

TECHNICAL EVALUATION REPORT
EXTENSION OF RECLAMATION MILESTONES
LICENSE AMENDMENT NO. 45

DATE: April 28, 2000

DOCKET NO.: 40-8905

SOURCE MATERIAL LICENSE NO.: SUA-1473

LICENSEE: Quivira Mining Company - Ambrosia Lake facility

PROJECT MANAGER: Jill S. Caverly

TECHNICAL REVIEWER: Jill S. Caverly

SUMMARY AND CONCLUSIONS:

Quivira Mining Company - Ambrosia Lake facility (QAL), by letter dated December 30, 1999, requested an extension to the reclamation milestones for placement of the erosion protection by two years. Based on its review, the NRC staff has determined that the delays attributed to factors beyond the control of the licensee justify extension of the schedule dates as requested. The revised dates will not cause additional risk to the public health and safety or to the environment. Therefore, the staff recommends amendment to Sources Material License SUA-1473 for Quivira's Ambrosia Lake facility.

DESCRIPTION OF LICENSEES REQUEST:

QAL, by letter dated December 29, 1999, requested an extension of site-reclamation milestones in License Condition 40B.(1). The request extended the milestones for completion of the rock erosion protection on the tailings impoundments. The original date shows the erosion cover being completed by December 31, 1999. Unforeseen factors, including abnormally wet weather, reduced staff and unresolved issues with the NRC affected the schedule requiring an amendment request for the extension of the milestone date.

TECHNICAL EVALUATION:

The staff, based on its review of Quivira's request, concludes that the delays can be attributed to factors beyond the control of the licensee, and therefore, extension of the schedule dates as requested is justified.

Quivira has completed placement of all erosion protection on impoundment #1 and #2 with the exception of several minor items which include the following: 1) completion of verifying rock layer thickness and correcting grooves from construction equipment, 2) elimination of access road to pond 1, and 3) installation of toe trenches on the west side of pond 2 and at the intersection of ponds 1 and 3.

During the rock verification process, several spots were identified as outside of the specified rock cover thickness. The areas identified totalled approximately 1 acre or 0.3% of the overall disposal area. The licensee provided additional rock as needed but requires additional time to allow verification of the area in question.

The placement and spreading of the rock cover on pond 1 required heavy earth moving equipment which left tire grooves in the rock. The licensee has proposed correcting the problem using heavy equipment to smooth the surface. By back-dragging the blade of the machine along the rock, the grooves will be removed but the thickness will be maintained.

An access road onto pond 1 is required while the rock verification work is completed. Once the thickness on the impoundment has been verified, the licensee will close the road by placing rock protection at the road location. The rock is currently stockpiled along the access road in the form of windrows. At the time when the access road is no longer needed, the rock will be spread with a grader and the thickness verified.

License condition 37.M requires a trench be installed on pond 2. This trench has not been constructed yet because the NRC must first review the trench design and associated rock apron. Once the trench design is submitted to the NRC, and has been approved by the staff, the trench and associated apron will be constructed. It is possible to complete construction within the requested time extension.

The final height of pond 3 will not be determined until the final windblown material has been placed. The apron at the toe of impoundment #1 between pond 1 and 3 will be constructed when all additional windblown material has been placed.

The licensee has addressed additional risk in detail and has demonstrated that there is no added risk to the public health and safety and to the environment. The extension of the milestone date does not jeopardize the long-term stability of the impoundments. Finally, QAL states that the current bonding is sufficient for the reclamation of both impoundments to cover the costs of completing the remaining work within the proposed extended milestone period.

RECOMMENDED LICENSE CHANGE:

The staff recommends that Condition 50 of Source Material license SUA-1473 be revised to change the scheduled reclamation milestone to read as follows:

40B. (1) Placement of erosion protection as part of reclamation to comply with Criterion 6 Appendix A of 10 CFR Part 40 -

For impoundment No. 1 - December 31, 2001

For impoundment No. 2, excluding portion used for approved byproduct material disposal - December 31, 2001.

ENVIRONMENTAL IMPACT EVALUATION:

An environmental assessment for this action is not required, since this action is categorically excluded under 10 CFR 51.22(c)(3)(i), and an environmental report from the licensee is not required by 10 CFR 51.60(b)(2).

REFERENCES:

Letter from William Paul Goranson (QAL) to Thomas Essig (NRC), dated December 30, 1999, requesting an extension of certain reclamation milestones.