RIO GRANDE RESOURCES

Mr. Dave Clark

July 09, 2015

NM MMD

Subject: Addenda to APPLICATION FOR REVISION OF MINE PERMIT #C1002RE FROM STANDBY TO ACTIVE STATUS and MODIFICATION OF GROUND WATER DISCHARGE PERMIT DP-61 MT. TAYLOR MINE, SAN MATEO, NEW MEXICO, Rev.1, for Addition of Molybdenum/ Selenium (MoSe) Treatment Building

Dear Mr. Clark:

With this letter, Rio Grande Resources Corporation (RGR) is submitting information describing a facility that will be added to the Mt. Taylor Mine's mine water treatment unit (MWTU) for removal of molybdenum and selenium from mine water before it is discharged. The MoSe facility will be constructed, and the existing IX plant (for removal of uranium) will be upgraded, during mine reactivation and will be operable before mine dewatering begins. When mine dewatering commences, the MWTU will be capable of removing U, Ra, Mo and Se to New Mexico human health standards per 20.6.2.3103A NMAC.

This submittal contains an addendum to the subject application for revision of the mine permit (application) from standby status to active status (Rev.1) as well as an addendum to the Closeout/Closure Plan (CCP), Rev.1 for the reactivated mine. Although water treatment for Mo and Se was not needed during previous mine operations, nor necessarily activitated in future mine operations until/ unless Mo or Se limits are approached, the MoSe facility is being added as a condition of the Environment Department (NMED) approval of renewal of DP-61; this submittal is not a request for mine permit revision or modification.

The attached *addendum to the application for revision of mine permit status to active* includes:

- Mount Taylor Uranium Mine/ Rio Grande Resources Corp. Uranium Ion Exchange & Molybdenum and Selenium Adsorption Facility design drawings, set of 14, by LNV Engineers/ Architects/ Contractors, Rev.1, 3/13/15
- Operations and Maintenance (O&M) Manual, Mount Taylor Uranium Mine/ Rio Grande Resources Corp. Mine Water Treatment Unit (MWTU) - Uranium IX & Molybdenum/ Selenium Treatment Facility, by LNV Engineers/ Architects/ Contractors, Rev.1, 3/19/15
- Drawings MT13-AC-01 Rev.2, -02 Rev.2, -03 Rev.1, and -14 Rev.2, showing the location of the MoSe facility.
- Update of Section 3.1, Mine Water Treatment Unit, by reference to section II and IV of the O&M Manual. Where the O&M Manual conflicts with the present language of the application, the O&M Manual governs and supersedes the application section 3.1 text.

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- LNV letter to NMED dated 5/20/2015 responding to questions regarding design and operation of the uranium IX and MoSe elements of the MWTU.
- RGR letter to MMD dated 6/24/2015, committing RGR to a cultural resources survey of the ground to be disturbed by construction of the MoSe facility.

The attached *addendum to the CCP for revision of mine permit status to active* includes:

- Additions to the CCP Rev.1 text, specifically to section 2.5, Future Mine Units; section 4.3, Surface Facilities Demolition; and section 7, Cost Estimate
- Changes to drawings MT13-CL-04 Rev.2, -07 Rev.2, and -13 Rev.2 to show the location of the MoSe facility.
- Change to Table 5.1, Building Inventory, to include the MoSe building.
- Rev.2 of the Cost Estimate (Appendix E) to include the cost to remove the MoSe facility.

Please contact me with any questions or comments.

Joe Lister

Addendum to the Application for Revision of Mine Permit #C1002RE from Standby to Active Status, Mt. Taylor Mine; July 9, 2015

This addendum to the Revision 1 of the Application for Revision of Mine Permit #C1002RE from Standby to Active Status, Mt. Taylor Mine provides information related to a new facility that will be added to the Mt. Taylor Mine's mine water treatment unit (MWTU) for removal of molybdenum and selenium from mine water before it is discharged. The MoSe facility will be constructed, and the existing IX plant (for removal of uranium) will be upgraded, during mine reactivation and will be operable before mine dewatering begins. The addendum includes:

1. Mount Taylor Uranium Mine/ Rio Grande Resources Corp. Uranium Ion Exchange & Molybdenum and Selenium Adsorption Facility design drawings, set of 14, by LNV Engineers/ Architects/ Contractors, Rev.1, 3/13/15. This document in pdf format is attached.
2. Operations and Maintenance (O&M) Manual, Mount Taylor Uranium Mine/ Rio Grande Resources Corp. Mine Water Treatment Unit (MWTU) - Uranium IX & Molybdenum/ Selenium Treatment Facility, by LNV Engineers/ Architects/ Contractors, Rev.1, 3/19/15. This document in pdf format is attached.
3. Drawings MT13-AC-01 Rev.2, -02 Rev.2, -03 Rev.1, and -14 Rev.2, showing the location of the MoSe facility. These documents in pdf format are attached.
4. Update of Section 3.1, Mine Water Treatment Unit, *by reference to section II and IV of the O&M Manual*. Where the O&M Manual conflicts with the present language of the application, the O&M Manual governs and supersedes sections 3.1 and 3.1.1 on pages 13-16 of Revision 1 of the application text.
5. LNV letter to NMED dated 5/20/2015 responding to questions regarding design and operation of the uranium IX and MoSe elements of the MWTU. This document in pdf format is attached.
6. RGR letter to MMD dated 6/24/2015, committing RGR to a cultural resources survey of the ground to be disturbed by construction of the MoSe facility. This document in pdf format is attached.

Addendum to the Closeoue/ Closure Plan (CCP) for Revision of Mine Permit #C1002RE from Standby to Active Status, Mt. Taylor Mine; July 9, 2015

1. Additions to the CCP Rev.1 text, specifically to section 2.5, Future Mine Units; section 4.3, Surface Facilities Demolition; and section 7, Cost Estimate, as follows:

2.5 Future Mine Units

Both existing and future mine units were described in the original mine permit application (RGR 1994b). The only mine units not existing at this time (future mine unit) are the north waste rock pile and the Molybdenum/ Selenium (MoSe) treatment facility. The north pile will be constructed only if needed, and that need will not be determined until at least five years after the mine is reactivated. The MoSe treatment facility will be constructed during mine reactivation adjacent to and north of the existing IX plant. The MoSe treatment facility will be operated as needed to maintain Mo and Se concentrations below the New Mexico human health standards per 20.6.2.3103A NMAC while water is pumped from the mine.

4.3 Surface Facilities Demolition

The MoSe facility is added to the list of facilities that will not be retained for the later use of the landowner and will be demolished.

7.0 COST ESTIMATE

The estimated costs of closeout/ closure of the Mt. Taylor Mine were developed to satisfy the requirements of both MMD's *CLOSEOUT PLAN GUIDELINES FOR EXISTING MINES, Attachment #4 (FINANCIAL ASSURANCE CALCULATION HAND BOOK)* and its *Guidance To Mine Operators for Calculating Reclamation Costs in Net Present Value, December 29, 2004* as well as NMED-GWQB's *Discharge Plan Closure Guidance for Mines, May 30, 1996.*

Several references were used for unit costs, the primary being R.S. Means Heavy Construction Cost Data 2013, the Wyoming DEQ Guideline No. 12, and the Caterpillar Performance Handbook. The basis for each unit cost is identified on the cost estimate spreadsheet.

Quantities of work and materials were based on field measurements or counts of materials, construction or design record drawings, and area/ volume calculation functions within AutoDesk AutoCAD Civil 3D® design software. A new base map, completed in June 2012 at 2.0-foot contour intervals, was used as the topographic base along with AutoCAD Civil 3D® design software for the earthwork estimates in this CCP.

The cost estimate does not include closure costs for the north waste pile. If this pile is needed, RGR will update the cost estimate to include costs related to closure of this facility. If the north waste pile is not needed and not constructed, the area reserved for this pile will be left undisturbed.

The cost estimate does not include any deductions or offsets for re-sale or salvage value of mine components and scrap. However, the value of these materials, especially the structural steel and the treated water pipeline, could offset one quarter to one third the actual direct cost of closeout.

Cost estimates for closeout of the IX facility are based on the conservative assumption that tubular materials (pipes) and debris internal to the IX circuit will contain scale or corrosion material with radiological contamination that cannot be removed, making it necessary to dispose of these materials as low-level radioactive waste in a licensed facility off-site (DOE 2002). Tubular materials (pipes) and debris internal to the MoSe circuit are not likely to contain scale or corrosion material with radiological contamination, so these materials will be disposed on-site with other similar material or recycled for off-site use. MoSe resins will be recycled to a permitted facility. Additional assumptions are that 1) the IX resin will be sent to a third party facility licensed by NRC or an Agreement State to process equivalent feed source material in the form of IX resin, and 2) the third party facility would accept title to the resin. The decontamination and demolition (D&D) costs for the IX circuit equipment are covered under the financial assurance requirement of the Radioactive Material License with the NMED Radiation Control Bureau and are not included in this estimate; only the IX structure is included in this estimate.

The detailed estimate is presented in Appendix E. The estimated costs by category are:

Direct Cost =	$ 5,135,745
Indirect Cost =	$2,516,515
Direct + Indirect Cost =	$7,652,260

Location Cost Adjustment=	0.879
Total Adjusted Direct + Indirect =	$6,726,337
New Mexico Gross Receipts Tax	$441,416
Total Direct + Indirect, Location-adjusted, with NMGRT	**$7,167,753**