

Uranium Watch

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December 4, 2015

via electronic mail

Director
Mining and Minerals Division
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
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% david.clark@state.nm.us

RE: Comments on 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; Rio Grand Resources Corporation.

Dear Sir or Madam,

Below please find Uranium Watch's comments addressed to the New Mexico Energy, Minerals and Natural Resources Department, Mining and Minerals Division (MMD) regarding the November 2013 Application for Revision of Mine Permit #C1002RE from Standby to Active Status and Modification of Ground Water Discharge Permit DP-61 for Rio Grand Resources Corporation's Mt. Taylor Mine, San Mateo, New Mexico (Application).

1. General Comments

1.1. I attempted to access the permitting documents for the Mt. Taylor Mine, but, guess what, the permit, inspections reports, correspondence applications, the whole regulatory history of the Mt. Taylor Mine is not available online. If this were a hard rock mine in Utah or Colorado, those documents would be readily available to the public online. Therefore, I can only assume that the MMD has an interest in keeping those records from the public. The MMD has an interest in the public not having historical mine information to use when framing informed comments on a proposed MMD mine permit decision.

1.2. The Application contains references to and cites various documents, which are not available for review. These include the current Closeout/Closure Plan submitted in 2012.

All documents referenced in the Application should have been made readily available by RRG or the MMD.

1.3. The Application does not contain any real information regarding the environmental impacts—past, current, and future—of the restart and operation of the Mt. Taylor Mine. There is no information on the cumulative impacts to an area and a community that has been battered by the uranium industry more than any other areas and communities in the United States.

1.4. The MMD has not presented a draft permit for active status of the Mt. Taylor Mine. Nor, has the MMD presented for public comment the applicable mitigative measures for operation of the mine. The public should have been given the opportunity to comment on a draft proposed permit and the mitigative measures.

2. Application, Introduction

2.1. The Introduction (page 1) states:

Existing- mine permit #C1002RE was issued to Rio Grande Resources (RGR) for the mine by the New Mexico Department of Energy, Minerals and Natural Resources, Mining and Minerals Division (MMD) on July 28, 1995. . . .

RGR applied for standby status for the mine permit in accordance with 19.10.7 NMAC on March 25, 1999. MMD approved standby status on October 12, 1999 under permit revision 99-1 for a term that ended on October 7, 2004. RGR applied for a first renewal of standby status on September 24, 2004, which MMD approved on July 27, 2005, under permit revision 04-1, for a term that ended on July 5, 2010. The second renewal of standby status was granted on January 30, 2012 for a term beginning July 5, 2010 and ending October 12, 2014 (MMD 2012).

According to the Application, the Mt. Taylor Mine last operated in 1990, so when RGR received its original permit in 1995, the mine was already on standby. So, in fact, the Mt. Taylor Mine has been on standby for about 25 years.

During the most recent “boom” (2007 to 2012) in the uranium boom-and-bust cycle, a number of existing, permitted uranium mines in Utah, Colorado, and Arizona that had been on standby for a number of years commenced operation.¹ Some new mines began operation during that period.² All of these mines were owned or subsequently purchased

¹ For example: Utah: La Sal Mine Complex, Pandora, Rim; Arizona: Canyon, Arizona 1, Pinenut; Colorado: Sunday Mine Complex, Whirlwind.

² Utah: Tony M and Daneros.

by Energy Fuels Resources Inc. (EFRI), owner of the White Mesa Uranium Mill, San Juan County, Utah. (or the previous Mill owner, Denison Mines Corp.). All of the ore from those mines was processed at the White Mesa Mill. At this time the White Mesa Mill is on indefinite standby and the operating uranium mines were put on standby or are in the process of closing after being mined out (except for the Canyon Mine, Arizona, which is under development).

The proposed Closeout/Closure Plan, as revised in November 2013, states: “Based on improving market conditions and recovery technologies, mine operation will resume after the mine permit (# CI002RE), issued by the Mining and Minerals Division, is revised to Active (Operating) status about year 2014.” So, now that the recent Colorado Plateau uranium boom is over and the only operating conventional uranium mill is on standby, RGR believes it is the perfect time to place the Mt. Taylor Mine on active status and commence mine development and production. The only reasonable explanation for this is that RGR cannot extend the standby status of the mine, so must place the mine on active status and hope for the best.

RRG presented no information regarding the “improving” market conditions or “improving” recovery technologies. The price of uranium on the spot market remains below \$40 per pound. RRG has not provided meaningful information regarding the economics of reactivation of the mine and the price of uranium that will justify the restart of the mine and ore production. There is no information regarding future contracts to sell the uranium. Who knows what the price of the sale of uranium will be 5 years from now, when the Mt. Taylor Mine is dewatered and production can commence, or during the anticipated 10-year production period. The Mt. Taylor Mine is a large, complex mining operation, far more complex than the operation of the dry mines in Utah and Arizona.

2.2. The MMD must take a hard look at the justification for the return to active status and determine whether such a change is economically and technically feasible. The MMD must clearly define “active” status; for example, what types of activities must be carried out to define and justify the “active” status over the next 5-15 years?

RGR must change the mine status to active and commence mine development and production, or permanently close and reclaim the mine, no matter how uneconomical. That is not a reason for the MMD to approve the change in mine status.

2.3. The NM Mine Registrations and Permits data base has conflicting information regarding Mine Permit #C1002RE.³ There are dates of October 17, 1989, February 1, 1992, and February 5, 1993 indicating Temporary Suspension of the Mine. Then it shows an approved permit with a permit type of “Mine-Regular Existing,” with a dates of January 30, 2012, and May 1, 2015. These dates and designations are confusing.

³ <http://wwwapps.emnrd.state.nm.us/MMD/MMDWebInfo/MinesAndPermits>

Anyone looking at this data base would conclude that the Mt. Taylor Mine was no longer on standby, which is not the case.

3. Application, Existing Mine Units

3.1. Existing Mine Units, Section 2 (page 5). This section lists the various units of the mine, including “Service and Support Facilities Unit (shaft collars, vent raises). It states that these facilities are shown in Figure 1.2 and are described in more detail in the existing mine permit. However, Figure 1.2 (April 2013 Application) does not show any vent raises. Also, the MMD has not placed the existing mine permit on the docket of the proposed status change. I have attempted to locate a copy of Mine Permit #C1002RE on the MMD website, but have been unable to do so. The Application should not have referenced information or records that are not included in the Application or otherwise readily available.

3.3. Existing Mine Units, Service and Support Facilities, Section 2.3. (pages 9-10). This section mentions various support facilities. The locations of all the support facilities should have been included in the Application.

4. Application, Upgrades to Existing Mine Units

4.1. Upgrades to Existing Mine Units, Ion Exchange, Section 3.1.1 (page 16) discusses the handling of IX resins and transport to an off-site facility for regeneration. Eventually, the spent resins will have to be disposed of. RGR should identify the facility that receives the resins for regeneration and eventual disposal. RGR should provide documentation that such processing and/or disposal is authorized under the receiving facility’s license or permit.

Approval of the disposal of IX resins and waste and the IX Plant license should be in place before the mine is placed on active status.

4.2. Upgrades to Existing Mine Units, Ponds, Section 3.1.2 (pages 17-19). It is Uranium Watch’s understanding that if the uranium and or thorium content of the mine-water treatment sediments meets the regulatory definition of source material and the mine owner posses a certain amount of source material, then a specific source material license if required and the sediments must be disposed of in a licensed source material disposal facility. RGR and the MMD must be aware of those Nuclear Regulatory Commission (NRC) regulations and determine whether a specific source material license is required.

This also applies to any contaminated soils underneath older ponds, caused by the use of a clay liner system or leaks and spills from geomembrane systems. The characterization, cleanup, and disposal of these materials should be approved by the MMD and such be conducted in accordance with all applicable state and federal regulations.

4.3. It may not be appropriate to dispose of the pond waste materials in an on-site waste rock pile, particularly due to the lack of long-term maintenance and control of uranium mine waste rock piles. There is no regulatory requirement for length of time that a waste rock pile must maintain its integrity, nor an emission standard. Eventually any covers will erode and the more highly contaminated materials will be exposed.

4.4. The mine water contained in the ponds prior to treatment will contain radium. Radon is emitted from liquid effluents containing radium. Recently the Environmental Protection Agency (EPA) developed a formula for determining the radon emissions from radium-laden effluents.⁴ The formula is based on the radium content and site-specific meteorological data. The MMD and RGR should make a determination, using the EPA formula or other formula, to determine the radon emissions and associated hazards from mine water and other effluents that are held in ponds.

4.5. Upgrades to Existing Mine Units, Ore Pad, Section 3.3 (page 23). There are 60,000 tons of ore that have stockpiled at the Mt. Taylor Mine. No matter what the MMD decides with respect the status of the mine, the ore should be transported from the mine to a uranium mill for processing. It is not necessary to activate the mine to remove the ore. Stockpiled ore should not remain at the mine. Prior to temporary cessation of operation of an active mine, the mine owner should be required to remove all stockpiled ore.

5. Application, Mine Facilities Rehabilitation

5.1. The Mine Facilities Rehabilitation (page 28) contains a brief description of the actions to be taken during standby. It is unclear whether RGR anticipates another period of temporary cessation after the proposed active period, or whether these actions are currently being carried out. It is also unclear if, legally, RGR will exceed the legally authorized standby periods if it goes on standby after another active period, is such is approved. This important legal question must be clarified.

5.2. The MMD must also clearly define “active” status and the ongoing activities that must be carried out to maintain “active” status. For example, once the mine is dewatered in anticipation of commencement of production, is the mine considered “active” if dewatering continues, but there is no ore production?

5.3. The description of actions during standby are brief and minimal. The Application should include a separate Interim Management Plan for the next, inevitable temporary cessation period, regardless of whether such an additional standby period is legal. The Application should include a plan for the protection of public health and safety and the environment during periods of temporary cessation. Such a plan should include removal

⁴ Risk Assessment Revision for 40 CFR Part 61 Subpart W — Radon Emissions from Operating Mill Tailings Task 5 – Radon Emission from Evaporation Ponds; S. Cohen and Associates, November 9, 2010. <http://www.epa.gov/radiation/docs/neshaps/subpart-w/riskassessmentrevision.pdf>

of all stockpiled ore and the blocking of ventilation shafts and portals. Such a plan is required for all hard rock mines on Bureau of Land Management administered land in New Mexico and should be a requirement for mines on private, tribal, or state lands.

5.4. The discussion of rehabilitation of the mine during standby, states: “Vent coverings, for protection against entry by wildlife, will consist of hardware cloth covers applied to those vents.” There is no mention of whether the vents are currently covered with hardware cloth or other materials. There is no mention of the closing of the shafts.

5.5. Vents should also be closed to prevent the emission of radon due to natural convection. It is unlikely that hardware cloth covers are of sufficient strength to hold up during decades of non-operation. Hardware cloth covers is unlikely to withstand wind, precipitation, degradation from the sun, and other natural and manmade impacts. In the past few years, EFRI has provided solid covers over radon vents at the La Sal Mines Complex, San Juan County, Utah. The materials include hardened foam and soil placed on top of metal covers. Any temporary vent and shaft covers must be substantial in nature, not just hardware cloth covers.

6. Application, Other Permits and Regulations

6.1. Other Permits and Regulations, Air Quality, Section 5.2 (page 29) states: “No air quality permits will be required for reactivation and operation of the Mt. Taylor Mine.”

There are uranium mines in Utah that are smaller operations and have less surface impact, yet those uranium mines are required to have air quality permits for their non-radioactive emissions as major emission sources. The permits limit PM10 (fugitive), PM10 (non-fugitive), PM2.5 (subset of PM10) (fugitive), PM2.5 (subset of PM10) (non-fugitive), NOx, SO2, CO, VOC, and HAPs emissions. The applications to the State of Utah Division of Air Quality include information on these emissions, ore production, diesel generators and compressors, operational vehicles, ore and rock storage and handling areas, and fugitive dust emissions.

It is hard to believe that the Mt. Taylor Mine would not be required to have a similar permit under EPA or State of New Mexico air quality permitting authority.

6.2. Other Permits and Regulations, NESHAPS for Radon Emissions from Underground Uranium Mines, Section 5.2.3 (page 30). The Mt. Taylor Mine falls under the administrative and enforcement authority of the EPA, under 40 C.F.R. Part 61 Subpart B: National Emission Standards for Radon Emissions From Underground Uranium Mines.

RGR will be required to submit an application for construction or modification of the radon emission sources, pursuant to 40 C.F.R. § 61.07 and receive EPA approval, pursuant to 40 C.F.R. § 61.08. RGR errs in stating that there are no permit requirements. UW has been in discussion with EPA Region 6 regarding the need for this application and approval process and the need for public comment. Current EPA permitting actions demonstrate that a new construction/modification application is required when there is a

new mine owner and when the mine has been inactive.

The Application did not identify the location of existing and possible future radon vents, nor the locations of the nearest receptors. This information should have been part of the Application.

6.3. The Application makes no mention of the approvals required by the Mine Safety and Health Administration (MSHA). MSHA must approve the mine ventilation plans and other aspects of the commencement of mining activities. Certain information must be provided to MSHA prior to and during operation, and MSHA must conduct at least one inspection before the mine commences operation. Continuing MSHA oversight is an important aspect of any uranium mine operation.

7. Application, Environmental Monitoring

7.1. Environmental Monitoring, Radiological Monitoring, Section 6.1 (page 33-34). This section describes radiological monitoring data that will be collected by RGR; however, there is no mention of any requirement or necessity to make that data available to the public in a timely manner. The MMD must require that all radiological monitoring data be submitted to the MMD in a timely manner and be made readily available to the public.

8. Conclusion

Considering the numerous adverse impacts to air quality and water quality and to the health and wellbeing of the community from the numerous adverse impacts (which have not been sufficiently characterized) from the proposed operation of the Mt. Taylor Mine and the lack of an economic justification for return to “active” status, the MMD should reject the RGR Application to return the mine to active status and direct RGR to commence closure and reclamation of the Mt. Taylor Mine.

Thank you for providing the opportunity to comment.

Sincerely,

/s/

Sarah Fields
Director
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