

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
Director
Mining and Minerals Division
1220 St. Francis St.
Santa Fe, New Mexico 87505
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MINING INSPECTION REPORT

Name of Operator: Rio Grande Resources, Inc. (RGR)
Name of Mine: Mt. Taylor Mine
Address: Approx. 20 miles north of Grants (UTM 13S 0260351, 3914011)
Permit Number: CI002RE
Commodity: Uranium <input type="checkbox"/> SURFACE <input checked="" type="checkbox"/> UNDERGROUND
Date of Inspection: April 6, 2021
Time of On-Site Inspection: 10:30 am – 2:00 pm
Weather Conditions: Partly Cloudy, 75°F
Purpose of Inspection: Mine permitting (Mod. 20-1) and Mine Closeout inspection.
Lead Inspector: David Otori
Present During Inspection: MMD – David Otori; RGR - Bruce Norquist
ENFORCEMENT ACTION TAKEN: None NOTICE OF VIOLATION: # _____ YES:___ NO: <u>X</u> CESSATION ORDER: YES:___ NO: <u>X</u>
Time: On-Site: <u>3.50</u> Permit Review: <u>1</u> Travel: <u>5</u> Report Writing: <u>1</u> TOTAL INSPECTION TIME: <u>10.5</u> HOURS
NOTE: Mt. Taylor Uranium Mine is located NE of the Town of San Mateo, UTM 13S 0260351, 3914011 on the San Mateo Quad. This inspection was not concurrent with the inspection of another mine.

MINE CLOSEOUT INSPECTION

April 6, 2021

Mount Taylor Mine

PERMIT UPDATE:

On May 15, 2020 MMD received an application from RGR to modify the permit for changes to the closeout schedule, for an expansion of the South Waste Rock Pile and disposal cell, and to change the post mining land use for several of the mine buildings and facilities. MMD is processing the application under Modification 20-1.

INSPECTION NARRATIVE:

The MMD inspector arrived at the Mt. Taylor Mine at approximately 10:30 am. He met with Bruce Norquist, manager for the Mt. Taylor Mine.

Ore Pile and Pad Area (see photos)

The low-grade ore from the ore pile continues to be shipped to the White Mesa Mill in Blanding, Utah at the rate of about 5 trucks per day, 5 days a week. The remaining ore pile has been consolidated into two smaller piles. The thickness of the underlying ore pad was estimated by RGR to be two to three feet thick after drilling a hole using an auger in the center of the ore pad. According to Bruce approx. 2,000 tons of the ore is being transported per month and he predicts at this rate the ore pile removal will be completed in July 2021. A transport truck arrived and loaded during the inspection.

Treated Water Pipeline

Bruce reported that they are dismantling the pipeline that carried treated water from the mine to the outfall on the San Lucas Creek, 4 miles away. The inside of the pipe has scale that has small amounts of uranium that collected in the pipe during discharge of the treated mine water. Bruce stated that RGR is considering cutting the pipeline into 5 ft. long segments and placing it in the expanded disposal cell in vertical rows and filling them with flow fill concrete.

Borrow Area A (see photos)

This was the source of the clay material used for lining and capping the disposal cell in the South Waste Rock Pile (SWRP). A pile of clay material that will be used as the capping material is piled in the center of the borrow area. The diversion ditch located below the borrow area will collect stormwater from the borrow area during reclamation.

Flocculant Building

The flocculant building has been demolished except for the concrete foundation (see photo).

Water Treatment Ponds (see photos)

The double HDPE-lined water treatment pond 2 has been emptied due to some minor leaks that were detected by the leak detection system and the liner is being repaired (see photo). The water from pond 2 has been transferred to the adjacent lined pond 3. A 2-ft. tall chicken wire fence was constructed around ponds 2 and 3.

Ponds 4, 5, 6 and 7 have been excavated of contaminated sediments with the sediments placed in the existing disposal cell. The concrete drain structures will be demolished and placed in the expanded disposal cell.

Barium Chloride Building

The Barium Chloride has been demolished except for the concrete foundation (see photo).

Ion Exchange Building (see photos)

The ion exchange building will be demolished once the ion exchange system has been removed.

York Chiller, Pump Building, Cooling Towers (see photos)

These buildings & facilities are in the process of being demolished.

24-Ft. & 14-Ft. Shaft Head Frames & Hoist House (see photos)

The head frames will be demolished and the Hoist House is proposed to be retained for the commercial PMLU.

Water Treatment, Electrical and Compressor Buildings (see photos)

The Water Treatment Building has been demolished and the concrete foundation has been broken up. The Compressor Building will be demolished and the Electrical Building is proposed to be retained for the commercial PMLU.

Carpenter Shop and Diesel Storage Tank Foundations (see photos)

The concrete foundations of these facilities remain after the Carpenter Shop and the Diesel Storage Tanks had been removed.

South Waste Rock Pile (see photos)

Work on the construction of the SWRP and disposal cell has been completed to the point where the MMD and NMED approval of the SWRP expansion is needed in order to

continue construction of the proposed expansion area that will be located to the east of the existing SWRP and disposal cell. The east side of the existing disposal cell that will be extended has been covered with a one-foot-thick layer of clay to contain the contaminated materials that have been placed there. Rip rap drainage structures are being constructed for stormwater handling on the disposal cell and SWRP. The west side of the disposal cell slopes have been covered with a 2-ft.-thick clay cap, radon and gamma measurements have been taken and confirmed that the surface of the clay cap meets the joint MMD/NMED radiation cleanup guidelines, and green erosion blankets have been temporarily placed to prevent erosion before the vegetative cover material is placed over the clay cap.

South Stormwater Pond

The clay-lined South Stormwater Pond appeared partially filled. A pair of ducks were observed on the pond.

The MMD inspector exited the mine at approximately 2:30 pm.

Sink Hole in San Mateo (see photos)

The approx. 5-ft diameter sinkhole that was reported to MMD, NMED and Cibola County was inspected. The landowner who was not present had told the Cibola County investigators that the original sink hole was approximately 4-5 feet deep and that it was backfilled with loose soil in early March, 2021. Since that time the backfill appears to have settled approximately 8 inches to 1 ft. The sinkhole is located along the side of the San Mateo village road and the local road dept. has placed concrete road barriers, cones and tape to keep the public from accidentally encountering the sinkhole. According to the local residents who spoke with Bruce Norquist of the Mt. Taylor Mine an old 2-inch water supply line is buried approximately 15 ft. away from the sink hole, the newer 6-inch community water supply line is located on the other side of the man road approximately 45-feet away. There is an un-occupied house located approx. 20-feet away and the septic tank for the house is located approx. 30-ft. away from the sinkhole. There was no other sign of any ground subsidence in the nearby area. An old acequia runs approximately 100-feet away to the north of the sinkhole and the road has a runoff ditch that extends along the roadside and come close to the sinkhole. Bruce reported that the area received approx. a foot of snow within the last 3-weeks. The sinkhole is approx. round in cross-section leading to suspicion that it was originally a well or sump that had been dug there in the past. The landowner said to Bruce that they would continue to monitor the sinkhole for further settlement or expansion. Bruce said that according to mine records there are no underground mine workings associated with the Mt. Taylor Mine within approx. a mile of the sinkhole.

The MMD inspector left the sinkhole site at approximately 3 pm.

ACTION ITEMS:

Closeout plan and reclamation of the mine will continue in 2021. MMD will process Modification 20-1.

PHOTOS:



Ore Pile looking west (two consolidated piles)



Loading ore into haul truck



Borrow Area A looking east



Borrow Area Diversion Ditch



Flocculant Building Foundation



Lined Pond 2



Barium Chloride Building Foundation



Water Treatment Ponds 4, 5, 6, and 7 and concrete structures



Ion Exchange Building



York Chiller, Pump Building and Cooling Towers



24-Ft. Headframe (left), Hoist House and 14-Ft. Headframe (right)



Electrical Building (left)



Compressor Building



Water Treatment Building foundation



Carpenter Shop foundation



Diesel Storage Tanks foundations



SWRP & Disposal Cell rip rap drainage structures under construction looking east



Disposal Cell (covered) looking west



SWRP & Disposal Cell West Slope with erosion blankets



South Stormwater Pond



Sink Hole in San Mateo



Sink Hole in San Mateo looking toward adjacent house (left photo) and away (right photo)

Additional photos may be viewed at L:\MARP\CI002RE---Rio Grande Resources\Mt Taylor Mine File Part 2\Photos\2021-04-06.

MAINTENANCE ITEMS

None.

ENFORCEMENT ACTIONS TAKEN OR TO BE CONSIDERED

None.

INSPECTOR'S SIGNATURE: _____ **DATE:** _____