditions apply to the South Waste Rock Pile Area ("SWRP"), as identified on Drawing MT13-CL-02, *Revision 1, Appendix A, Closeout Plan Index Sheet* in the CCP. These conditions are required to mitigate the disturbances within the Permit area and provide for stabilization of the Permit area that will minimize future impact to the environment and protect air and water resources in accordance with §19.10.1.7.R.(1) NMAC. The conditions are also required to reclaim the Permit area to a condition that allows for re-establishment of a self-sustaining ecosystem as required by §19.10.5.507.A NMAC. Specifications contained in these conditions may be modified during final design, with MMD approval.

1. **Pond Sediments Disposal Cell**

A clay-lined disposal cell for MWTU pond sediments shall be constructed within the SWRP as shown on Drawings MT13-CL-02, *Appendix A, Closeout Plan Index Sheet*, on MT13-CL-09, *Appendix A, Final Grading and Cover Plan-Waste Rock Pile Area,* and MT13-CL-10, *Appendix A, Final Grading and Cover Sections – SWRP Area*, respectively. The following conditions may be modified following pond sediment disposal cell design, with MMD approval.

a) The Permittee shall submit for MMD approval, construction plans and specifications (per disposal cell and cover designs in the CCP) for the lined disposal cell at least 45 days prior to construction commencement. Construction plans shall include design of the liner and disposal cell cover construction including hydraulic conductivity and other testing results of the liner and cover material, for MMD approval. The Permittee shall submit a Construction Quality Assurance Report ("CQAR") of the disposal cell to MMD within 180 days after completion of the disposal cell.

2. **Surface Shaping and Stormwater Management**

a) The Permittee shall regrade the SWRP in a manner that ensures positive drainage and eliminates, to the extent practicable, ponding on the top surfaces and final cover surfaces. The Permittee shall construct the surfaces to a final grade to direct stormwater to water management conveyances as shown on Drawing MT13-CL-13, *Appendix A, Final Site Grading Plan* in the CCP. RGR shall provide other

erosion controls if required by the MMD. All final slopes shall be regraded to no steeper than a 3:1 slope gradient.

b) Designed channels for drainage control and sediment containment will be established on the reclaimed areas. The designed channels will be constructed to minimize the gradient and reduce flow velocities. These water diversion structures will be designed for a 100-year, 24-hour storm event or an alternative criterion approved by the MMD in consultation with other state or federal agencies.

3. **Cover Placement Plan**

a) The SWRP shall be covered with a minimum of 24 inches, or greater thickness if needed, of suitable cover material to achieve the performance standard for mine site radiation levels as described in Section L, revegetation and erosion resistance, and to demonstrate that the cover material is protective of ground water as required by NMED. Test plot studies required in Condition 9.M.3 shall be designed to demonstrate that the 24-inch thick cover will meet these requirements.

b) All areas used for cover borrow material sources shall be graded for stormwater control, ripped and/or covered with an overall minimum thickness of 12 inches, and revegetated according to requirements of Appendix A. All slopes and high walls created by excavation of borrow pits shall be no steeper than a 3:1 slope gradient.

4. **Revegetation Plan**

The SWRP shall be revegetated in accordance with revegetation standards set forth in Appendix A.

5. **Post-Mining Land Use**

The PMLU for the SWRP shall be grazing, in compliance with §19.10.5.507.A NMAC.

F. BORROW AREAS

The following conditions apply to the Borrow Area (located immediately east of the "Ore Pad Area"), as identified on Drawing MT13-CL-02, *Appendix A, Closeout Plan Index Sheet* in the CCP. These conditions are required to mitigate the disturbances and provide for stabilization within the Permit area that will minimize future impact to the environment and protect air and water resources in accordance with §19.10.1.7.R.(1) NMAC. The conditions are also required to reclaim the Permit area to a condition that allows for re-establishment of a self-sustaining ecosystem as required by §19.10.5.507.A NMAC.

1. **Surface Shaping and Stormwater Management**

a) The Permittee shall regrade the Borrow Area and other areas used for borrow material sources in a manner that promotes positive drainage and eliminates, to the extent practicable, ponding on the final cover surfaces. The Permittee shall

construct the surfaces to a final grade to direct stormwater to water management conveyances as shown on Drawing MT13-CL-13, *Appendix A, Final Site Grading Plan* in the CCP. RGR shall provide other erosion controls if required by the MMD. All final slopes shall be regraded to no steeper than a 3:1 slope gradient.

b) Designed channels for drainage control and sediment containment will be established on the reclaimed areas. The designed channels will be constructed to minimize the gradient and reduce flow velocities. These water diversion structures will be designed for a 100-year, 24-hour storm event or an alternative criterion approved by the MMD in consultation with other state or federal agencies.

2. **Revegetation Plan**

a) Suitable material at the Borrow Area shall be ripped to a minimum depth of 12 inches. The final surface will achieve the performance standard for mine site radiation levels as described in Section L, and demonstrate erosion resistance.

b) The Borrow Area shall be revegetated in accordance with revegetation standards set forth in Appendix A.

3. **Post-Mining Land Use**

The PMLU for the Borrow Area shall be grazing in compliance with §19.10.5.507.A NMAC.

G. ORE PAD AREA

The following conditions apply to the existing Ore Pad Area ("OPA"), as identified on Drawing MT13-CL-02, *Revision 1, Appendix A, Closeout Plan Index Sheet*, and Drawing MT13-CL-04, *Revision 2, Facility Disposition Plan* in the CCP. These conditions are required to mitigate disturbances within the Permit area and provide for stabilization of the Permit area that will minimize future impact to the environment and protect air and water resources in accordance with §19.10.1.7.R.(1) NMAC. The conditions are also required to reclaim the Permit area to a condition that allows for re-establishment of a self-sustaining ecosystem as required by §19.10.5.507.A NMAC. Specifications contained in these conditions may be modified during final design, with MMD approval.

1. **Ore and Infrastructure Removal**

The ore stockpile presently covers 6.8 acres and contains approximately 60,000 tons of low-grade ore. The entire surface of the pile is covered with approximately two feet of native soil that is supporting established volunteer vegetation, consisting mostly of grasses.

a) Upon resumption of mine operations, and prior to placement of newly-mined ore from the mine on the OPA, the existing stockpile of ore will be removed from the OPA. Current stockpile cover soil that exceeds the *Joint Guidance for the Cleanup*

and Reclamation of Existing Uranium Mining Operations in New Mexico, dated March 2016 ("Joint Guidance") cleanup standard will be placed in the lined reactivation disposal cell located within the South Waste Rock Pile. Stockpile cover soil that meets the Joint Guidance cleanup standard may be utilized as fill or cover where needed on the mine site, upon MMD approval. Any remaining contaminated material will be excavated and placed in the lined reactivation disposal cell in the SWRP.

b) Following removal and relocation of the OPA cover soil, the existing stockpile of ore will be shipped off site to be used as feed stock in uranium milling (per April 2013 *Application for Revision 13-2, Standby to Active Status: Application, Section 2.6 - Ore Stockpile*, p. 11).

c) After stockpiled ore and contaminated materials are removed, the existing OPA working surface will be excavated and removed to the lined reactivation disposal cell in the SWRP. A new OPA will be reconstructed to upgraded standards: one foot of free-draining gravels or crushed sandstone (new working surface/travel course, maintained as necessary), overlying 18 inches of clay, on top of a single 60 mil thick HDPE geomembrane liner.

The upgraded OPA system will include a truck wash facility with catch basins for wash water and ore pad runoff that is delivered to a double-liner runoff retention pond, as illustrated in Drawings MT13-AC-12 *Appendix A, Ore Pad and Appurtenant Facilities-Plan View*, MT13-AC-13 (*-Sections, Detail E*), and MT13-AC-15 *Ore Pad Runoff Collection and Retention–Note 15, and* as described in *Section 3.3* of the *Application Permit Revision 1.*

d) Upon completion or cessation of mining operations and initiation of final reclamation, the OPA shall be dismantled. Following final removal of residual mined materials and contaminated soil and sediments from the OPA, the operation will excavate and fold the geomembrane liner, either burying it in-place or placing it into an adjacent MWTU pond excavation, replace clean soils to re-establish grade, and revegetate. Requirements of this Condition may be modified with MMD approval.

2. **Surface Shaping and Stormwater Management**

a) Following ore, contaminated materials and liner removal, the Permittee shall regrade the OPA in a manner that ensures positive drainage and eliminates, to the extent practicable, ponding on the top surfaces and final cover surfaces. The Permittee shall construct the surfaces to a final grade to direct stormwater to water management conveyances as shown on Drawing MT13-CL-13, *Appendix A, Final Site Grading Plan* in the CCP. RGR shall provide other erosion controls if required by the MMD. All final slopes shall be regraded to no steeper than a 3:1 slope gradient.

3. **Revegetation Plan**

a) At the time of final reclamation all contaminated materials will be removed to achieve the cleanup standard in Section L. The Operator will grade the surface for positive drainage and stormwater control, provide erosion resistance, and demonstrate that the cover material is protective of ground water as required by NMED. All slopes and high walls created by excavation of borrow pits shall be no steeper than a 3:1 slope gradient.

b) The reclaimed OPA shall be ripped to a minimum depth of 12 inches and revegetated in accordance with revegetation standards set forth in Appendix A.

4. **Post-Reclamation Radiological Survey**

The Permittee shall conduct a radiological survey of the disturbed and reclaimed OPA in accordance with the work plan required in Section L of this Permit Revision.

5. **Post-Mining Land Use**

The PMLU for the OPA shall be grazing, in compliance with §19.10.5.507.A NMAC.

H. PIPELINES

The following condition applies to process water pipelines and associated disturbances when they are no longer needed for site operations, water treatment or water management. The conditions are required to mitigate the disturbances within the Permit area and provide for stabilization of the Permit area that will minimize future impact to the environment and protect air and water resources in accordance with §19.10.1.7.R.(1) NMAC. The condition is also required to reclaim the Permit area to a condition that allows for re-establishment of a self-sustaining ecosystem as required by §19.10.5.507.A NMAC, and to meet applicable environmental standards as required by §69-36-11.B (4) of the Act and §19.10.5.506.J.5 NMAC.

1. **Demolition and Removal**

The Permittee shall remove and properly dispose of pipelines if not needed for post-reclamation water management.

a) The treated water discharge pipeline from the MWTU shall be removed and the pipeline corridor shall be regraded in a manner that ensures positive drainage and eliminates, to the extent practicable, ponding on the top surfaces.

2. **Revegetation Plan**

The treated water discharge pipeline corridor shall be revegetated in accordance with revegetation standards set forth in Appendix A.

3. **Post-Reclamation Radiological Survey**

The Permittee shall conduct a radiological survey of the disturbed and reclaimed pipeline areas in accordance with the work plan required in Section L.

I. MINE SHAFTS

The Permittee shall seal all shafts and other underground mine openings within the Permit area, unless conflicting with other agency requirements.

1. **Demolition, Removal and Closure**

Demolition, removal and closure of the twenty-four-foot diameter production/haulage shaft, the fourteen-foot diameter manway/ventilation shaft, connected access tunnels, and utility corridors for the shafts shall be performed as provided in the CCP per Section 4.1, Shaft Closures, shown in Drawings MT13-CL-05, *Appendix A, Shaft Closure – Manway/Vent* and MT13-CL-06, *Shaft Closure-Production Shaft*, and in CCP Revision 1 Technical Specifications *Appendix C.3, Revision 1, Shaft Plugging and Backfill.*

a) The Permittee shall conduct a radiological survey of the surface of the reclaimed shaft areas in accordance with the work plan required in Section L.

J. SERVICE AND SUPPORT AREA

The following conditions apply to facilities within the Service and Support Area, as identified in the Application, Revision 1 Drawing MT13-AC-01, *Appendix A, General Site Plan and Drawing Index*, and on Drawing MT13-CL-02, *Appendix A, Closeout Plan Index Sheet* in the CCP. These conditions are required in order to establish the beneficial use (PMLU) on a Permit area approved by the Director pursuant to §19.10.1.7.P.(5) NMAC, to mitigate the disturbances within the Permit area, and to provide for stabilization of the Permit area that will minimize future impact to the environment and protect air and water resources in accordance with §19.10.1.7.R.(1) NMAC.

1. **Commercial Post-Mining Land Use**

The PMLU shall be commercial for the ancillary facilities and areas identified in Appendix B. These areas are approved as a commercial PMLU subject to the following conditions:

a) The Permittee shall provide to MMD a building inspection certification signed by a professional engineer, that the buildings are in good condition, meet all applicable codes, are structurally sound, meet all zoning requirements, meet all local ordinances, and all utilities are operable. This certification shall be provided to MMD within 180 days of approval of the Permit Revision, and once every 5 years thereafter.

b) The Permittee shall submit, for MMD approval, a general erosion control plan to be implemented at closeout for the area covered by the commercial PMLU. The plan shall describe the installation of erosion control features including, but not be limited

to, road design construction, berms, culverts, diversions, dikes, sediment control ponds, revegetation, water bars, armoring or rip rapping. The plan shall be provided to MMD within 180 days of approval of the Permit Revision. The Plan shall be updated at least 90 days prior to implementation of reclamation in consideration of site specific conditions at the time.

c) The Permittee shall not be released from requirements of the New Mexico Mining Act
and Rules for those areas approved as commercial until the commercial PMLU has been implemented. Implementation shall be demonstrated as follows:

1. The Permittee shall conduct a radiological survey of the commercial PMLU area in accordance with the work plan required in Section L.

2. If soil contamination exists in and around all buildings and facilities for commercial use, the Permittee must demonstrate that any required remediation has been completed for these areas to be utilized for the commercial PMLU.

3. Maintain documentation that the area comprising the commercial PMLU meets NPDES requirements.

d) The Permittee shall demonstrate that they have either entered into long-term contractual commitments for the sale, lease or occupancy of a substantial portion of the areas approved for commercial PMLU use with commercial businesses, or can demonstrate to a reasonable certainty that such contractual commitments shall be executed either in conjunction with the release of the corresponding Permit area from the Mining Act or shortly thereafter. MMD shall determine whether the Permittee has complied with those requirements.

2. **Demolition and Burial**

All facilities shall be removed except those that may be left in place under the MMD-approved commercial PMLU. Demolition, removal, and/or burial shall be accomplished by meeting requirements of the following conditions (may be modified with MMD approval following final demolition and burial design):

a) Where footings, slabs, walls, pavement, manholes, vaults, stormwater controls, and other foundations are not included in the commercial PMLU, are abandoned in place, and not demolished, they shall be covered with topdressing to a depth of 24 inches minimum. The covered foundation areas shall be graded for stormwater control.

b) Covered footings, slabs, walls, pavement, manholes, vaults, stormwater controls, and other foundations not included in the commercial PMLU shall be revegetated in accordance with Appendix A.

c) A post-reclamation radiological survey shall be conducted on disturbed portions of the permit area, and where covered footings, slabs, walls, pavement, manholes, vaults, stormwater controls, and other foundation areas are not included in the commercial PMLU in accordance with the work plan required in Section L.

K. ANCILLARY FACILITIES

1. Electrical Distribution System

The Permittee shall remove all electrical systems and infrastructure, including outdoor lighting and transmission lines, not used in the commercial PMLU or not necessary for the site operation and maintenance, including water treatment, prior to release from requirements of the New Mexico Mining Act and Rules. The Permittee shall maintain the remaining portion of the electrical distribution system for the commercial PMLU in satisfactory condition that complies with all applicable building codes and regulations until the commercial PMLU has been implemented. Power poles not required for the electrical distribution system of the commercial PMLU shall be removed unless left in place as raptor habitat and approved by MMD.

2. Roads

The following conditions apply to all roads identified in the Permit area and on Drawing MT13-CL-04, *Revision 2, Facility Disposition Plan* in the CCP. These conditions are required in order to reclaim the Permit area to a condition that allows for re-establishment of a self-sustaining ecosystem as required by §19.10.5.507.A.

a) The County Road #334 right of way shall have contaminated soils removed and placed in the Waste Rock Pile Area.

b) Roads required for continued site maintenance will be identified within 180-days of implementation of reclamation.

c) Revegetation of reclaimed access roads shall be in accordance with Appendix A.

d) The Permittee shall conduct a radiological survey of reclaimed access roads and vehicle disturbance areas in accordance with the work plan required in Section L.

3. South and North ("Ore Pad Runoff Retention") Storm Water Ponds

a) When no longer needed for management of impacted mine site runoff, the South Storm Water Pond, as shown on Drawings MT13-CL-13, *Appendix A, Final Site Grading Plan – Note 6* and MT13-CL-09, *Appendix A, Final Grading and Cover Plan – Waste Rock Pile Area – Note 6,* shall have sediments removed and placed within the SWRP. The pond and related drainage pipes, manholes and concrete spillways will remain as a storm water retention basin. The following conditions may be modified following final pond reclamation design with MMD approval.

b) During reclamation of the MWTU area the North Storm Water Pond (Ore Pad Runoff Retention Pond) sediments shall be removed and placed within the SWRP as shown on Drawing MT13-CL-07, *Appendix A, Final Grading Plan- Mine Water Treatment Pond and Ore Pad Areas – Note 6.* The following conditions may be modified with MMD approval following final pond reclamation design with MMD approval.

c) Remaining pond liners, if any, will be consolidated and the pond berms will be pushed into the ponds.

d) If necessary, the ponds shall be covered with cover material to achieve the performance standard for mine site radiation levels as described in Section L. The cover material may be derived from the berms surrounding the ponds or additional cover material may be required to be placed to achieve the reclamation performance standard in Section L.

e) The South and North (Ore Pad Runoff Retention) Storm Water Ponds shall be revegetated in accordance with revegetation standards set forth in Appendix A.

f) The Permittee shall conduct a radiological survey of the surface of the reclaimed South and North (Ore Pad Runoff Retention) Storm Water Ponds in accordance with the work plan required in Section L.

4. **Exploration and Development Drill Holes**

The Permittee shall plug and abandon all drill holes within the Permit area in accordance with 19.10.3.302.L NMAC. If the Permittee conducts exploration or development within the Permit area that creates a new disturbance, the Permittee must identify the general areas or locations within the Permit area where drilling activities have taken place, and provide a general plan regarding measures that will be taken to minimize disturbance, enhance stability and control erosion. The Permittee shall also identify any areas of new disturbance due to exploration or development activities in each annual report submitted to MMD. In addition, the Permittee shall describe how these areas will be reclaimed and provide a schedule indicating when the reclamation work will take place. All new disturbed areas related to drilling shall be revegetated in accordance with Appendix A.

5. **Water, Dewatering and Monitoring Wells and Utility Conduits**

Unless required to be maintained by NMED under DP-61 or other NMED requirements, or otherwise required for post-closure operations, maintenance or monitoring, or are approved to remain for the commercial PMLU, the Permittee shall abandon all water wells, dewatering wells, utility conduits, and groundwater monitoring wells, in accordance with the requirements of NMED *Monitoring Well Construction and Abandonment Guidelines*; discharge permit DP-61; or the New Mexico Office of the State Engineer regulations in 19.27.7 NMAC.

6. **Mine Shafts**

The Permittee shall seal and safeguard all shafts and other penetrations from the ground surface within the Permit area, unless conflicting with other agency requirements. The Permittee shall submit to MMD for approval a closure plan for underground mine openings 180 days prior to closeout activities. The Permittee shall submit to MMD for approval a bat habitat study that addresses all openings within the Permit area, including the need for and design of bat-compatible enclosures. Openings shall be sealed with bat-compatible enclosures where features are identified as important bat habitat. The study shall be submitted to MMD no less than 180 days prior to closeout activities at any opening.

L. RADIATION CLEANUP CRITERIA

1. The mine permit area and affected areas shall be reclaimed in accordance with the *Joint Guidance for the Cleanup and Reclamation of Existing Uranium Mining Operations in New Mexico*, dated March 2016.

2. Radiation levels in the facilities that will be retained for PMLU shall not exceed NMED Radiation Control Bureau 20.3 NMAC criteria for the facilities' unrestricted release and use.

3. The Permittee shall submit to MMD for approval, a reclamation and post-reclamation radiological survey work plan for all disturbed areas and reclaimed mine units, at least 180-days prior to commencement of reclamation.

M. ADDITIONAL STUDIES

1. **Affected Areas**

All affected areas, as defined by §19.10.1.7.A.(3) NMAC shall be reclaimed according to §19.10.5.507.A and §19.10.1.7.R.1 NMAC. The Permittee shall identify affected areas pursuant to 19.10.1.7.A(3) NMAC, as required by MMD, prior to the commencement of final reclamation of the mine.

2. **Studies for Other Agencies**

The Permittee shall submit to MMD copies of any work plans or studies for reclamation or closeout of the Permit area and affected areas required by NMED or other agencies. If any submittals to NMED or other agencies indicate that additional or alternative closeout actions are necessary to meet New Mexico Mining Act requirements, MMD may require the Permittee to submit a request to modify or revise the Permit. MMD will review the request to determine if a modification or revision of this Permit is required by §19.10.5.504.B and §19.10.5.505.B NMAC.

3. **South Waste Rock Pile Test Plots**

Test plots shall be developed on the cover of the activation waste cell on the SWRP area (general location depicted on Figure 3-3, *Mine Activation Contaminated Pond Sediment Disposal Cell,* and on Drawing MT13-AC-08, *Revision 1, South Waste Rock Pile at Mine Reactivation – Plan View)*, to:

- Provide a site-specific means to demonstrate and document the success of selected plant species, amendments, and planting methods;
- Verify the adequacy of a 2.0 ft. cover thickness (versus 3.0 ft., or greater), where placed, to meet requirements of the *Joint Guidance for the Cleanup and Reclamation of Existing Uranium Mining Operations in New Mexico*, dated March 2016, support vegetation that meets requirements of Appendix A, resist erosion, and to demonstrate that the cover material is protective of ground water as required by NMED;
- Measure and document the radon attenuation performance of the cover with vegetation;
- NMED requests joint submission and approval of all test plot documents and would amend or modify DP-61 to include the study as a new condition.

RGR shall submit a test plot workplan within 180 days after approval of Revision 13-2. These requirements may be modified with MMD approval.

N. FINANCIAL ASSURANCE

The following conditions are required to ensure that adequate financial assurance is provided for the site, pursuant to §19.10.5.506.J.2, §19.10.12.1202.B, §19.10.12.1204.A, §19.10.12.1206.A, and §19.10.12.1210 NMAC.

1. The Permittee has provided joint financial assurance for the updated November 2013 Closeout Plan in the amount of **$7,606,477.00** (updated for inflation to 2016; dated 3/31/2017) in the form of an Irrevocable Standby Letter of Credit No. MB60516318, as amended, issued by Bank of the West.

2. The Permittee may apply for and obtain release of financial assurance in accordance with §19.10.12.1210 NMAC.

3. The Permittee shall evaluate the adequacy of the financial assurance approved as a part of the Permit every five years, beginning in 2022 or sooner as required by the Director. This evaluation shall be provided to MMD with the annual report due April 30th. If upon review of the evaluation, MMD determines that a change to the financial assurance amount or form is required; the Permittee shall submit to MMD a request to modify or revise the Permit. The Permittee may request a change to the financial assurance in accordance with §19.10.12 NMAC.

4. The Permittee shall not be released from the requirements of the Mining Act for those areas approved as commercial until the commercial PMLU has been implemented as described in condition J.1 of this Permit Revision.

O. POST-CLOSURE MONITORING AND MAINTENANCE

1. Erosion and Sediment Control

The following conditions apply to the reclaimed areas. The conditions for the reclaimed areas are required to mitigate the disturbances within the Permit area and provide for stabilization of the Permit area that will minimize future impact to the environment and protect air and water resources in accordance with §19.10.1.7.R.1 NMAC. The conditions are also required to reclaim the Permit area to a condition that allows for re-establishment of a self-sustaining ecosystem as required by §19.10.5.507.A NMAC, and to meet applicable environmental standards as required by §69-36-11.B(4) of the Act and §19.10.5.506.J.5 NMAC.

a) The Permittee shall visibly inspect reclaimed lands for signs of erosion and shall mitigate significant erosion features to prevent further degradation of the site. Drainage channels, diversion structures, retention ponds, and auxiliary erosion control measures will be inspected, repaired and maintained in accordance with standards identified in the Field Office Technical Guides (FOTG) of the U.S. Natural Resource Conservation Service (NRCS), Section IV-Table of Contents, at https://efotg.sc.egov.usda.gov/treemenuFS.aspx. Guidance is provided for construction, repair or stabilization, as necessary, utilizing established best management practices. Inspections shall continue until the specific units are released under the New Mexico Mining Act. Inspections shall be conducted monthly for the first year following completion of reclamation construction activities for each unit, and quarterly thereafter. Reclaimed areas shall additionally be inspected for evidence of erosion after storm events of one inch or greater in any one-day period. Inspections shall continue until the specific units are released under the New Mexico Mining Act, unless continued inspections are required by other agencies.

b) The Permittee shall report evidence of significant rill, gully, or sheet erosion on any reclaimed area within 24 hours of discovery. The Permittee shall then provide the MMD a written report that describes the nature and extent of erosion and a corrective action plan, according to the following schedule. The Permittee shall provide the report within 30 days of discovery. The corrective action plan shall describe the efforts necessary to stabilize the affected area. The plan shall be implemented as soon as practical following regulatory approval.

c) Erosion control measures that are damaged or ineffective shall be repaired, or re-designed as necessary. The Permittee shall commit to using a variety of erosion control measures, as needed, if erosion control problems develop. Long-term erosion control measures will include the installation of berms, designed channels, and sediment containment structures, as necessary, and shall be designed for a 100-year, 24-hour storm event. Short-term erosion control measures may include, but not be limited to: silt fences, hay bales, water bars, and mulching.

2. **Noxious Weed Management**

Noxious weeds shall be controlled by the Permittee. Noxious weed management shall consist, at a minimum, of the following:

a) The Permittee shall perform two inspections in the year after reclamation seeding has been performed (in early growing season [May-June] and after the monsoon season [September]), of all disturbed areas such as roads, and all reclaimed areas within the Permit Area. The inspections shall identify and inventory noxious weeds that are listed in the New Mexico Department of Agriculture Noxious Weed Update List, dated April 1, 2009.

b) The Permittee shall submit to MMD, within 90-days of the completion of the noxious weed inspections required in §O.2.a of this permit revision (above), a weed control program work plan. The weed control program work plan shall provide species-specific weed control measures and a schedule of inspections for noxious weeds during the post-reclamation period.

P. WATER QUALITY

The Permittee shall submit to MMD a copy of any submittals approved by NMED on ground water modeling, geochemical characterization and modeling, and cover infiltration necessary for closure. The Permittee shall submit to MMD copies of any studies required by NMED under DP-61 and shall submit to NMED copies of plans and submittals required by MMD under this Permit. If any of these submittals indicate that additional or alternative closeout actions are necessary to meet the requirements of the New Mexico Mining Act and Rules, MMD may require the Permittee to submit to MMD a request to modify or revise the Permit. MMD will review the request to determine if a modification or revision of this Permit is required by §19.10.5.504.B and §19.10.5.505.B NMAC.

Q. RETURN TO ACTIVE STATUS

RGR has provided MMD a Gantt chart depicting phased project development components, tasks, upgrades, design and implementation schedules, their relative sequence, and the projected duration of actions and activities necessary to accomplish the reopening, reactivation and upgrade of the Mine (from June 2017 *Mt. Taylor Mine Reactivation Plan – Phases, Tasks, and Sequence; Rev. B-Supplement to Rev. A)*. The planning chart is attached to this Revision 13-2, as Appendix C. The progressive completion of these development tasks will be expected to demonstrate tangible progress following final approval and signature of this Revision 13-2, by the Order of the Mining and Minerals Director, below.

To enable MMD to track and verify the listed tasks (and potentially others) for coming-off-standby and resumption of active mine status activities and milestones, the Permittee shall provide quarterly reports to MMD, due on January 31st, on April 30 (an annual

summary of the previous twelve months' progress, coincident with required mine permit annual fees and reporting), on July 31, and October 31 of each year. These reports will give an account of the advancement of these and other mine development activities, describe the status of tasks, and present a forecast of future actions. Elements on the Gantt chart in Appendix C may be modified with MMD approval.

MMD may also verify that the mine is in active status through periodic inspections. The quarterly progress reports shall continue until the mine has completed the water treatment system, and mine dewatering has commenced. These requirements may be modified with MMD approval.

R. TEMPORARY CESSATION

If, due to a temporary cessation of mining operation exceeding 180 days, or the Permittee wishes to suspend reclamation, the Permittee shall submit an application for a Permit Revision for standby status pursuant to §19.10.5.505 and §19.10.7 NMAC.

Pursuant to the New Mexico Mining Act, NMSA 1978, §69-36-7.E and 19.10.7.701.I NMAC, standby status shall be granted for a maximum term of five years; the Director may renew the standby status for no more than three additional five-year terms, for a total of twenty (20) years. The original term of standby status for the Mt. Taylor Mine was approved by MMD under Revision 99-1 on October 12, 1999. To date, MMD has approved two additional five-year terms of standby status for the Mt. Taylor Mine. The Permittee submitted an application for the third five-year renewal of standby status on October 12, 2014 that MMD is processing under Revision 14-1.

S. RECLAMATION SCHEDULE

The Reclamation Schedule is required pursuant to §19.10.5.506.B.1 NMAC. The reclamation of units at the Mount Taylor Mine shall begin in accordance with the schedule identified in Table 1. below, unless earlier reclamation is required by other agencies or is initiated under the requirements below:
During reclamation, measures shall be taken to provide for the stabilization of the disturbances that will minimize future impact to the environment and protect air and water resources. The Permittee may submit for MMD approval a request to modify or revise the Reclamation Schedule.

If, after the Effective Date of this Permit Revision the mine site is in a condition of cessation of mining operations, exceeding a period of 180-days, the Permittee shall either begin reclamation pursuant to the schedule identified on Table 1, below, or submit an application for standby status to MMD. Cessation of mining operations is defined as a stoppage of activities identified in Appendix C, any subsequent mine development, and eventual uranium ore production.

Table 1. Closeout / Closure Schedule

Table 1 Mt. Taylor Mine Closeout/ Closure Schedule

ID	Task Name	Duration
1	PROJECT MANAGEMENT	
2	Contracting	120 days
3	Mobilization	30 days
4	Demobilization	5 days
5	DEMOLITION	60 days
6	24 ft Shaft Headframe	15 days
7	14 ft Shaft Headframe	10 days
8	Surface Facilities	60 days
9	MWTU Buildings, Structures	60 days
10	Treated Water Discharge Pipeline	25 days
11	Service and Support Facilities	20 days
12	SHAFT BACKFILL AND PLUGGING	100 days
13	24 ft Shaft	90 days
14	14 ft Shaft	90 days
15	WELL AND CONDUIT PLUGGING	30 days
16	EARTHWORK	197 days
17	Waste Disposal Cell	20 days
18	Ore Pad and Runoff Retention Pond	60 days
19	MWTU Ponds	97 days
20	Contaminated Soil	60 days
21	Waste Pile	62 days
22	Finish Grading	15 days
23	Erosion Protection	30 days
24	REVEGETATION	30 days
25	Conditioning, seeding, mulching	15 days
26	Fencing	15 days

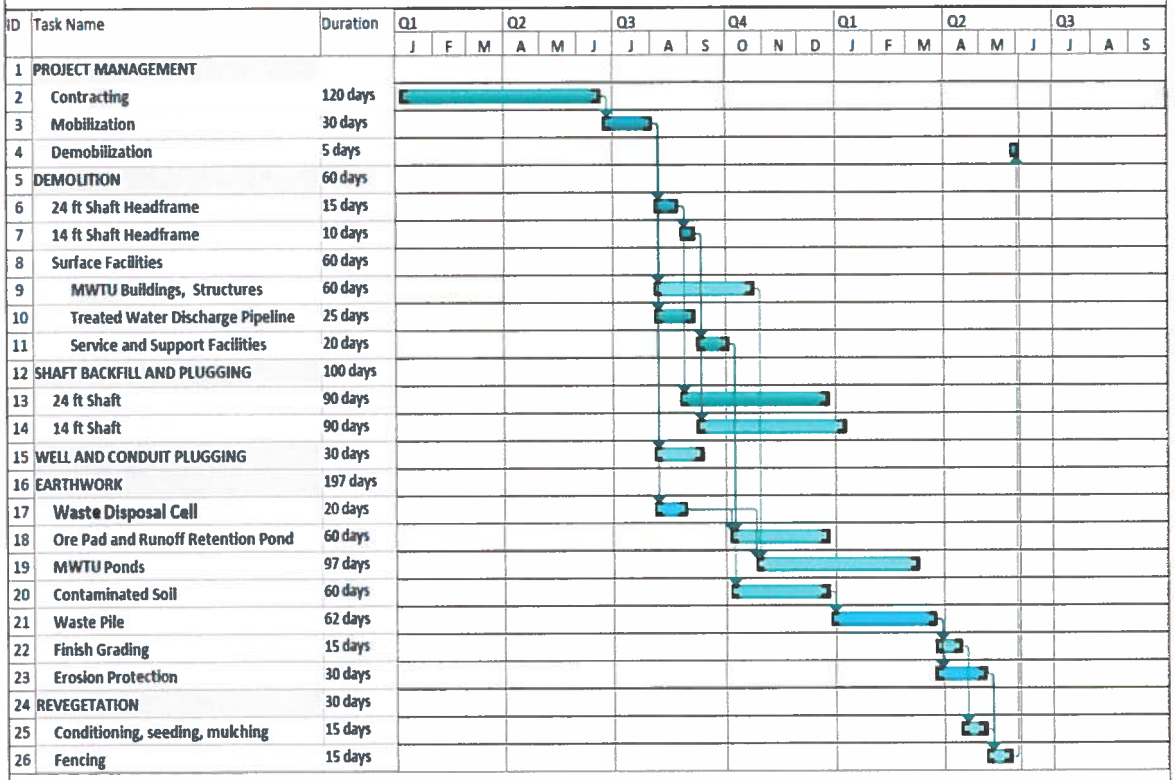


Figure 6-1 MT TAYLOR MINE CLOSEOUT/CLOSURE SCHEDULE
REV. 1 NOVEMBER 2013

Baseline Milestone ◇ Task
Baseline Summary Baseline

In the event the entire operation transitions into permanent cessation, the operator will resubmit a schedule for reclamation, taking into account reasonable timeframes for the reclamation of the remaining mine units. A specified time frame will be provided for the complete reclamation of the site.

T. COMPLIANCE WITH ENVIRONMENTAL PERMITS

Pursuant to 19.10.5.509.C NMAC, during the term of the Permit issued pursuant to 19.10. NMAC, the Permittee must maintain all state and federal (or other applicable) environmental permits required for the Permit area. Revocation or termination of such a Permit or the forfeiture of financial assurance related to the Permit area by another governmental agency is adequate grounds for the Director to issue a cessation order pursuant to 19.10.11 NMAC.

U. CLOSEOUT PLAN RENEWAL

The Permittee shall submit a revised Closeout Plan no later than five years after approval of

this permit revision. Earlier modifications or revisions to a portion, or portions, of the Permit, may be required if the submittals or studies addressed under Condition M warrant such action.

Section 10 (13-2). CONCLUSIONS OF LAW

A. The Director has jurisdiction over the Permittee and the subject matter of this proceeding.

B. The PRP is complete, accurate, and complies with the requirements of the Act and §19.10.5.502 and §19.10.5.503 of the Rules with conditions described in this Permit Revision document.

C. The PRP is complete, accurate, and complies with the requirements for Closeout Plans in the Act and §19.10.5.505, §19.10.5.506, and §19.10.5.507.A NMAC. The Permittee, Rio Grande Resources Corporation, is permitted pursuant to the New Mexico Mining Act to conduct mining and reclamation operations at the Mount Taylor Mine, Cibola County, New Mexico, upon the condition that the Permittee complies with the requirements of the Order, the Act, the Rules, the Permit Conditions, and requirements imposed by this Decision.

All other provisions, modifications, and revisions for mining and reclamation contained in the Mt. Taylor Mine Permit No. CI002RE, remain unchanged.

CERTIFICATION

I certify that I have personally examined and am familiar with the information submitted herein, and based on my inquiry of those individuals responsible for obtaining the information, I believe the submitted information is true, accurate, and complete.

I certify that I have read, understand and will comply with the requirements of this Permit Revision. I also agree to comply with the performance and reclamation standards and requirements of the permit, the Rules, and the Act, and allow the Director to enter the Permit area without delay for the purpose of conducting inspections.

Joel C. Justus
Authorized Representative of the Permittee

Mine Manager
Title

Rio Grande Resources
Company

Subscribed and sworn to before me this 22 day of November, 2017

Mable Martinez
Notary Public

My Commission Expires

11-22-17
(date)

Official Seal
MABLE MARTINEZ
Notary Public
State of New Mexico
My Comm. Expires 11-22-21

ORDER

NOW THEREFORE, IT IS HEREBY ORDERED that Permit Revision 13-2 of the Mt. Taylor Mine Permit, approving the transition from standby to active mining status, incorporating the updated Closeout Plan and financial assurance, and allowing Rio Grande Resources Corporation to conduct mining, closeout and reclamation operations in Cibola County, New Mexico, is approved.

By Order of the Director, Mining and Minerals Division, Energy, Minerals and Natural Resources Department, of the State of New Mexico.

By: _____

Fernando R. Martinez, Director
Mining and Minerals Division
Energy, Minerals and Natural
Resources Department

DATED: 12/28/2017

APPENDIX A.

Seeding Methods and Revegetation Standards

Table 2. Revegetation Species and Planting Rates

The reclaimed mine surfaces, except the areas approved as commercial PMLU, will be reseeded using the seed mix in Table 2, below.

Seed Mix	PLS lb./ft^2	PLS lb./acre	Species Name	Common Name	Life Form	Bunch/Sod	Perennial/Biennial/Annual	Seeds/lb	Average Recommended Seeding Rate PLS lbs/acre	Planting Season
	5	1.00	*Penstemon angustifolius*	Narrowleaf penstemon	Forb		P	223000	3	
Site Name: **Mount Taylor Mine**	3	0.30	*Sphaeralcea fendleri*	Globemallow	Forb			500000		
Date: **10/14/2016**	11	6.80	*Hesperostipa neomexicana*	New Mexico needlegrass	Grass-Cool	B		70000	13	
Acres to be Seeded: 139	9	3.60	*Pascopyrum smithii*	Western wheatgrass	Grass-Cool	S		110000	12	F/S
Proposed PLS lbs/acre: 24.00	9	0.50	*Bouteloua gracilis*	Blue grama	Grass-Warm	B/S	P	825000	2.5	SU
Proposed PLS # seeds/ft^2: 68	9	2.50	*Pleuraphis jamesii*	Galleta	Grass-Warm	B/S	P	159000	4	
	9	0.20	*Sporobolus airoides*	Alkali sacaton	Grass-Warm	B	P	1750000		
	4	3.40	*Atriplex canescens*	Fourwing saltbush	Shrub		P	52000	0.5	
	3	1.10	*Krascheninnikovia lanata*	Winterfat	Shrub		P	123000	5	F-SP
	5	4.60	*Cerocarpus montanus*	Mountain mahogany	Shurb		P	47400		
	Total[1]	24.00								
warm season grass substitute species[2]	9		*Bouteloua eriopoda*	Black grama	Grass-Warm	S		1335000	2.5	F/SP

Notes: [1] For broadcast seeding the application rate will be double (48 PLS lb./acre)

[2] Substitutions of any grasses, forbs or shrubs require MMD approval at least 60-days prior to seed application.

Seeding Methods

Seedbed preparation will be conducted on the contour to reduce erosion. Disking will be utilized to:

- ameliorate compaction of the topdressing to facilitate penetration of roots by seedlings;
- prevent surface crusting of the topdressing; and
- eliminate large clods of soil or cover material.

Seed will be applied by either rangeland drill or broadcast methods. Seeding methods may be determined by the steepness of the slope. The disturbed area will be seeded using standard mine reclamation equipment; i.e., tracked and wheeled tractors, rangeland seed drill, and mulch

application in areas with slopes of 3H:1V or flatter. All reseeded areas will be mulched utilizing native grass mulch, straw or other approvable mulch material at an application rate of 1.5 to 2.0 tons per acre. The mulch will be mechanically applied and subsequently crimped to reduce wind loss and stacking. Reclaimed slopes steeper than 3H:1V including natural and cut slopes east of the shafts may be seeded using a combination of manual and mechanical application techniques, including broadcasting seeding followed by, where practicable, chains dragged by a tracked dozer to incorporate the seed with the soil.

Seed Origin and Quality

All seed must be certified, weed-free, and each seed bag must have attached to it a complete label with certification information. Seed labels or copies of seed labels shall be submitted to MMD within 30-days after seeding.

Revegetation Success

Revegetation Success Standard

Quantitative vegetation data shall be collected from undisturbed vegetation on the area north of Marquez Canyon arroyo (i.e., reference area) to establish revegetation success standards, which will include:

- percent canopy cover,
- species diversity, and
- shrub density (number of stems/ac.)

RGR shall submit a work plan for MMD approval for quantitative vegetation sampling of the reference area and reclaimed areas within 180-days of approval of the updated closeout plan under this permit revision. The reference area shall be protected from livestock grazing.

The vegetation success standards will be based on the results of the quantitative vegetation sampling of the reference area. Sites for each vegetation type to be sampled will be at least one acre in size. Vegetation types to be sampled for the revegetation success standard will be representative of the undisturbed area near the mine. Vegetation sampling will be done during the peak period of the growing season, September 1 through mid-October.

All data and copies of all documents and reports used to establish the vegetation standards will be submitted to MMD within 90-days of the sampling event(s). Vegetation types to be sampled for developing the vegetation standard should be in as good or better condition and should be representative of areas not currently disturbed by mining.

The Revegetation Success Standard may be modified with MMD approval based on the results of the demonstration plots or the test plots South Waste Rock Pile.

Implementation

Revegetation will occur incrementally on the waste pile slopes and after completion of other closeout activities on the other disturbed land surfaces. Implementation of revegetation will be

performed in accordance with the approved closeout plan and the conditions of this permit revision. Vegetation establishment monitoring of reseeded areas will be conducted during the third year after seeding, with the objective of determining the adequacy of reseeding efforts. Subsequent quantitative revegetation success monitoring of the reclaimed areas shall occur during the sixth year after seeding and in the last two years of the twelve-year revegetation period. The period of responsibility will continue after completion of closeout until release of financial assurance. The Permittee shall notify MMD at least 14-days in advance of vegetation sampling events so that MMD may observe the sampling event.

Revegetation Success Criteria

The reclaimed and reference areas shall have quantitative vegetation surveys performed in year six after seeding and in two out of the last four years of the twelve-year vegetation re-establishment period using the same quantitative vegetation sampling methods in the reclaimed areas and the reference area. After the twelve-year vegetation establishment period, the revegetation will be considered successful for vegetation percent canopy cover, species diversity, and shrub density of the reclaimed area are equal to or greater than 70% of the reference area at a 90% statistical confidence level.

Sample Adequacy

Reclaimed areas will be sampled separately to allow separate determination of sample adequacy. On the revegetated disturbed areas, the transects will be located randomly as approved in the work plan.

The minimum sample size shall be determined by using:

- The Nmin value using the methods of Cochran, W.G., 1977. *Sampling Techniques*, 3rd ed. John Wiley and Sons, New York, N.Y.; or
- An alternative method approved by MMD.

Parameters shall be tested at the 90 percent confidence level that the sample means for total live cover, and shrub density are within 10 percent of the true population mean. At least 60-days prior to the quantitative vegetation sampling event, RGR shall submit for MMD approval the proposed location of the vegetation monitoring transects.

Sampling Methods

The following sampling methods for conducting vegetation studies will be used for determining revegetation success of reclaimed areas:

Percent Canopy Cover

Percent canopy cover will be sampled as approved in the work plan. Transects will be randomly placed within the reference area and revegetated areas. At least 60-days prior to the quantitative vegetation sampling event, RGR shall submit for MMD approval the proposed randomization methods used for the vegetation monitoring transects.

Species Diversity

The vegetation standard for diversity for the revegetated area is at least three native perennial grasses, two native perennial forbs, and two native perennial shrub species. The minimum occurrence of native perennial warm season grasses and native perennial shrubs shall be at least one percent of cover. The minimum occurrence of native perennial cool season grasses shall be 0.5 percent of cover and the minimum occurrence of native perennial forbs shall be 0.1 percent of cover.

Shrub Density

Shrub density will be measured by exact count. In revegetated areas, the counts will be made as approved in the work plan. The standard for shrub density will be 70 percent of the shrub density in the reference area at a 90% statistical confidence level.

APPENDIX B.

Table 5.1 Building List – Demolish and Retain

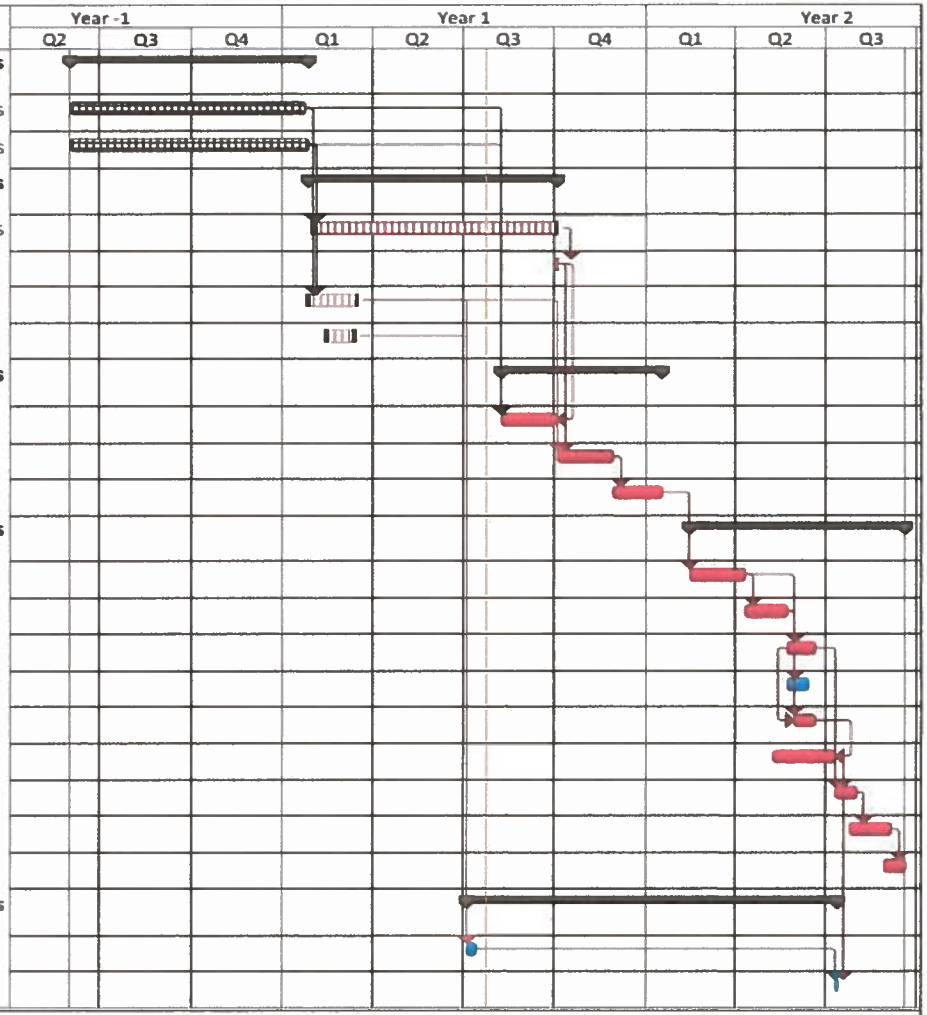
Building Name	Building Type	Dimensions	Volume, ft3	Disposition at Closeout	
				Demolish	Retain for Owner PMLU**
Compressor Building	Steel frame and siding	40'4" x 40'2"x 16'	25921		X
York Chiller (Chill Water) Building	Steel frame and siding	100' x 50' x 30'	150000		X
Pump Building (Chill Water Pump House)	Steel frame and siding	40' x 24' x 16'	15360		X
Chlorine Building	Concrete Block	23' x 50'6" x 20'	23230	X	
Shaft Heating Building	Steel frame and siding	50' x 30' x 16'	24000	X	
Glycol Heat Exchanger	Steel frame and siding	50 x 30 x 16	24000	X	
Hoist House	Steel frame and siding	162' x 120' x40'	777600		X
Cooling Tower	Steel frame and siding	75 x 25 x 25	46875	X	
Guard House (Security Building)	Steel frame and siding	63' x 20'6" x 16'	20664		X
Fire Equipment Building (Fire House)	Steel frame and siding	27' x 24' x 16'	10368		X
Service Building (Office and Warehouse)	Steel frame and siding	194' x 138' x 24'	642528		X
Car (Maintenance) Shop	Steel frame and siding	150' x 100' x 30'	450000		X
Carpenter Shop	Steel frame and siding	45' x 24' x 16'	17280		X
Electrical Building	Steel frame and siding	62' x 30' x 16'	29760	X	
Water Treatment and Boiler Building	Steel frame and siding	62' x 50' x 16'	49600	X	
Core Storage Building	Steel frame and siding	100' x 38' x 16'	60800		X

Fan Shop	Steel frame and siding	40' x 30' x 12'	14400		X
Storage Buildings (2)	Steel frame and siding	28' x 30' x 16'	13440		X
Flocculant Treatment Facility	Steel frame and siding	30' x 23' x 12'	8280	X	
Barium Chloride Treatment Facility	Steel frame and siding	40' x 25' x 16'	16000	X	
Ion Exchange Plant	Steel frame and siding	140' x 70' x 40'	392000	X	
Mo-Se Facility ***	Steel Frame and Siding	234.2' x 70' x 40'	655760	X	
Portable building	Steel Frame and Siding	12' x 12' x 8'	1152	X	
Fuel Pump House	Steel Frame and Siding	10' x 15' x 8'	1200		X
Access/Utility Tunnel	Concrete				X
Sanitary Treatment Plant	Concrete; steel	70' x 30' x 6'; 40' x 20' x 8'	1260; 2000	X	
Septic Tank and Leach Field	various		1		X
Water Tank	Steel		300,000 gal.		X
Fuel Storage Tanks	Steel		various	X	

** ***Other facilities to be retained for PMLU by owner:*** **Phase I water wells to remain (to Pt. Lookout aquifer, see Drawing MT13-CL-04, Revision 1, Facility Disposition Plan);**

*** **Amended cost estimate & FA includes separate Mo-Se ion exchange building that may be constructed near Ion Exchange Plant.**

ID	Task Name	Duration
1	**1A Design Package**	**172 days**
2	Drawings	169 days
3	Specifications	172 days
4	**1B Regulatory Review**	**178 days**
5	Design review MMD	174 days
6	Mine Permit revised to active status	1 day
7	Implementation Plan review NMED	35 days
8	Abatement Plan SAP review NMED	20 days
9	**1C Construction Contract Bid and Award**	**115 days**
10	Assemble bid packages	40 days
11	Issue invitations to bid	40 days
12	Evaluate bids and award contracts	35 days
13	**1D Construction**	**155 days**
14	Mobilization	40 days
15	Waste pile reshaping and disposal cell construction	30 days
16	Contaminated sediment removal	20 days
17	Ore and old ore pad removal	15 days
18	SSWP and septic drain field construction	15 days
19	Surface water drainage upgrades	45 days
20	MWTU Pond #2 and 3 reshaping	15 days
21	MWTU hydraulic structure upgrades	30 days
22	MWTU ponds #2 and 3 lining and leak testing	15 days
23	**1E Stage 2 Abatement Plan**	**267 days**
24	Waste lagoon wells installation	7 days
25	Connection to surface water drains	2 days



Phase 1 Construction Sequence
Mt Taylor Mine Reactivation
Date: Tue 7/25/17

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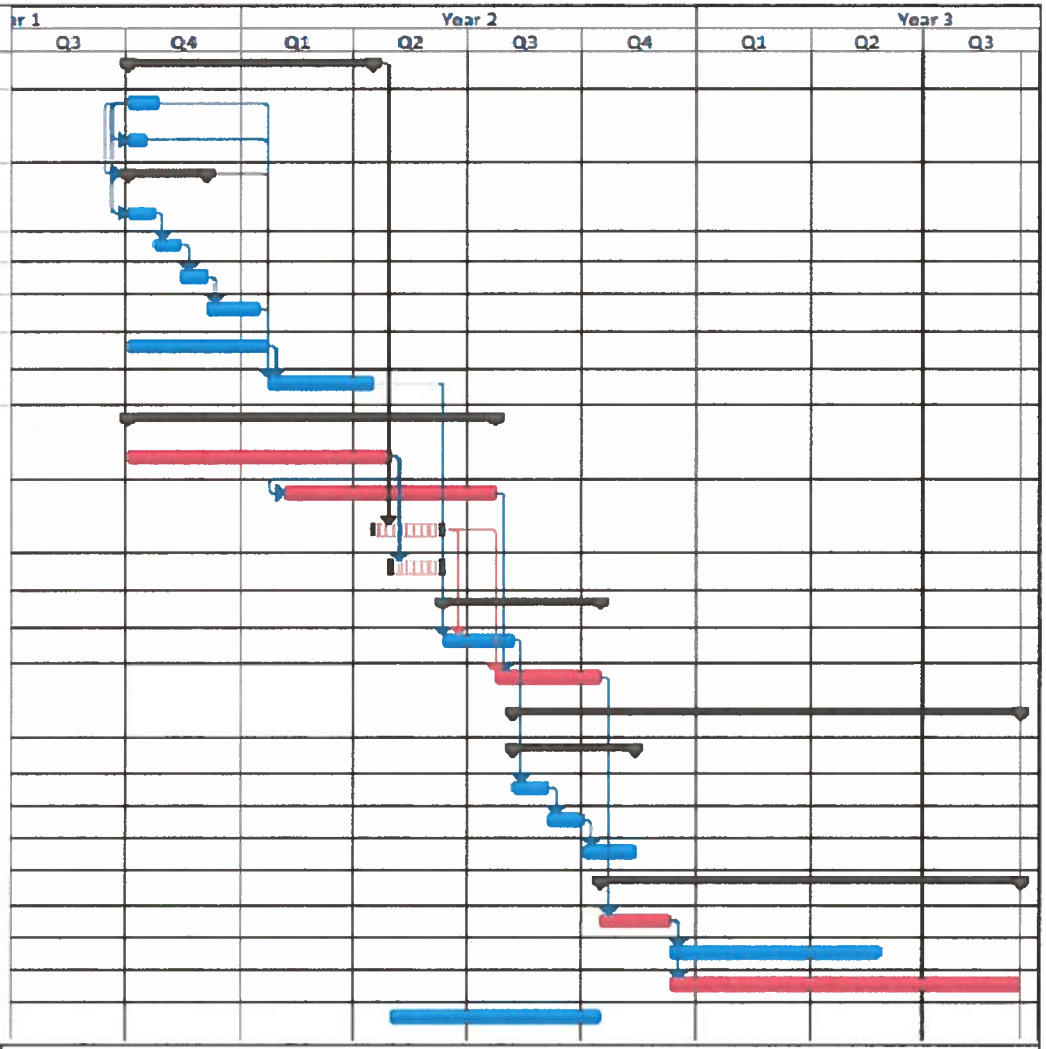
ID	Task Name	Duration
1	**2A Complete Surface Facilities Design**	140 days
2	MWTU ponds 1, 4-8 and ore pad pond design	18 days
3	Waste pile reshaping design	10 days
4	Ore pad design	45 days
5	Pad earthwork and liner	15 days
6	Pad plumbing and drainage	15 days
7	Truck wash	15 days
8	Surface piping upgrades	30 days
9	Electrical & mechanical design	80 days
10	Construction drawings, specifications	60 days
11	**2B Mine Water Treatment Plant Upgrade Design**	210 days
12	Process design	150 days
13	Construction drawings, specifications	120 days
14	**2C Regulatory Reviews - MMD and NMED**	40 days
17	**2D Radiological Materials License - NMED**	20 days
18	**2E Contract Bids and Awards**	90 days
19	Waste pile earthwork contract	40 days
20	Mine water treatment contract	60 days
21	**2F Construction**	290 days
22	Waste pile earthwork	70 days
23	Mobilization	20 days
24	Waste pile reshaping completion	20 days
25	Waste pile cover, disposal cell cap completion	30 days
26	Mine water treatment plant	240 days
27	Mobilization	40 days
28	Radium treatment system rehabilitation	120 days
29	Water treatment (U, Mo, Se) plant refit & construction	200 days
30	**2G Exploration Drilling**	120 days

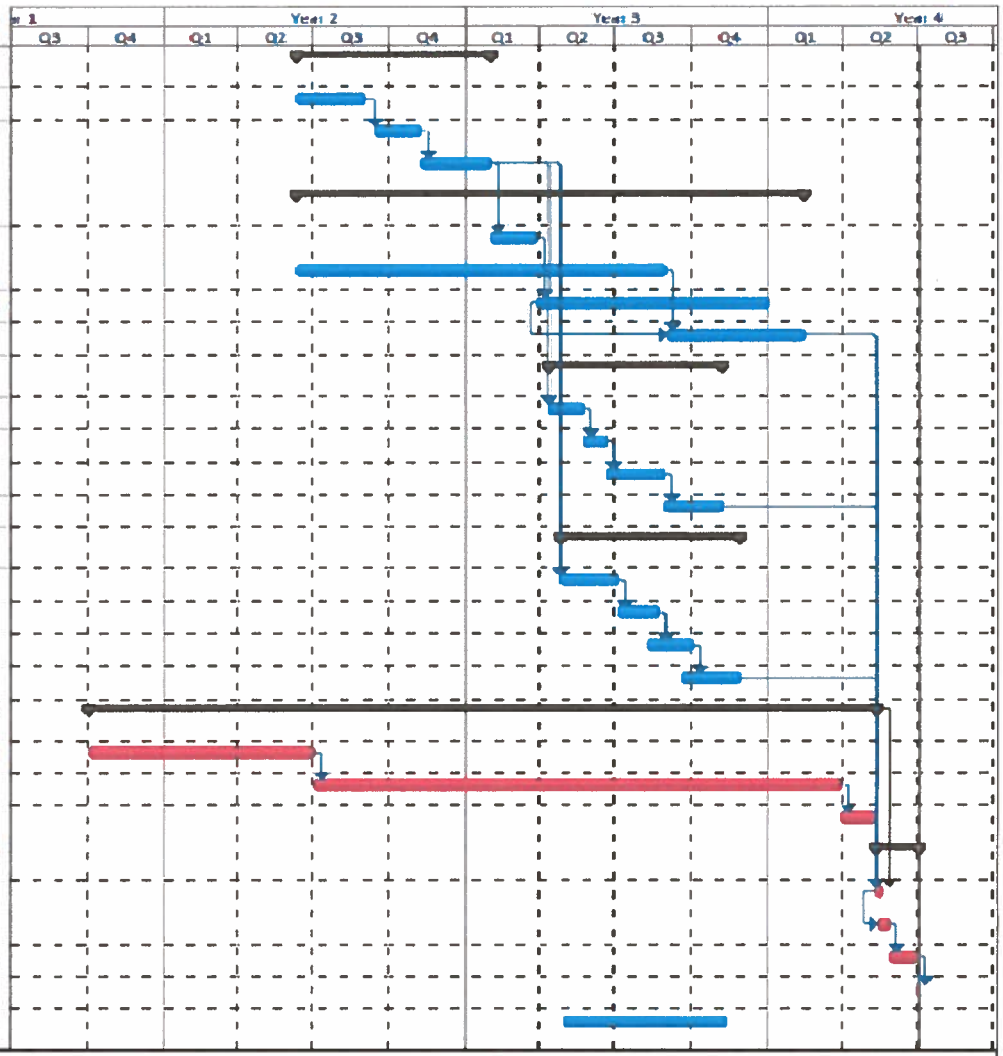


Phase 2 Construction Sequence
Mt Taylor Mine Reactivation
Thu 6/15/17

Regulatory Review
Task
Milestone
Summary
Critical

(Page 3 of 4)

ID	Task Name	Duration
1	**3A Mine Water Systems Contracting**	160 days
2	Bid packages	60 days
3	Issue invitations to bid	40 days
4	Evaluate bids and award contract	60 days
5	**3B Deep Well Rehabilitation/ Activation**	440 days
6	Mobilization	40 days
7	Pump acquisition	320 days
8	Well re-development	200 days
9	Well re-fitting	120 days
10	**3C Treated Water Pipeline Rehab and Lining**	150 days
11	Mobilization	30 days
12	Pipeline condition survey	20 days
13	Pipeline repairs	50 days
14	Pipeline liner installation	50 days
15	**3D Pond Reconstruction and Lining**	155 days
16	Mobilization	50 days
17	Hydraulic structures repair and construction	35 days
18	Earthwork	40 days
19	Liner installation and testing - ponds 1,4,5,6,7,8; ore pad port	50 days
20	**3E Substation Rehabilitation and Upgrade**	680 days
21	Design	195 days
22	Procurement	455 days
23	Installation	30 days
24	**3F MWTU Start-up**	38 days
25	Initiate mine water pumping	5 days
26	Initiate mine water treatment, systems calibration	10 days
27	Initiate mine water discharge, performance verification	25 days
28	Commence MWTU operations	1 day
29	**3G Exploration Drilling**	140 days

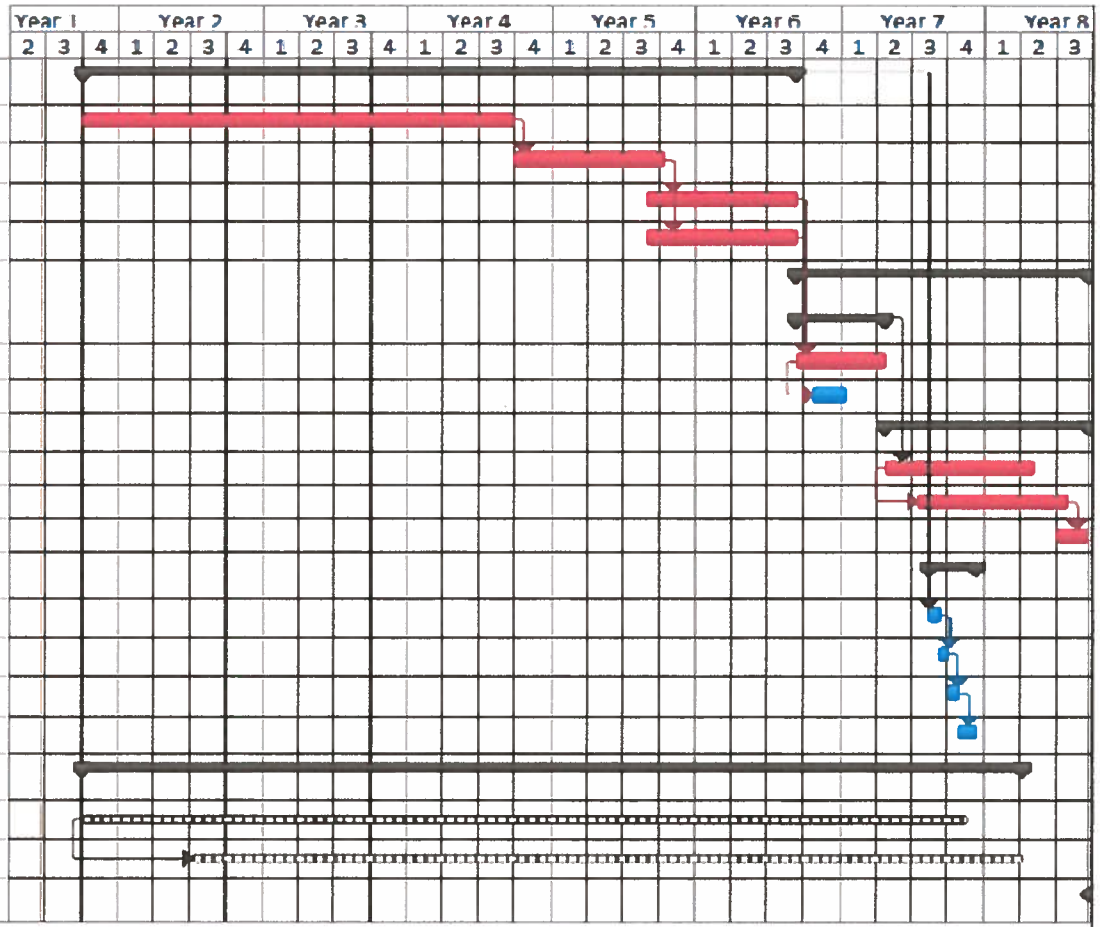


Phase 3 Construction Sequence
Mt Taylor Mine Reactivation
Date: Thu 6/15/17

Task — Milestone — Summary — Critical

(Page 4 of 4)

ID	Task Name	Duration
1	**4A Shafts and Hoisting Systems**	1290 days
2	Hoists procurement	780 days
3	Hoists installation	270 days
4	Re-fit 24 foot shaft and headframe	270 days
5	Re-fit 14 foot shaft and headframe	270 days
6	**4B Underground Mine**	590 days
7	Re establish shaft stations	160 days
8	Muck out and ground support	160 days
9	Services- ventilation, electrical, water	60 days
10	Rehabilitate underground workings	370 days
11	Muck out and ground support	270 days
12	Services- ventilation, electrical, water	270 days
13	Haulage systems	60 days
14	**4C Ore Pad Construction**	85 days
15	Earthwork	70 days
16	Pad plumbing and drainage pipe	15 days
17	Liner installation and pad fill	70 days
18	Truck wash	30 days
19	**4D Recruitment and Training**	1700 days
20	Recruitment	1600 days
21	Training	1500 days
22	**4E Reactivation Complete**	0 days



Phase 4 Construction Sequence
Mt Taylor Mine Reactivation
Date: Thu 6/22/17

Task
Milestone
Summary
Critical
Intermittent