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CERTIFIED MAIL—RETURN RECEIPT REQUESTED

October 20, 2015

Mr. Joel Lister, Mine Manager
Rio Grande Resources Corporation
P.O. Box 1150
Grants, NM 87020

RE: Rio Grande Resources Corporation's Mt. Taylor mine/Discharge Permit-61—Discharge Permit reissuance to correct formatting error

Dear Mr. Lister:

Recently you received the approved renewal and modification of Discharge Permit-61 pertaining to reactivation of the Mt. Taylor mine. Upon review, the New Mexico Environment Department has discovered a formatting error in that version, which affected the numbering of the permit conditions.

Please discard that earlier version and replace it with the enclosure to this letter. If you should have any questions on this letter, please contact me at (505) 476-3777 or by email at david.mayerson@state.nm.us.

Sincerely,

David L. Mayerson
Mining Environmental Compliance Section
Ground Water Quality Bureau
New Mexico Environment Department

Enclosure: Discharge Permit Renewal and Modification, DP-61

Joel Lister, Rio Grande Resources Corporation Mt. Taylor Mine Manager
RE: **Rio Grande Resources Corporation's Mt. Taylor mine/Discharge Permit-61—Discharge Permit reissuance to correct formatting error**
October 20, 2015

Emailed copies:

Joel Lister, Rio Grande Resources Corporation
(joel.lister@riogranderesources.com)

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Discharge Permit-61 Renewal and Modification

Permittee: **Rio Grande Resources Corporation**
Facility: **Mt. Taylor Mine**

I. Introduction

The New Mexico Environment Department (NMED) issues this Discharge Permit renewal and modification (Discharge Permit) to Rio Grande Resources Corporation (Permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978 §§ 74-6-1 through 74-6-17, and the New Mexico Water Quality Control Commission (WQCC) Regulations, 20.6.2 NMAC.

NMED's purposes in issuing this Discharge Permit, and in imposing the requirements and conditions specified herein, are to control the discharge of water contaminants from operations of the Mt. Taylor Mine to ground and surface water, so as to protect ground and surface water for present and potential future use, including as domestic and agricultural water supply; to protect public health; and to abate localized ground water contamination that has resulted from previous operations. In issuing this Discharge Permit, NMED has determined that the requirements of 20.6.2.3109.C NMAC have been met. Pursuant to 20.6.2.3104 NMAC, it is the responsibility of the Permittee to comply with the terms and conditions of this Discharge Permit; failure may result in enforcement action by NMED (20.6.2.1220 NMAC).

A. LOCATION OF DISCHARGE

The Mt. Taylor Mine is located approximately one-half mile northeast of the Village of San Mateo in Cibola County, New Mexico at 35.34 degrees north latitude and 107.63 degrees west longitude in Section 24, Township 13 North, Range 8 West. Treated mine water is discharged via pipeline at a discharge outfall (*e.g.,* Outfall 001) located in San Lucas Canyon, which is 4.3 miles north of the Mt. Taylor Mine at 35.39 degrees north latitude and 107.64 degrees west longitude.

B. FACILITY DESCRIPTION

The Mt. Taylor Mine, which is currently on standby status, previously operated from 1979 to 1982 and from 1985 to 1990 before being placed on standby status in 1990. During prior conventional underground mining operations by room-and-pillar and stope mining methods, approximately 675,000 tons of uranium ore and 698,000 tons of waste rock were extracted from the Westwater Canyon member of the Morrison Formation (Westwater Canyon member). Existing subsurface facilities at the Mt. Taylor Mine include a 24-foot diameter production shaft and a 14-foot diameter manway/ventilation shaft, which provide access to underground workings at depths of between 3,100 and 3,200 feet below the ground surface. Additionally two 10¾-inch diameter utility conduits extend from the ground surface to the underground workings.

Existing surface facilities include an ore stockpile (comprising 6.8 acres); the South Waste Rock Pile (comprising 11.5 acres); two storm water run-off retention ponds (comprising 0.9 and 1.45 acres respectively) and associated diversion ditches and channels; eight clay-lined water treatment ponds, a housed ion exchange (IX) Plant, a radium treatment system, flocculant feed facilities, and associated piping, which are herein collectively referenced as the "Mine Water

Treatment Unit" (MWTU) (comprising 28 acres) for treatment of water pumped from the underground workings; a Sewage Treatment Plant (STP) and backup septic tank and leach field; and surface Service and Support facilities (93 acres). Additionally, the Permittee maintains six alluvial aquifer monitoring wells, nine wells completed in the Point Lookout Formation, four wells completed in the Tres Hermanos and/or Dakota aquifers, and 12 wells that are completed in the Dakota Formation and/or Westwater Canyon member. County Road NM-334 bisects the Mt. Taylor Mine and provides public access to Cibola National Forest. Currently, the Mt. Taylor Mine facilities occupy approximately 286 acres in total. A treated mine water discharge pipeline extends 4.3 miles north from the Mt. Taylor Mine to Outfall 001 in San Lucas Canyon.

The Permittee plans to implement the following upgrades to Mt. Taylor Mine facilities prior to resuming discharge activities:

- The IX Plant will be upgraded with new IX columns that will utilize a resin, which was determined during previous testing under Discharge Permit-1712 to be effective for treating expected uranium concentrations in the mine water.
- The Permittee will construct a new molybdenum and selenium (Mo/Se) treatment system facility to treat water that is pumped from underground workings.
- The existing 4.3-mile 24-inch diameter treated water discharge steel pipeline will be lined with a high density polyethylene (HDPE) liner.
- A 10-acre synthetically-lined ore pad with a truck wash pad will be constructed in the location of the existing ore stockpile following removal of the existing soil cover, low-grade ore, and any underlying contaminated soil.
- The existing 11.5-acre South Waste Rock Pile will be re-contoured to flatten the western and southern slopes to a maximum 5:1 ratio (horizontal/vertical).
- The Permittee will clean out, regrade, and synthetically-line the existing eight water treatment-related ponds, and rehabilitate the associated hydraulic control structures.
- The Permittee will clean out, regrade, and line the two existing stormwater run-off retention ponds to capture and contain stormwater on-site. Additional site regrading will direct unimpacted off-site stormwater from around the Mt. Taylor Mine facilities into adjacent arroyos.
    - The existing north stormwater retention pond, which will be renamed the "Ore Pad Run-off Retention Pond," will receive impacted run-off only from the ore pad and truck wash via a series of intermediate sediment-retaining concrete catch basins. The Ore Pad Run-off Retention Pond will be synthetically double-lined with a leak detection and collection system, which drains to a sump.
    - The South Stormwater Retention Pond will be enlarged to a capacity of 15 acre-feet and constructed with a minimum one-foot thick engineered clay liner.

Water pumped from the underground workings that does not meet standards promulgated in 20.6.2.3103 NMAC, treated effluent from the STP, and impacted stormwater will flow to the MWTU where it will first be treated to reduce particulates by addition of a flocculant. Following settlement, the discharge will be routed through the IX Plant to reduce uranium concentrations. The discharge from the IX Plant will be directed through the Mo/Se treatment system to reduce

Mo and Se concentrations, and thereafter to the barium chloride feed system for precipitation of radium in ponds #8, #4, and #5. The treated water will then flow into synthetically-lined retention ponds #6 and #7 prior either to discharge to the San Lucas Canyon Outfall 001 via the refurbished 4.3-mile long pipeline, or to recycle into Mt. Taylor Mine operations.

Stormwater is diverted around the MWTU by the natural drainage system of Marquez Creek and by two man-made diversion ditches, which also drain to Marquez Creek. Stormwater run-off from the Service and Support area and South Waste Rock Pile will be directed to the South Stormwater Retention Pond for evaporation or treatment through the MWTU. Stormwater run-off from the ore pad and wash water and associated sediments from the truck wash will drain to a catch basin with an oil separator that will be located near the southwest corner of the ore pad. Water collected in this catch basin and a second catch basin located near the northwest corner of the ore pad will discharge via a common pipe to the synthetically double-lined Ore Pad Run-off Retention Pond.

C. QUANTITY, QUALITY, AND FLOW CHARACTERISTICS OF THE DISCHARGE

Regulated discharges from the Mt. Taylor Mine include those from mine dewatering, STP, and truck wash operations; leachate and impacted stormwater run-off from the ore pad, stormwater run-off from the South Waste Rock Pile, and impacted stormwater run-off from other mine facilities.

Based upon data from previous operations, the quality of untreated water that will be pumped from aquifers overlying the Westwater Canyon member is expected to comply with the numerical standards promulgated in 20.6.2.3103 NMAC. The discharge of water from these aquifers overlying the Westwater Canyon member will not require treatment, and therefore could achieve the maximum discharge rate of 17,280,000 gallons per day (gpd) that is permitted herein during initial dewatering activities. However, previous operational data indicate that untreated water which is pumped from the Westwater Canyon member will contain uranium, radium, selenium, and molybdenum concentrations in excess of numerical ground water standards promulgated in 20.6.2.3103 NMAC. The discharge rate for this ground water, the quality of which, prior to treatment, exceeds one or more of the numerical standards in the above-referenced regulation, will be limited by the maximum 14,400,000 gpd MWTU operational design capacity, as well as by permit conditions herein that stipulate minimum freeboard levels for MWTU ponds. Following dewatering of the existing underground workings, sustained pumping rates to maintain working conditions within the underground workings will range between 5,760,000 and 7,200,000 gpd.

The Sewage Treatment Plant (STP) comprises two packaged Case/Cotter extended aeration plants that are deployed side-by-side, with total treatment capacity of 50,000 gpd. Treated wastewater from this unit will be combined with untreated water pumped from the underground workings for subsequent treatment through the MWTU prior to discharge via Outfall 001.

The Mt. Taylor Mine utilized a sewage lagoon from 1975 through 1982. This lagoon, which is located on residual clayey silts and sands that were derived from the underlying Menefee Formation, was subsequently covered by the existing South Waste Rock Pile. The Permittee

submitted a voluntary Stage 1 Abatement Plan to NMED in 2005, which identified uranium, nitrate, sulfate, total dissolved solids (TDS), and chloride impacts to localized alluvial ground water. Characterization of the South Waste Rock Pile in 2011 confirmed that these impacts were attributable to discharge from the buried sewage lagoon. Under a Stage 2 Abatement Plan that was approved by NMED in 2011, the Permittee proposed to address this localized ground water contamination by evapotranspiration.

This Discharge Permit requires the Permittee to augment the previously-approved abatement plan with active pumping of the localized contaminated ground water body for evaporation in one synthetically double-lined MWTU pond; subsequently, the contaminated water will be treated in the MWTU when it is fully constructed and operational.

D. GROUND WATER CHARACTERISTICS

Alluvium underlying most of the Mt. Taylor Mine is generally thin, discontinuous in extent, and unsaturated. Alluvial ground water occurs only as perched ground water 14 to 33 feet below the ground surface in a paleoarroyo beneath the existing South Waste Rock Pile and underlying part of the Service and Support area. The alluvial ground water system beneath the existing South Waste Rock Pile received discharge from a sewage lagoon that is buried beneath the existing South Waste Rock Pile. Other alluvial ground water possibly originates from some isolated spring-fed locations in paleochannels at the alluvium/bedrock contact. The original pre-mining TDS concentration of the alluvial ground water is unknown.

The shallowest ground water aquifer above the underground mine workings is the Point Lookout Sandstone of the Lower Menefee Formation, which occurs at depths of 650 to 800 feet below the ground surface and has a potentiometric surface at depths of 500 to 600 feet. This aquifer is overlain by sandy shale and sandstone sequences, and underlain by hundreds of feet of shale.

The water level in the main shaft, which reflects that of the Westwater Canyon member, has maintained an elevation difference of approximately 260 feet below the static water level that is measured in nearby dewatering wells completed in the Point Lookout Sandstone. The integrity of the shaft lining is indicated by this difference in ground water levels, as measured in 2012 following a period of 23 years when mining and associated pumping activities were suspended. A comparison of ground water chemistry between samples collected from an existing monitoring well completed in the Point Lookout Sandstone and from the flooded mineshaft in the Westwater Canyon member further supports the conclusion that mine-related penetrations effectively maintain isolation between these two aquifers. Water quality data also indicate that ground water in the Point Lookout Sandstone is compliant with the numerical standards of 20.6.2.3103 NMAC, while uranium, radium, selenium, and molybdenum concentrations in ground water of the Westwater Canyon member will likely exceed the respective regulatory numerical standards.

E. REGULATORY SUMMARY

Discharge Permit-61 (DP-61) was first issued in 1979 to Gulf Mineral Resources Company, which was the original owner of the Mt. Taylor Mine. The permit was renewed in 1984, 1989, and 1995, and has been in timely renewal since 1999. This renewal and modification of DP-61 for the Mt. Taylor Mine incorporates an updated Discharge Permit renewal application that was

submitted by the Permittee on April 23, 2013, and additional information that has been submitted as part of the renewal and modification process since 1995. Surface discharge of treated mine water at San Lucas Canyon Outfall 001 is regulated by the United States Environmental Protection Agency (EPA) under NPDES permit #NM0028100. Stormwater discharge is regulated by the EPA under NPDES permit #NMR05GB27.

The discharges permitted herein shall be managed in accordance with the approved Discharge Permit, including all conditions herein. Issuance of this Discharge Permit does not relieve the Permittee of its responsibility to comply with the WQA, WQCC Regulations, and any other applicable federal, state, and/or local laws and regulations such as zoning requirements and nuisance orders.

Pursuant to 20.6.2.3109.E NMAC, NMED reserves the right to modify permit requirements in the event NMED determines that the requirements of 20.6.2 NMAC are being or may be violated, or the standards of 20.6.2.3103 NMAC are being, or may be, violated at a place of withdrawal of water for present or reasonably foreseeable future use due to a discharge regulated under this Discharge Permit. This may include a determination by NMED that operational practices approved under this Discharge Permit are not protective of ground and surface water quality, and that a modification is necessary to protect water quality or abate water pollution. Permit modification may include, but is not limited to, lining or relining impoundments, changing discharge locations, changing waste and leachate management practices, expanding monitoring requirements, and/or implementing abatement of water pollution.

F. PERMIT MODIFICATIONS

DP-61 includes the following modifications:

- Authorization to increase the maximum total Mt. Taylor Mine daily discharge volume from 7,200,000 gpd to 17,280,000 gpd;
- Authorization to operate water treatment facilities to remove uranium, molybdenum, selenium, and radium;
- Inclusion of discharge from a truck wash that will be constructed on the refurbished ore pad; and
- Incorporation of ongoing Stage 2 abatement activities to address nitrate and uranium ground water contamination.

II. Findings

In issuing this Discharge Permit modification and renewal, NMED finds:

1. The Permittee will discharge effluent or leachate from the Mt. Taylor Mine such that fluids or leachate may move directly or indirectly into ground water, which has an existing concentration of 10,000 mg/l or less of TDS within the meaning of 20.6.2.3101.A and 20.6.2.3104 NMAC;

2. The discharges from the Mt. Taylor Mine are not subject to any of the exemptions of 20.6.2.3105 NMAC;

3. The Mt. Taylor Mine is located at a place of withdrawal of water for present or reasonably foreseeable future use within the meaning of 20.6.2.3101.A NMAC; and

4. The Permittee is required to abate ground water contamination pursuant to 20.6.2.3107.A (11) and 20.6.2.3109.E (1) NMAC because the discharge from prior Mt. Taylor Mine operations has contaminated ground water of the State of New Mexico, which has an existing concentration of 10,000 mg/l or less of TDS and which is at a place of withdrawal for present or reasonably foreseeable future use, above the standards and requirements in 20.6.2.3103 NMAC.

III. Discharge Authorizations

Pursuant to 20.6.2.3104 NMAC, the Permittee shall ensure that discharges authorized by this Discharge Permit are consistent with the terms and conditions herein. The Permittee shall manage discharges from its operations as follows, subject to the conditions within this Discharge Permit [20.6.2.3109 NMAC]:

1. *Total maximum Mt. Taylor Mine discharge:* The Permittee is authorized to discharge up to 17,280,000 gpd of water that achieves all numerical ground water standards promulgated in 20.6.2.3103 NMAC at Outfall 001. This maximum total discharge volume is comprised of ground water from dewatering of aquifers overlying the underground workings, and the maximum 14,400,000 gpd that is discharged from the MWTU (see **Discharge Authorizations 2** and **4**).
2. *Mine Water Treatment Unit discharge:* The Permittee is authorized to discharge a maximum of 14,400,000 gpd from the MWTU, which is the design flow capacity of the active components. The MWTU shall treat mine dewatering effluent from the Westwater Canyon member, impacted stormwater, and wastewater from the STP prior to discharge at Outfall 001.
3. *Ponds:* The Permittee is authorized to operate the following ponds:
    a) Ponds #1, #2, and #3, which are synthetically double-lined with leak detection and collection systems and are located hydraulically upgradient of the MWTU active components, receive discharge of untreated water from the underground workings;
    b) Ponds #8, #4, and #5, which are synthetically double-lined with leak detection and collection systems and are located hydraulically downgradient of the MWTU active components, are used for precipitation of radium flocculant;
    c) Ponds #6 and #7, which are synthetically single-lined holding ponds for treated water prior to discharge at Outfall 001;
    d) A synthetically double-lined Ore Pad Run-off Retention Pond with a leak detection and collection system to contain truck wash wastewater and impacted stormwater and leachate run-off from the ore pad; and
    e) A clay-lined South Stormwater Retention Pond.
4. *Sewage Treatment Plant discharge:* The Permittee is authorized to discharge a maximum of 50,000 gpd of chlorinated effluent from the STP, which is its design treatment capacity. Additionally, the Permittee is authorized to operate the existing septic tank and

associated leach field only as a backup system to the STP, subject to relevant conditions herein.

5. *Ore pad and truck wash:* The Permittee is authorized to operate one synthetically single-lined 10-acre ore pad, and a truck wash constructed on the ore pad, subject to relevant conditions herein, with stormwater and leachate run-off collected and diverted to the Ore Pad Run-off Retention Pond.
6. *South Waste Rock Pile:* The Permittee is authorized to operate the existing 11.5-acre South Waste Rock Pile, with stormwater run-off collected and diverted to the South Stormwater Retention Pond.

IV. Permit Conditions

Throughout any activities resulting in discharge from Mt. Taylor Mine operations, the Permittee shall comply with the following conditions, which are enforceable by NMED:

A. OPERATIONS

Mine Water Treatment Unit

General

1. The Permittee shall construct and operate the MWTU so that water discharged from its operation shall achieve all numerical ground water standards that are promulgated in 20.6.2.3103 NMAC prior to discharge. Influent sources to the MWTU from Mt. Taylor Mine operations may include water pumped from the underground workings and impacted stormwater. [20.6.2.3106.C NMAC]
2. Within 120 days of completion of construction, the Permittee shall submit to NMED for approval as-built drawings for the MWTU (*e.g.*, ponds #1 through #8, IX Plant, Mo/Se treatment plant, barium chloride feed system, and associated conveyance piping), which shall include calculated Action Leakage Rates for ponds #1 through #5, and #8. The Action Leakage Rate for each pond shall be calculated by considering the amount of water that would accumulate in the geonet leak detection and collection layer that would equal one foot of hydrostatic head on the bottom secondary pond liner within a 100-foot radius of the associated sump (see **Condition 9**). As-built drawings shall bear the seal and signature of a licensed New Mexico professional engineer. [20.6.2.3109 NMAC]
3. Prior to the discharge of water that does not comply with the standards promulgated in 20.6.2.3103 NMAC into pipelines, and following any standby period in excess of 180 days, the Permittee shall submit to NMED results of mechanical integrity tests that shall be conducted under accepted procedures as are documented in American Petroleum Institute "*Recommended Practice 1110*" and certified by a licensed New Mexico professional engineer. The testing process shall include, but not be limited to, the following elements:
    a) Each section of the piping system shall be tested under normal working pressures for a continuous period of at least 14 hours;
    b) No piping will be acceptable for use until it sustains pressure without the addition of more fluids;

c) All pipe or appurtenances that are found to be defective or leaking shall be removed and replaced with sound units; and
d) The integrity test shall be repeated until no leakage is detected. [20.6.2.3107 NMAC]

4. The Permittee shall operate all pipelines related to the MWTU operations in a manner to prevent discharges that are not authorized by this Discharge Permit, including but not limited to the following activities:

a) During operation, all aboveground pumps and pipelines shall be visually inspected daily, monitored in real time via instrumentation for flow rate and pressure, and alarmed for upset conditions that would indicate leakage or pipe breakage; and
b) Upon discontinuing the operation of a pipeline or prior to moving a pipeline, all untreated water from the underground workings within each pipeline shall be released to an authorized discharge location or otherwise properly contained, transferred or disposed. [20.6.2.3109 NMAC]

IX Plant

5. Operation of the IX Plant shall include, but not be limited to, the following procedures:

a) Each IX treatment train shall comprise two IX columns that shall be operated in an up-flow lead/tail serial mode;
b) The maximum operational rate of each IX treatment train shall not exceed 1,650 gpm;
c) Resin screens shall be employed in the overflow of each individual column to prevent resin loss;
d) A level control system and sonic level sensor shall control the input flow rate to each IX column, and in upset conditions shall automatically divert flow to the IX Plant overflow tank for subsequent recycle into the IX Plant;
e) During IX Plant operation, the Permittee shall change out the IX resin in any individual IX column when either uranium loading of the resin reaches a maximum of 0.06 pounds per cubic foot or when the effluent from the column reaches 80% of the feed concentration, whichever occurs first, in order to prevent discharge of water with uranium concentrations exceeding 0.03 mg/l; and
f) The Permittee shall temporarily store loaded IX resin only within two loaded resin storage tanks of 1,000 cubic foot capacity within the IX Plant pending offsite transport for regeneration, and shall transport loaded resin only to a licensed regeneration facility in resin tankers that can hold up to 1,500 cubic feet of resin. [20.6.2.3106.C NMAC]

Molybdenum/selenium treatment plant

6. Operation of the Mo/Se treatment plant shall include, but not be limited to, the following procedures:

a) Each Mo/Se treatment train shall comprise two media columns that shall be operated in a lead/tail serial configuration;
b) Each train will operate at a maximum rate of 715 gpm;

c) Each Mo/Se media column shall have an internal screen to prevent media loss;
d) A level control system and sonic level sensor shall control the input flow rate to each Mo/Se media column, and in upset conditions shall automatically divert flow to a Mo/Se treatment plant overflow tank for subsequent recycle into the Mo/Se treatment plant; and
e) Loaded media will be assayed and disposed in accordance with all applicable regulations. [20.6.2.3106.C NMAC]

Barium chloride feed system

7. The Permittee shall operate the barium chloride feed system at a concentration of 32 mg/l, which is approximately equal to 120% of the barium chloride concentration that was necessary for radium removal to meet discharge standards from historical operation of the water treatment system. Any request for NMED approval to reduce this feed concentration shall include analytical data from an independent laboratory that demonstrate the ability of the proposed feed concentration to reduce observed radium concentrations to comply with the radium concentration standard promulgated in 20.6.2.3103.A (13) NMAC. [20.6.2.3106.C NMAC]

MWTU Ponds

8. The Permittee shall remove any contaminated sediments in which radium-226 + -228 activity exceeds five picocuries per gram (pCi/g) above background from all eight existing MWTU ponds prior to regrading or liner installation. These sediments shall be emplaced in the Reactivation Cell (see **Condition 25**). [20.6.2.3106.C NMAC]

9. The Permittee shall construct MWTU ponds #1, #2, #3, #4, #5, and #8 with double HDPE geomembrane liners (*e.g.*, primary 60 mil/secondary 40 mil, or their equivalent), and an intercalated leak detection and collection system (*e.g.*, 250 mil HDPE geonet, or equivalent) that drains to a gravel-filled sump on a suitable subgrade (see **Condition 32**). The Permittee shall use only these six ponds for containment of untreated water that is pumped from the underground workings. [20.6.2.3106.C NMAC]

10. The Permittee shall construct treated water ponds #6 and #7 with single 60 mil HDPE liners or their equivalent on a suitable subgrade (see **Condition 32**), from which treated water will be discharged to Outfall 001. The Permittee shall not discharge any water that exceeds the numerical concentration standards promulgated in 20.6.2.3103 NMAC to these two ponds. [20.6.2.3106.C NMAC]

11. The Permittee shall maintain a minimum of two feet of freeboard, as measured from the water surface to the top of the lowest elevation of the surrounding berm, in all ponds at all times. [20.6.2.3109.C (2) NMAC]

12. The Permittee shall return all water that accumulates in a pond leak detection and collection system sump to its respective impoundment using automatically-activated pumps to minimize hydraulic head on the secondary liner. The Permittee shall repair any pond liner if the leakage rate in a pond exceeds the respective Action Leakage Rate (see **Condition 2** and **60**). [20.6.3107.A (10) NMAC]

13. If it is necessary to remove sediment from MWTU ponds during Mt. Taylor Mine operations, the Permittee shall provide to NMED for review and approval a proposal for dewatering and subsequent disposal of these sediments at an appropriate facility. The

proposal submitted shall include analyses of these sediments for uranium, molybdenum, selenium, and total radium-226 + -228. [20.6.2.3106.C (7) NMAC]

14. The Permittee shall maintain signs at the facility entrance and at areas around all ponds where public contact is possible, in English, Spanish, and with symbols indicating that the water in the ponds is not potable. All signs shall remain visible and legible for the duration of pond operations. [20.6.2.3106.C NMAC]

Treated water pipeline

15. The Permittee shall line the treated water discharge pipeline for conveyance of treated water to Outfall 001 with an HDPE liner. Any material that is removed from the discharge pipeline during this process shall be placed in the Reactivation Cell (see **Condition 25**). [20.6.2.3106.C (7) NMAC]

STP and Backup Septic Tank/Leach Field

16. The Permittee shall utilize the STP for treatment of all Mt. Taylor Mine related sanitary waste, except for time periods when the STP is being serviced, during which time the Permittee may use the backup septic tank/leach field, subject to **Condition 17**. [20.6.2.3106.C (7) NMAC]

17. The Permittee shall not discharge waste water from showers, sinks, or laundry to the backup septic tank/leach field at any time after the Mt. Taylor Mine is placed into production of ore. [20.6.2.3106.C (7) NMAC]

Ore Pad and Truck Wash

18. The Permittee shall remove all ore that currently is on the existing ore pad to an offsite licensed uranium mill or appropriately-permitted facility prior to initiation of ore pad reconstruction (see **Condition 20**). [20.6.2.3106.C (7) NMAC]

19. Prior to initiation of mine production, the Permittee shall remove all contaminated soil that currently overlies or underlies the existing ore pad, in which radium-226 + -228 activity exceeds five pCi/g above background. This contaminated soil shall be disposed in the Reactivation Cell (see **Condition 25**). [20.6.2.3106.C (7) NMAC]

20. Prior to initiation of mine production, the Permittee shall construct a 10-acre ore pad with a 60 mil HDPE liner or equivalent on a suitable subgrade (see **Condition 31**) that is sloped at a 1% grade to drain run-off and any leachate to two catch basins, which drain to the Ore Pad Run-off Retention Pond. The ore pad liner shall be covered with at least 1.5 feet of clay or clayey sand (*i.e.*, CL, CH, or SC per U.S. Soil Conservation Service classification) that shall be compacted to 95% Standard Proctor density (ASTM D-698), over which shall be emplaced a travel course/drainage layer that is comprised of at least one foot of free-draining material. [20.6.2.3106.C (7) NMAC]

21. The Permittee shall construct and operate an Ore Pad Run-off Retention Pond with double HDPE geomembrane liners (*e.g.*, primary 60 mil/secondary 40 mil or their equivalent) with an intercalated leak detection and collection system (*e.g.*, 250 mil HDPE geonet or an equivalent) that drains to a gravel-filled sump on a suitable subgrade (see **Condition 31**). [20.6.2.3106.C (7) NMAC]

22. The Permittee shall store ore from Mt. Taylor Mine operations only on the 10-acre ore

pad. [20.6.2.3106.C (7) NMAC]

23. The Permittee shall construct a truck wash on the ore pad that is designed in accordance with guidance in EPA-816-F-01-024. All run-off and wash water from the truck wash shall drain through sediment catch basins prior to entering the Ore Pad Run-off Retention Pond. [20.6.2.3106.C (7) NMAC]

24. Any truck-washing operations associated with mining operations shall occur only on the truck wash that will be constructed on the ore pad. All trucks and equipment that are used to handle ore shall be washed in the truck wash prior to leaving the Mt. Taylor Mine. [20.6.2.3106.C (7) NMAC]

South Waste Rock Pile

25. The Permittee shall construct a cell (*i.e.,* Reactivation Cell) on the South Waste Rock Pile for emplacement of contaminated sediments that are excavated from ponds and contaminated soil from the ore pad during Mt. Taylor Mine reactivation. The cell shall be constructed with a minimum one-foot thick clay liner and cover system designed and installed in accordance with **Condition 32**. [20.6.2.3106.C (7) NMAC]

26. The Permittee shall cap the Reactivation Cell constructed for emplacement of contaminated sediments (see **Condition 25**) with a clay cap designed and installed in accordance with **Condition 32**, *i.e.,* a minimum of one-foot thickness or greater as necessary to reduce radon emissions to equal or less than 20 picocuries per square meter per second within 90 days following completion of contaminated sediments emplacement. Following cap emplacement, the Permittee shall cover the Reactivation Cell with a minimum of at least 12 inches of native soil fill. [20.6.2.3106.C (7) NMAC]

Stormwater Management

27. The Permittee shall divert off-site stormwater away from its facility through employment of Best Management Practices so as to minimize stormwater contact with contaminated materials either produced from or utilized in the Mt. Taylor Mine operations. [20.6.2.3106.C (7) NMAC]

28. The Permittee shall direct all on-site stormwater run-off that is potentially-impacted by Mine operations from surface facilities to collection systems for evaporation or treatment. [20.6.2.3106.C (7) NMAC]

29. The Permittee shall construct the South Stormwater Retention Pond with a minimum two-foot thick clay liner that is designed and installed in accordance with **Condition 32**. The Permittee shall emplace a layer of native soil fill of at least six inches thickness over the clay liner. The Permittee shall install an electric motor and pump on floating platform in a sump within the pond that shall transfer collected stormwater to pond #2 for treatment through the MWTU. [20.6.2.3107.C (7) NMAC]

30. The Permittee shall install catch basins and connecting culverts from the east edge of the South Waste Rock Pile to trap sediments and convey stormwater run-off to the South Stormwater Retention Pond. [20.6.2.3106.C (7) NMAC]

Liner and Cap Construction Quality Control and Construction Quality Assurance

31. The Permittee shall install all synthetic liners on a stable subgrade constructed in accordance with either the liner manufacturer's specifications or the specifications of the Fabricated Geomembrane Institute's "*Subgrade Requirements for Fabricated Geomembranes*" (July 12, 2010), as appropriate. Construction quality control (CQC) and construction quality assurance (CQA) plans shall be submitted to NMED for approval a minimum of 30 days prior to beginning of construction and liner installation. Within 60 days following completion of construction and liner installation, a CQA report and as-built plans shall be submitted to NMED. [20.6.2.3106.C NMAC]

32. The Permittee shall install all clay liners and caps on a stable subgrade. If necessary, the subgrade on which the clay liner or cap is placed should be compacted to eliminate soft areas. The clay liner or cap material shall have a maximum saturated hydraulic conductivity of 1×10^{-6} centimeters per second at 95 percent Standard Proctor density, and shall be emplaced in lifts that shall be compacted by appropriate methods to form interlocking lifts no greater than six inches thickness while achieving the density and conductivity standards herein throughout each lift. If necessary, the clay liner or cap material shall be preprocessed prior to use to include, at a minimum, elimination of large pieces of organic or other deleterious matter, pulverization of clods of soil, removal of oversized rocks, and homogenization of non-uniform material. CQC and CQA plans shall be submitted to NMED for approval a minimum of 30 days prior to beginning of construction of the clay liner. Within 60 days following completion of construction of the clay liner, a CQA report and as-built plans shall be submitted to NMED. [20.6.2.3106.C NMAC]

B. MONITORING AND INSPECTIONS

General

33. Unless otherwise approved in writing by NMED, the Permittee shall conduct all sampling and analyses in accordance with the most recent edition of the following documents:

    a) American Public Health Association, Standard Methods for the Examination of Water and Wastewater;
    b) U.S. Environmental Protection Agency, Methods for Chemical Analysis of Water and Waste;
    c) U.S. Geological Survey, Techniques for Water Resource Investigations of the U.S. Geological Survey;
    d) American Society for Testing and Materials, Annual Book of ASTM Standards, Part 31, Water;
    e) Latest methods published for monitoring pursuant to Resource Conservation and Recovery Act regulations, Federal Register; and
    f) U.S. Geological Survey, *et al.*, National Handbook of Recommended Methods for Water Data Acquisition. [20.6.2.3107.B NMAC]

34. The Permittee shall document inspections and resulting maintenance of the following facilities in accordance with the schedules shown:

    a) IX Plant, Mo/Se treatment plant, and barium chloride tanks daily; and

b) The entire length of all storm- and surface-water diversion channels, the South Stormwater Retention Pond, the Ore Pad Run-off Retention Pond, and all associated structures for physical evidence of erosion and other damage that may compromise the integrity of the stormwater management system at least once every quarter and immediately following storm events of one inch or greater during any 24-hour period. [20.6.2.3107.A (9) NMAC]

35. The Permittee shall monitor daily site-specific meteorological conditions. At a minimum, meteorological data that will be recorded shall include precipitation amounts and date of occurrence, air temperature, wind speed, and wind direction. The Permittee shall maintain record of these data on-site. [20.6.2.3107.A (6) NMAC]

Mine Water Treatment Unit

36. At least 60 days prior to the initiation of dewatering operations, the Permittee shall submit for NMED approval a plan to monitor influent ground water quality from the Westwater Canyon member to the MWTU in order to establish operating baseline water quality for treatment through the MWTU. [20.6.2.3103 NMAC]

37. Prior to operation of the MWTU, the Permittee shall install tensiometers with pressure transducers at each of the four corners of the mixing tanks associated with the barium chloride feed system. The Permittee shall monitor these tensiometers quarterly to detect leakage from these tanks. [20.6.2.3106.C (7) NMAC]

38. The Permittee shall collect daily eight-hour composite samples, with additional duplicate sample bottles for third party assay, from the tail IX column of each active IX train. The composite samples shall be comprised of samples that are collected hourly by automatic samplers. These samples shall be analyzed on-site for uranium concentrations with a Kinetic Phosphorescence Analyzer (KPA) in accordance with the ASTM D5174 standard. The duplicate sample shall be analyzed at an accredited laboratory. [20.6.2.3107.A (1) NMAC]

39. The Permittee shall collect daily eight-hour composite samples, with additional duplicate sample bottles for third party assay by an independent accredited laboratory, from the tail Mo/Se column of each active Mo/Se treatment train. The composite samples shall be comprised of samples that are collected hourly by automatic samplers.

    a) Samples shall be analyzed on-site for Mo with an inductively coupled plasma—atomic emission spectrometer (ICP-AES) in accordance with EPA Method 200.7 and achieve an analysis detection limit of 10 micrograms/liter (µg/l) or less; and
    b) Samples shall be analyzed on-site for Se with an inductively coupled plasma—mass spectrometer (ICP-MS) with a cyclic redundancy (CRC) detector in accordance with EPA Method 200.8 and achieve analysis detection limit of 0.25 µg/l or less. [20.6.2.3107.A (1) NMAC]

40. The Permittee shall collect and analyze grab samples every eight hours from each lead and tail IX and Mo/Se column to determine when resin or media change-out respectively is necessary in order maintain discharge water quality to the numerical standards promulgated in 20.6.2.3103 NMAC. [20.6.2.3107.A (1) NMAC]

41. The Permittee shall collect at least one daily grab sample of treated water from the main discharge pipeline from the MWTU to Outfall 001, which shall be analyzed for radium activity. [20.6.2.3107.A (1) NMAC]

42. The Permittee shall collect and analyze quarterly grab samples of treated water from the main discharge pipeline from the MWTU to Outfall 001, which shall be analyzed for the dissolved concentrations of the constituents listed in **Table 1** by an accredited laboratory. [20.6.2.3107.A (1) NMAC]

43. The Permittee shall record the weight of contaminant-loaded IX resin in each of the loaded resin storage tanks on a weekly schedule. [20.6.2.3107.A (6) NMAC]

44. The Permittee shall record the following fluid movement data:

    a) Volume and average daily rate of water extracted from each dewatering well and shaft;
    b) Volume and average daily in-flow rate to the IX Plant;
    c) Volume of water pumped from underground workings that is recycled for Mt. Taylor Mine process uses; and
    d) Volume and average daily rate of treated water discharged at Outfall 001. [20.6.2.3107.A (6) NMAC]

Ponds

45. During the first year of Mine operations, following any rainfall event that results in stormwater accumulation sufficient to collect stormwater samples, but no more frequently than weekly, the Permittee shall collect a sample from the South Stormwater Retention Pond for analysis at an accredited laboratory for the constituents specified in **Table 2.** At NMED's discretion, the duration of this monitoring requirement may be extended. [20.6.2.3107.A (8) NMAC]

46. The Permittee shall monitor pond leak detection and collection systems in ponds #1 through #5 and #8 on a weekly schedule, recording the depth of water that has collected in the sump of each pond and the calculated leakage rate as applicable. [20.6.2.3107.A (8) NMAC]

47. The Permittee shall record the freeboard level of each pond on a weekly schedule. [20.6.2.3107.A (8) NMAC]

48. The Permittee shall collect quarterly samples from the first two ponds in the MWTU process that throughout the quarter were predominantly used for discharge of untreated mine water and from ponds #6 and #7 that are used for discharge of water from the barium chloride treatment system, for analysis of the constituents listed in **Table 1** at an accredited laboratory for at least the first two years of mining operations. Following establishment of baseline conditions, the Permittee may request a reduction in this monitoring requirement. [20.6.2.3107.A (8) NMAC]

Sanitary Treatment Plant

49. The Permittee shall record the monthly volume of effluent discharged from the STP. [20.6.2.3107.A (6) NMAC]

50. If the Permittee must clean-out and dispose of sewage sludge from the STP, the Permittee shall analyze this sludge for selenium, uranium, molybdenum and total radium-226 + -228, and make such analyses available both to NMED and to an appropriately-licensed disposal facility at the time of disposal. [20.6.2.3106.C (7) NMAC]

Operational Ground Water Monitoring

51. The Permittee shall measure water levels to within 0.01 foot in the alluvial monitoring wells listed in **Table 3** on a quarterly schedule. If water is present in any of these wells, the Permittee shall attempt to collect a sample for analysis of the constituents listed in **Table 2** at an accredited laboratory. [20.6.2.3107.A (3) and 20.6.2.3107.A (8) NMAC]

52. Within 60 days of achieving dewatered conditions in the underground workings, the Permittee shall submit a proposal to monitor water quality in the Point Lookout aquifer to NMED for review, which shall include at a minimum those wells being used for potable water supply at the Mt. Taylor Mine. [20.6.2.3107.A (8) NMAC]

C. GROUND WATER ABATEMENT

53. Ground water standards as promulgated under 20.6.2.3103 NMAC have been exceeded as a result of discharges from past Mine operations. A Stage 2 abatement plan to address this contamination was approved by NMED in 2011, all provisions of which are herein incorporated into this Discharge Permit. [20.6.2.4101 NMAC]

54. Within 120 days of either the effective date of this Discharge Permit or approval of Mine Permit C1002RE/Revision 13-2, whichever occurs last, the Permittee shall submit a plan and associated implementation schedule in which, within 180 days of NMED's approval of this plan, the Permittee would synthetically double-line one MWTU pond and commence pumping of wells MW-6 and WP-5, with discharge of the recovered water to the lined pond for evaporation. Once the MWTU is operational, this contaminated ground water shall be treated in the MWTU for disposal through Outfall 001. [20.6.2.4101 NMAC]

55. In the event that monitoring indicates that the extent and/or magnitude of existing ground water contamination are increasing significantly, the Permittee shall notify NMED within five days of discovery; if NMED discovers such an increase, it will notify the Permittee. In either case, the Permittee shall collect a confirmatory sample from the monitoring well(s) within 15 days of discovery or notification to confirm the initial sampling results. If the finding is confirmed by sampling, within 60 days the Permittee shall submit to NMED for approval an abatement plan, which includes a site investigation to define the source, nature, and extent of contamination; a proposed abatement option, and a schedule for its implementation. The site investigation and abatement option shall be consistent with the requirements and provisions of 20.6.2.4101 through 20.6.2.4115 NMAC. Upon NMED approval, the Permittee shall implement the approved abatement plan in accordance with the included implementation schedule. [20.6.2.4101 to 20.6.2.4115 NMAC]

D. REPORTING

General

56. The Permittee shall submit workplans for the activities required under **Conditions 8** and **19** herein to NMED for review and approval a minimum of 60 days prior to implementation. The submittals shall include, but not be limited to, proposed quality control measures that the Permittee shall implement both during and following these activities to ensure and document the removal of all radioactively-contaminated materials. Following the completion of the activities specified in the referenced Conditions, the Permittee shall submit reports on follow-up quality control surveys that shall be conducted in accordance with the approved workplans to NMED for review and approval. [20.6.2.3107.A (8) NMAC]

Quarterly Reports

57. The Permittee shall submit one paper and one electronic copy of a quarterly report to NMED that includes information specified in **Conditions 58** and **59**. The submittal schedule for these reports shall be as follows:
    a) April 30th, for information collected between January 1st and March 31st;
    b) July 31st, for information collected between April 1st and June 30th;
    c) October 30th, for information collected between July 1st and September 30th; and
    d) January 30th, for information collected between October 1st and December 31st. [20.6.2.3107.A (8) NMAC]
58. The quarterly report shall include, but not be limited to, the following tabulated information:
    a) Quantities of contaminated sediments removed from ponds (see **Condition 8**) and the ore pad (see **Condition 19**) and placed into the Reactivation Cell, as applicable;
    b) Baseline monitoring data from influent ground water quality from the Westwater Canyon member to the MWTU (see **Condition 36**);
    c) Results of uranium sample analyses by KPA and an accredited laboratory from daily eight-hour samples that are composited from the tail IX column of each active IX train (see **Condition 38**);
    d) Analytical results by on-site and accredited laboratories for Mo/Se samples from daily eight-hour composite samples that are composited from the tail column of each active treatment train (see **Condition 39**);
    e) Analytical results from grab samples collected from lead and tail IX and Mo/Se treatment columns (see **Condition 40**);
    f) Analytical results for radium from daily grab samples from the main discharge pipeline from the MWTU to Outfall 001 (see **Condition 41**);
    g) Analytical results of treated water discharged to Outfall 001 (see **Condition 42**);
    h) Weekly record of the contaminant-loaded IX resin weight in each loaded resin storage tank (see **Condition 43**);
    i) Fluid movement data (see **Condition 44**);
    j) Analytical results from samples collected from the South Stormwater Retention Pond (see **Condition 45**), as appropriate;

k) Weekly measurements of the depth of water accumulated in the sumps of ponds with leak detection and collection systems (see **Condition 46**);
l) Weekly freeboard level for each pond (see **Condition 47**);
m) Analytical data for active pond sampling (see **Condition 48**);
n) Quarterly STP effluent discharged through Outfall 001 (see **Condition 49**); and
o) Alluvial monitoring data (see **Condition 51**). [20.6.2.3107.A (8) NMAC]

59. The quarterly report shall include, but not be limited to, narrative summaries of the following information:

a) Pipeline movements, removal, repairs, and closures, including the date, approximate location and length of the affected pipeline;
b) Any conditions requiring maintenance, which are documented during mandated inspections, as well as completed or proposed activities to address the identified deficiencies (see **Condition 34**);
c) Results from tensiometer monitoring from the previous quarter (see **Condition 37**);
d) Pond leakage in excess of the respective Action Leakage Rate, as well as activities undertaken or planned to address the deficiency (see **Condition 2** and **12**);
e) Well abandonment (see **Condition 61**), rehabilitation or drilling; and
f) Significant changes in discharge volume and daily flow rates from the preceding quarterly report. [20.6.2.3107.A (8) NMAC]

E. CONTINGENCIES

60. For any pond leak detection and collection system in which the Permittee confirms a leakage rate that exceeds the respective pond Action Leakage Rate (see **Condition 2** for definition), the Permittee shall perform the following actions:

a) Inform NMED by telephone within 24 hours of confirmation; and
b) Immediately discontinue operational use of the impaired pond, and transfer fluids to another pond or NMED-approved containment until either the pond liner is repaired or the pumpback equipment is upgraded, as approved by NMED. [20.6.2.3107 NMAC]

61. The Permittee shall notify NMED as soon as practical in the event of unintentional well destruction or damage requiring well abandonment, or other proposed well abandonment. The Permittee shall plug and abandon all borings and monitoring wells in accordance with NMED, March 2011 ("*Monitoring well construction and abandonment conditions*" rev. 1.1) or the most current update to these conditions, and the regulations in 19.27.7 NMAC that have been issued by the New Mexico Office of the State Engineer, unless an alternative method is approved. A report documenting abandonment details, including volumes of materials used, composition of plugging material, and methods shall be submitted to NMED within 30 days of well abandonment completion. [20.6.2.3107.A (8) NMAC]

62. In the event that information available to NMED indicates that a monitoring well(s) is not constructed in a manner consistent with NMED, March 2011 or the most current update to these guidelines; contains insufficient water to effectively monitor ground water

quality due to well construction or location; or is not completed in a manner that is protective of ground water quality, the Permittee shall install a replacement well(s) within 120 days following notification from NMED.

The Permittee shall survey the replacement monitoring well(s) within 150 days following notification from NMED.

Replacement monitoring well location(s) shall be approved by NMED prior to installation and completed in accordance with NMED, March 2011 or the most current update to these guidelines. The Permittee shall submit construction and lithologic logs, survey data, and an up to date ground water elevation contour map for the aquifer in which the replacement monitoring well is completed to NMED within 60 days following monitoring well completion.

Upon completion of the replacement monitoring well(s), the monitoring well(s) requiring replacement shall be properly plugged and abandoned. Well plugging, abandonment, and documentation of the abandonment procedures shall be completed in accordance with NMED, March 2011 or the most current update to these guidelines, and all applicable local, state, and federal regulations. The well abandonment documentation shall be submitted to NMED within 60 days of well plugging activities. [20.6.2.3107.A NMAC]

63. In the event that NMED or the Permittee identifies any failures of the discharge plan or this Discharge Permit not specifically noted herein, NMED may require the Permittee to submit a corrective action plan and a schedule for completion of corrective actions to address the failure(s). Additionally, NMED may require a Discharge Permit modification to achieve compliance with 20.6.2 NMAC. [20.6.2.3107.A and 20.6.2.3109.E NMAC]

64. In the event that a release (commonly known as a "spill") occurs that is not authorized under this Discharge Permit, the Permittee shall take measures to mitigate damage from the unauthorized discharge and initiate the notifications and corrective actions required in 20.6.2.1203 NMAC and summarized below:

    a) Within 24 hours following discovery of the unauthorized discharge, the Permittee shall verbally notify NMED and provide the following information:
        1) The name, address, and telephone number of the person or persons in charge of the facility, as well as of the owner and/or operator of the facility;
        2) The name and address of the facility;
        3) The date, time, location, and duration of the unauthorized discharge;
        4) The source and cause of the unauthorized discharge;
        5) A description of the unauthorized discharge, including its estimated chemical composition;
        6) The estimated volume of the unauthorized discharge; and
        7) Any actions taken to mitigate immediate damage from the unauthorized discharge.
    b) Within one week following discovery of the unauthorized discharge, the Permittee shall submit written notification to NMED that verifies the prior verbal notification and provides any corrections or additional information to that earlier report.
    c) Within 15 days after the discovery of the spill or release, the Permittee shall submit a corrective action report to NMED that includes the following:

1) A description of proposed actions to mitigate damage from the unauthorized discharge;
2) A description of proposed actions to prevent future unauthorized discharges of this nature; and
3) A schedule for completion of proposed actions.

In the event that the unauthorized discharge causes or may with reasonable probability cause water pollution in excess of the standards and requirements of Section 20.6.2.4103 NMAC, and the water pollution will not be abated within 180 days after notice is required to be given pursuant to Paragraph (1) of Subsection A of 20.6.2.1203 NMAC, the Permittee may be required to abate water pollution pursuant to Sections 20.6.2.4000 through 20.6.2.4115 NMAC. Nothing in this condition shall be construed as relieving the Permittee of the obligation to comply with all requirements of Section 20.6.2.1203 NMAC. [20.6.2.1203 NMAC]

F. TEMPORARY SUSPENSION OF OPERATIONS, SITE CLOSURE, AND POST-CLOSURE MONITORING

65. The Permittee shall notify NMED in writing of its intention to suspend temporarily, resume, or terminate permanently mining operations at least 30 days in advance of initiating such actions. [20.6.2.3107.A (6) NMAC]

66. For any future temporary suspension of mining operations that will last for more than 180 days, the Permittee shall submit to NMED a plan and schedule for removal of all ore material on the ore pad. [20.6.2.3106.C NMAC]

67. Within 30 days of its notification to NMED of its intent to permanently terminate mining operations under **Condition 65**, the Permittee shall submit a proposal to NMED for post-closure ground water monitoring of the Point Lookout, Tres Hermanos, Dakota, and Westwater Canyon aquifers. [20.6.2.3107.A (6) NMAC]

68. The Permittee shall conduct Mt. Taylor Mine closure activities in accordance with the State-approved closure plan. [20.6.2.3107.A (11) NMAC]

69. Following final termination of mining operations, the Permittee shall continue monitoring in accordance with **Condition 51** and from wells identified in **Condition 67**, and report the results in accordance with **Condition 58** until the Permittee is notified in writing by NMED that it may discontinue such monitoring. [20.6.2.3107.A (4) NMAC]

70. Following notification from NMED that post-closure monitoring may cease, the Permittee shall plug and abandon all remaining wells, excepting those excluded in the approved closure plan, in accordance with NMED, March 2011 or the most current update to these guidelines and the regulations issued by the New Mexico Office of the State Engineer in 19.27.4 NMAC. [20.6.2.3107.A (11) and 20.6.2.4107.C NMAC]

71. When all post-closure requirements have been met, the Permittee may request in writing to terminate this Discharge Permit. [20.6.2.3107.A (11) NMAC]

G. FINANCIAL ASSURANCE

72. The Permittee shall maintain the existing joint financial assurance with NMED and the

Mining and Minerals Division of the New Mexico Energy, Minerals and Natural Resources Department to cover costs associated with post-closure monitoring, maintenance, and corrective actions as required under this Discharge Permit. [20.6.2.3107.A (11) NMAC]

H. GENERAL TERMS AND CONDITIONS

Recordkeeping

73. The Permittee shall maintain a written record of the following information:
    a) Information and data used to complete the application for this Discharge Permit;
    b) Records of any releases (commonly known as "spills") not authorized under this Discharge Permit and reports submitted pursuant to 20.6.2.1203 NMAC;
    c) Records of the operation, maintenance, and repair of all facilities/equipment used to treat, store, or dispose of wastewater;
    d) Copies of monitoring reports completed and/or submitted to NMED pursuant to the Discharge Permit;
    e) The volume of wastewater or other wastes discharged pursuant to this Discharge Permit;
    f) Ground water quality and wastewater quality data collected pursuant to this Discharge Permit;
    g) Copies of construction records (well logs) for all ground water monitoring wells required to be sampled pursuant to workplans developed under this Discharge Permit;
    h) Records of the maintenance, repair, replacement, or calibration of any monitoring equipment or flow measurement devices required under workplans developed pursuant to this Discharge Permit;
    i) Data and information related to field measurements, sampling, and analysis conducted pursuant to this Discharge Permit. The following information shall be recorded and shall be made available to NMED upon request:
        1) The dates, location, and times of sampling or field measurements;
        2) The name and job title of the individuals who performed each sample collection or field measurement;
        3) The sample analysis date of each sample;
        4) The name and address of the laboratory, and the name of the signatory authority for the laboratory analysis;
        5) The analytical technique or method used to analyze each sample or collect each field measurement;
        6) The results of each analysis or field measurement, including raw data;
        7) The results of any split, spiked, duplicate, or repeat sample; and
        8) A copy of the laboratory analysis chain-of-custody as well as a description of the quality assurance and quality control procedures used.

The written record shall be maintained for a period of at least five years from the date of application, report, collection, or measurement and shall be made available to NMED upon request. [20.6.2.3107.A NMAC]

Inspection and Entry

74. The Permittee shall allow inspection by NMED of the facility and its operations that are subject to this Discharge Permit and the WQCC regulations. NMED may, upon presentation of proper credentials, enter at reasonable times upon or through any premises in which a water contaminant source is located or in which are located any records required to be maintained by regulations of the federal government or the WQCC. The Permittee shall allow NMED to have access to and reproduce for their use any copy of the records, and to perform assessments, sampling, or monitoring during an inspection for the purpose of evaluating compliance with this Discharge Permit and the WQCC regulations. Nothing in this Discharge Permit shall be construed as limiting in any way the inspection and entry authority of the NMED under the WQA, the WQCC Regulations, or any other applicable law or regulation. [20.6.2.3107.D NMAC; NMSA 1978, §§ 74-6-9.B and 74-6-9.E]

Duty to Provide Information

75. The Permittee shall, upon NMED's request, allow NMED's inspection/duplication of records required by this Discharge Permit and/or furnish to NMED copies of such records. [NMSA 1978, § 74-6-5.D, 20.6.2.3109.B NMAC 20.6.2.3107.D NMAC, NMSA 1978, §§ 74-6-9.B and 74-6-9.E]

Modifications/Amendments

76. In the event the Permittee proposes a change to the facility or the facility's discharge that would result in a significant increase in the volume discharged; or change in the location of the discharge; or significant change in the amount or character of water contaminants received, treated or discharged by the facility, the Permittee shall notify NMED prior to implementing such changes. The Permittee shall obtain approval (which may require modification of this Discharge Permit) by NMED prior to implementing such changes. [NMSA 1978, § 74-6-5.D, 20.6.2.3109.E NMAC, 20.6.2.3107.C NMAC]

Plans and Specifications

77. In the event the Permittee is proposing to construct a wastewater system or change a process unit of an existing system such that the quantity or quality of the discharge will change substantially from that authorized by this Discharge Permit, the Permittee shall submit construction plans and specifications to NMED for the proposed system or process unit prior to the commencement of construction.

    In the event the Permittee implements changes to the wastewater system authorized by this Discharge Permit which result in only a minor effect on the character of the discharge, the Permittee shall report such changes (including the submission of record drawings, where applicable) as of January 1 and June 30 of each year to NMED. [NMSA 1978, § 74-6-5.D, 20.6.2.3109.B NMAC, 20.6.2.1202 NMAC]

Civil Penalties

78. Any violation of the requirements and conditions of this Discharge Permit, including any failure to allow NMED staff to enter and inspect records or facilities, or any refusal or

failure to provide NMED with records or information, may subject the permittee to a civil enforcement action. Pursuant to WQA 74-6-10(A) and (B), such action may include a compliance order requiring compliance immediately or in a specified time, assessing a civil penalty, modifying or terminating the Discharge Permit, or any combination of the foregoing; or an action in district court seeking injunctive relief, civil penalties, or both. Pursuant to WQA 74-6-10(C) and 74-6-10.1, civil penalties of up to $15,000 per day of noncompliance may be assessed for each violation of the WQA 74-6-5, the WQCC Regulations, or this Discharge Permit, and civil penalties of up to $10,000 per day of noncompliance may be assessed for each violation of any other provision of the WQA, or any regulation, standard, or order adopted pursuant to such other provision. In any action to enforce this Discharge Permit, the Permittee waives any objection to the admissibility as evidence of any data generated pursuant to this Discharge Permit. [NMSA 1978, §§ 74-6-5, 74-6-10, and 74-6-10.1]

Criminal Penalties

79. No person shall:

    a) make any false material statement, representation, certification or omission of material fact in an application, record, report, plan or other document filed, submitted or required to be maintained under the WQA;
    b) falsify, tamper with or render inaccurate any monitoring device, method or record required to be maintained under the WQA; or
    c) fail to monitor, sample or report as required by a permit issued pursuant to a state or federal law or regulation.

    Any person who knowingly violates or knowingly causes or allows another person to violate the requirements of this condition is guilty of a fourth degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who is convicted of a second or subsequent violation of the requirements of this condition is guilty of a third degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who knowingly violates the requirements of this condition or knowingly causes another person to violate the requirements of this condition and thereby causes a substantial adverse environmental impact is guilty of a third degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who knowingly violates the requirements of this condition and knows at the time of the violation that he is creating a substantial danger of death or serious bodily injury to any other person is guilty of a second degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. [NMSA 1978, §§ 74-6-10.2.A through 74-6-10.2.F]

Compliance with Other Laws

80. Nothing in this Discharge Permit shall be construed in any way as relieving the Permittee of the obligation to comply with all applicable federal, state, and local laws, regulations, permits or orders. [20.6.2 NMAC]

Right to Appeal

81. The Permittee may file a petition for review before the WQCC on this Discharge Permit.

Such petition shall be in writing to the WQCC within thirty days of the receipt of postal notice of this Discharge Permit and shall include a statement of the issues to be raised and the relief sought. Unless a timely petition for review is made, the decision of NMED shall be final and not subject to judicial review. [NMSA 1978, § 74-6-5.O]

Transfer of Discharge Permit

82. Prior to the transfer of any ownership, control, or possession of this facility or any portion thereof, the Permittee shall:

    a) notify the proposed transferee in writing of the existence of this Discharge Permit;
    b) include a copy of this Discharge Permit with the notice; and
    c) deliver or send by certified mail to NMED a copy of the notification and proof that such notification has been received by the proposed transferee.

    Until both ownership and possession of the facility have been transferred to the transferee, the Permittee shall continue to be responsible for any discharge from the facility. [20.6.2.3111 NMAC]

Permit Fees

83. Payment of permit fees is due at the time of Discharge Permit approval. Payments shall be remitted to NMED no later than 30 days after the Discharge Permit effective date.

    Permit fees are associated with issuance of this Discharge Permit. Nothing in this Discharge Permit shall be construed as relieving the Permittee of the obligation to pay all permit fees assessed by NMED. A Permittee that ceases discharging or does not commence discharging from the facility during the term of the Discharge Permit shall pay all permit fees assessed by NMED. An approved Discharge Permit shall be suspended or terminated if the facility fails to remit an installment payment by its due date. [20.6.2.3114.F NMAC; NMSA 1978, §74-6-5.K]

Term

84. The term of this Discharge Permit is five years; the Permit will automatically expire five years from the date it is issued. To renew this Discharge Permit, the Permittee must submit an application for renewal at least 120 days before that date. [20.6.2.3109.H (4) NMAC]

EFFECTIVE DATE October 14, 2015

TERM ENDS October 14, 2020

Trais Kliphuis, Director
Water Protection Division
New Mexico Environment Department

Under authority delegated by the Secretary of the New Mexico Environment Department.

TK/dlm

Table 1: Analytes for MWTU monitoring

Analyte	Ground water standard promulgated in 20.6.2.3103 NMAC*,†
pH	6.0 -- 9.0 standard units
Total radium-226 + radium-228	30 pCi/l
Uranium	0.03
Zinc	10.0
Aluminum	5.0
Boron	0.75
Cadmium	0.01
Chromium	0.05
Cobalt	0.05
Copper	1.0
Mercury	0.002
Molybdenum	1.0
Selenium	0.05
Arsenic	0.1
Barium	1.0
Fluoride	1.6
Lead	0.05
Chloride	250.0
Sulfate	600.0
Nitrate (NO_3 as N)	10.0
Manganese	0.2
Total dissolved solids	1000.0

* All units mg/l unless otherwise noted

† The Permittee is responsible for complying with the numerical standards promulgated in 20.6.2.3103 NMAC for all constituents in its discharge.

Table 2: Analytes for alluvial aquifer ground water monitoring and stormwater monitoring

Uranium
Total radium-226 + radium-228
Selenium
Chloride
Molybdenum
Sulfate
Total dissolved solids
Benzene, toluene, ethylbenzene, and xylene*
Nitrate†

*Not required for "OFMW" (see **Table 3**) or abatement (see **Table 4**) wells
†Required only for abatement wells (see **Table 4**)

Table 3: Operational alluvial aquifer monitoring wells

South Waste Rock Pile monitoring well

Well no.	State Plane Coordinates (NAD83)	
	North	East
MW-6	1578620	27822473

MWTU ponds monitoring wells

Well no.	State Plane Coordinates (NAD83)	
	North	East
MW-1	1580484	2781541
MW-2	1570191	2781538
MW-3	1580976	2781545

Outfall 001 monitoring wells

Well no.	State Plane Coordinates (NAD83)	
	North	East
OFMW-02	1601073	2780925
OFMW-03	1601250	2781000
OFMW-04	1601914	2781403

Table 4: Stage 2 Abatement alluvial aquifer monitoring wells (Metric Corporation, August 2010; Stage 2 Abatement Plan)

Well no.	State Plane Coordinates (NAD83)	
	North	East
WP-4	1578330	2781527
WP-5	1578790	2781545
MW-4	1578580	2781050
MW-5	1579062	2781556