

# Uranium Watch

76 South Main Street, # 7 | P. O. Box 344  
Moab, Utah 84532  
435-259-9450

January 19, 2012

Via electronic mail

Mr. Rusty Lundberg  
Director  
Division of Radiation Control  
195 N. 1950 West  
Salt Lake City, Utah 84116  
[rlundberg@utah.gov](mailto:rlundberg@utah.gov)

RE: Comments on Amendment 4 to Radioactive Material License UT19000481,  
Condition 56 for the Rio Algom Mining L.L.C. Lisbon Valley Uranium Mill Facility

Dear Mr. Lundberg:

Below please find the comments on Amendment 4 to Radioactive Material License UT19000481, Condition 56 for the Rio Algom Mining L.L.C. Lisbon Valley Uranium Mill Facility. These comments are submitted by the Uranium Watch and Living Rivers, Moab, Utah.

## 1. BACKGROUND

According to the Division of Radiation Control (DRC) notice, "The amended License Condition 56 shall require the licensee to submit a work plan and schedule by December 16, 2011, for Executive Secretary review and approval." The purpose of this work plan and schedule is to collect additional field data in the area of the former uranium mill property and provide an analysis of the existing data to be used for subsequent technical evaluation of the Licensee's Application for Alternate Concentration Limits and Long Term Ground Water Monitoring Plan (Approved by the U.S. Nuclear Regulatory Commission, May 11, 2004, License No. SUA-1119, Amendment 66).

## 2. COMMENTS

**2.1. Timeliness.** The DRC should have proposed License Amendment 4 at a much earlier date, and prior to the date by which Rio Algom Mining LLC (Rio Algom) was

required to submit the Work Plan and Schedule. As it was, by the time the DRC issued the notice of an opportunity to comment on the work plan and schedule and made the public aware that there were problems with the uranium concentrations at the Mill, Rio Algom had already developed and submitted the *Supplemental Site Assessment to Address Out-of-Compliance Status at Trend Wells RL-1 and EF-8, Lisbon Valley Facility, Rio Algom Mining LLC*, dated December 13, 2011. According to the DRC's Statement of Basis for Amendment 4, Rio Algom and the DRC discussed confirmatory actions to be undertaken in response to increasing uranium concentrations in early 2011 and on October 13, 2011, agreed that a Work Plan and Schedule for the additional field work would be submitted to DRC by December 16, 2011. The DRC waited over 2 months to initiate a public comment period and make the draft license amendment and Statement of Basis available.

## **2.2. Availability of Documents.**

2.2.1. The Statement of Basis for Amendment 4 is based on and references several documents related to the establishment of Alternate Concentration Limits for the groundwater at the Lisbon Valley facility. At the time of issuance of the notice there was not even a webpage established for the Lisbon Valley Mill at the DRC website.

The DRC should have posted the documents referenced in the Statement of Basis on the DRC website. This would have included the relevant Nuclear Regulatory Commission Documents; February 7, 2011, letter from the DRC to Rio Algom and other relevant correspondence; June 1, 2011, Action Plan; August 10, 2011, technical Memorandum; and the 2010 1st Semi-Annual Groundwater Stability Report and subsequent Semi-Annual Groundwater Stability Reports.

An interested member of the public should not have to rely on a Utah Government Records Access and Management (GRAMA) request to obtain documents relevant to a notice of opportunity to comment on a DRC licensing action.

2.2.2. The Supplemental Site Assessment outlines a number of actions and submittals that will be completed over the next year. The DRC must make any future plans, reports, summaries, data, models, analyses, and other documents pertinent to the Groundwater Compliance status at the Lisbon Valley Facility available on the DRC website in a timely manner.

2.2.3. There are a number of proposals, expansions, and ongoing regulatory issues related to uranium mining and milling and a nuclear reactor project in southeast Utah. These involve opportunities for the public to comment and the obligation of citizens to become informed and address the failures of regulatory agencies to properly administer and enforce state and federal regulation. It is a lot to cover. The DRC (and other Department of Environmental Quality (DEQ) divisions) purposely makes this public participation process much more difficult by failing to routinely post relevant licensing documents on their website. When the DRC puts up a notice of an opportunity to comment on a licensing decision, a member of the public should not have to pay to play; that is, pay for pertinent records, which can only be accessed via a GRAMA request or a

long trip to Salt Lake City. Clearly, the DRC is not really interested in having informed public comment and public participation in their regulatory and licensing decisions. I look back to Radiation Control Board meetings several years ago when I was told that the DEQ was in the process of setting up an electronic document control system so that licensing and permitting documents could be routinely be made publicly available. If the Utah Division of Oil, Gas & Mining can make permitting records associated with mining operations routinely available, why can't the DRC?

### **2.3. Action Plan.**

2.3.1. According to the December 2011 Supplemental Site Assessment, the Action Plan contemplated by the DRC in February 2011 would address certain performance objectives (POs). The POs relate to the existing Alternate Concentration Limits (ACLs) approved by the NRC in 2004 (just prior to Utah's assumption of primacy for the site) and the Long-Term Long Term Groundwater Monitor Plan (LTGMP). At this time, it appears that the purpose of these additional site investigations is to provide a basis for tweaking the existing ACLs and adjusting the LTGMP. The DRC must clarify the scope of the purpose of the continuing investigations into the groundwater dynamics at the Lisbon Valley site. The DRC must also consider expanding the scope of such POs.

2.3.2. The December 2011 Supplemental Site Assessment calls into question some of the assumptions and data that may have been used to justify the establishment of ACLs and to set the ACL limits in 2004.<sup>1</sup> It calls into question some of the determinations made by the NRC and the State of Utah when the ACLs were approved. These assumptions and determinations include:

- Cessation of active groundwater remediation (pump and treat);
- Allowing groundwater contamination at the site to migrate and naturally degrade over time and distance;
- Location of Point(s) of Compliance;
- Assumption that groundwater contaminant levels would degrade to acceptable levels prior to migrating to the point of exposure (POE), i.e., property boundary;
- Human dose from all viable pathways will not exceed the criteria in subpart E of 10 CFR part 20 (25 mrem/year);
- The ACL approach is the only economical alternative that will be protective of human health and the environment;
- Only uranium will migrate past the property boundary above background levels for the above stated constituents during the 1,000 year compliance period;
- Establishment of a 1,000 year compliance period;

---

<sup>1</sup> Finding of No Significant Impact and Notice of Availability of the Environmental Assessment Addressing a License Amendment Request to Approve Rio Algom Mining LLC's Application for Alternate Concentration Limits at its Lisbon Uranium Mill Tailings Impoundment Located in San Juan County, UT; 69 Fed. Reg. 22100; April 23, 2004.

- Assumption that that of the hazardous constituents in the groundwater contaminant plume (arsenic, selenium, molybdenum, and uranium) only uranium will migrate past the long-term care boundary;
- Cost benefit ratios associated with active remedial alternatives;
- The uranium plume will intersect the boundary in approximately 500 to 1000 years but will be at levels consistent with the class of use and will not present a significant risk to human health or the environment; and
- It is technically impracticable and economically unfeasible to remediate the groundwater to background.

The DRC and the public must revisit these assumptions and determinations associated with the cessation of an active Groundwater Corrective Action Plan, the establishment of the ACLs, and the Long-Term Long Term Groundwater Monitor Plan.

**2.4. Data.** According to the December 2011 Supplemental Site Assessment, after 2004 the amount of groundwater monitoring data collected at the site decreased, so that some relevant data was not available when the increased uranium became apparent. Therefore, the DRC must assure that, in the future, Rio Algom continues to monitor the groundwater at a level that will provide ongoing relevant data over time.

## **2.5. Evaporation ponds.**

2.5.1. The Supplemental Site Assessment discusses the need to assess groundwater near the tailings, but does not specifically discuss the need to characterize groundwater that may be impacted by the evaporation ponds that existed during and after the Mill operations. The map of the 2010 Groundwater Level Contours in Burro Canyon Aquifer (Figure 4, page 22) shows two evaporation ponds on the tailings impoundment and some unidentified ponds to the east of the southern portion of the tailings impoundment that are both on and off the site. There is no information regarding the current status of the evaporation ponds and other ponds. That information should be provided in the Site Assessment.

2.5.2. In 2000 the NRC published at *Federal Register* Notice of a request to amend the Mill's license for the milestone for the completion of the final radon barrier for the area under the evaporation ponds.<sup>2</sup> The requested milestone and milestone currently in License Condition 55 A.(3) is December 31, 2014. If Rio Algom has not been able to place a final radon barrier on the area under the evaporation ponds, it is because that area is still be in the process of drying out. Therefore, the area is a potential source of continuing ground water contamination. This situation should be discussed in any site assessment.

---

<sup>2</sup> Rio Algom Mining Corporation; Request to Revise a Site-Reclamation Milestone; 65 Fed. Reg. 5407; February 4, 2000.

**2.6. License Condition 55A(3).** License Condition 55 A.(3) states that the milestone for the placement of the final radon barrier for areas not covered by the evaporation ponds at the Mill is December 31, 1996. However, the 2000 NRC *Federal Register* Notice noticed a license amendment request that proposed to modify LC 55 A.(3) to change the completion date for placement of the final radon barrier on the pile to December 31, 2000, for the area not covered by the evaporation pond.<sup>3</sup> It is likely that that new milestone was approved by the NRC and incorporated into License Condition 55 A.(3). Be that as it may, it is now 2012, so that the final radon barrier for the area not covered by the evaporation pond should have been completed. If it has been completed, that fact should be reflected in the License.

**2.7. License Condition 55 B.(1).** License Condition 55 B.(1) establishes an enforceable milestone for the placement of erosion protection: "*Placement of erosion protection as part of reclamation to comply with UAC R313- 24 (10 CFR Part 40 Criterion 6 of Appendix A, incorporated by reference). Target completion date is December 31, 2015.*"

The Supplemental Site Assessment should evaluate the potential impacts to groundwater due to the placement, or lack of placement, of the erosion protection at the former Mill site.

## **2.8. Groundwater Corrective Action.**

2.8.1. According to the 2004 Federal Register Notice regarding the establishment of ACLs, Rio Algom ceased the active groundwater remediation (pump and treat). Therefore, the DRC and Rio Algom must revisit the conclusion that an active groundwater remediation is not feasible or practical.

2.8.2. License Condition 55 B.(2) states: "*Projected completion of ground-water corrective actions to meet performance objectives specified in the ground-water corrective action plan, as amended by subsequent submittals. Target completion date is December 31, 2015. COMPLETE*"

The DRC must determine whether the information provided in the most recent groundwater sampling events and the information that will be gathered in the Supplemental Site Assessment activities warrant a reevaluation of performance objectives of the groundwater corrective actions, whether past performance objectives are currently being met. It may be necessary to amend the license to establish 1) new performance objectives, 2) the means to meet those objectives, and 3) new groundwater corrective action target date(s).

Thank you for providing this opportunity to comment.

---

<sup>3</sup> Rio Algom Mining Corporation; Request to Revise a Site-Reclamation Milestone; 65 Fed. Reg. 5407; February 4, 2000.

Rusty Lundberg/DRC  
January 19, 2012

6

Sincerely,

Sarah M. Fields  
Program Director  
Uranium Watch

John Weisheit  
Conservation Director  
Living Rivers  
PO Box 466  
Moab, Utah 84532