

December 21, 2004

Ms. Donna L. Wichers, General Manager
COGEMA Mining
P.O. Box 730
Mills, WY 82644

SUBJECT: COGEMA MINING INC., 2004 ANNUAL SURETY UPDATE - AMENDMENT 10
SUA-1341 (TAC LU0060)

Dear Ms. Wichers:

The U.S. Nuclear Regulatory Commission (NRC) staff has completed its review of your proposed 2004 annual surety dated August 17, 2004, as revised December 8, 2004, for the COGEMA Mining, Inc. (COGEMA) Irigaray and Christensen Ranch *In Situ* Leach Uranium Projects. The review is documented in the enclosed Technical Evaluation Report (Enclosure 1).

Your 2004 restoration/reclamation cost estimates, including the groundwater sweep cost, result in a total surety amount of \$10,369,238. The proposed amount has been approved and License Condition 9.5 has been revised to require a surety for that amount. The amended license is enclosed (Enclosure 2).

An environmental review was not performed since this action is categorically excluded under 10 CFR 51.22(c)(10)(i), as a change to a surety requirement.

If you have any questions or comments regarding this letter please contact Elaine Brummett, the NRC project manager for the Irigaray and Christensen Ranch facilities, at (301) 415-6606 or via e-mail to esb@nrc.gov.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Please note that on October 25, 2004, the NRC suspended public access to ADAMS, and initiated an additional security review of publicly available documents to ensure that potentially sensitive information is removed from the ADAMS database accessible through the NRC's web site. Interested members of the public may obtain copies of the referenced documents for review and/or copying by contacting the Public Document Room pending resumption of public access to ADAMS. The NRC Public Document Room is located at NRC Headquarters in Rockville, MD, and can be contacted at (800) 397-4209 or (301) 415-4737 or pdrc@nrc.gov.

Sincerely,

/RA/

Gary S. Janosko, Chief
Fuel Cycle Facilities Branch
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
and Safeguards

Docket No: 40-8502

License: SUA-1341

Enclosures: 1. Technical Evaluation Report
2. Amendment 10

cc: D. McKenzie, WDEQ - District III

D. Wichers

2

December 21, 2004

Please note that on October 25, 2004, the NRC suspended public access to ADAMS, and initiated an additional security review of publicly available documents to ensure that potentially sensitive information is removed from the ADAMS database accessible through the NRC's web site. Interested members of the public may obtain copies of the referenced documents for review and/or copying by contacting the Public Document Room pending resumption of public access to ADAMS. The NRC Public Document Room is located at NRC Headquarters in Rockville, MD, and can be contacted at (800) 397-4209 or (301) 415-4737 or pdr@nrc.gov.

Sincerely,

/RA/

Gary S. Janosko, Chief
Fuel Cycle Facilities Branch
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
and Safeguards

Docket No: 40-8502
License: SUA-1341

Enclosures: 1. Technical Evaluation Report
2. Amendment 10

cc: D. McKenzie, WDEQ - District III

CLOSES TAC NO. LU0060

DISTRIBUTION:

J. Whitten, RIV FCLBr/f M. Moriarty, IMNS

C:\FileNet\ML043570020.wpd

ML043570020

OFC	FCFB		FCFB		FCFB		FCFB	
NAME	E. Brummett		B. Garrett		R. Nelson		G. Janosko	
DATE	12/16/04		12/ 20/04		12/ 21 /04		12/21/04	

OFFICIAL RECORD COPY

**TECHNICAL EVALUATION REPORT
FOR COGEMA MINING, INC., 2004 SURETY UPDATE FOR
IRIGARAY AND CHRISTENSEN RANCH**

Docket No.: 40-8502 **License No.:** SUA-1341

DATE: December 13, 2004

FACILITY: Irigaray and Christensen Ranch facilities in Wyoming

TECHNICAL REVIEWERS: Elaine Brummett, Jill Caverly

PROJECT MANAGER: Elaine Brummett

SUMMARY AND CONCLUSIONS:

COGEMA Mining, Inc. (COGEMA) submitted the 2004 surety update by letter dated August 17, 2004, in compliance with License Condition 9.5 in SUA-1341. The Nuclear Regulatory Commission (NRC) staff's acceptance review resulted in 4 comments dated September 14, 2004, and COGEMA provided responses and page changes dated December 8, 2004. The staff determined that the revised surety amount for decommissioning and restoration of the two sites was appropriate and that the submittal complies with 10 CFR Appendix A, Criterion 9, and guidance provided in NUREG-1569, Appendix C. Therefore, the surety amount should be \$10,369,238, as proposed.

BACKGROUND:

The Irigaray and Christensen Ranch uranium *in situ* leach facilities are located in east-central Wyoming. Wellfield operations ended at Irigaray in 1994 and at Christensen Ranch in 2000. The final surface decommissioning plan for the sites was approved December 31, 2001, and a detailed review of the decommissioning cost estimates for the surety was done at that time. The 2003 re-baselined restoration/reclamation cost estimates resulted in an approved surety amount of \$12,120,120 (February 6, 2004).

TECHNICAL EVALUATION:

The NRC staff review was performed in accordance with NUREG-1569, "Standard Review Plan for *In Situ* Leach Uranium Extraction License Applications," Appendix C. Also, the cost calculations were spot checked.

COGEMA provided the basis for its assumptions and revised spreadsheets for the decommissioning activities at the two sites. The individual cost estimates are from actual billings, estimates from contractors, or from published reference sources such as the Wyoming Development of Environmental Quality Land Quality Division's Guideline No. 12, "Standardized Reclamation Performance Bond Format and Cost Calculation Methods." The costs were

increased for inflation by applying the 2.6 percent change in the consumer price index (CPI) (August 2003 to July 2004). This is conservative since some costs were based on December 2003 or January 2004 estimates. The worksheets that indicated changes from the January 22, 2004 submittal are discussed below.

Groundwater Restoration

Worksheet 1 was revised to reflect a lower monthly utility cost of \$556 based on use of the trailer, instead of the main office, for project management personnel. Also, the labor costs were lower by one year to reflect 1.6 years of restoration operations remaining.

Plant Equipment Removal

Worksheet 2 lists the cost for decontamination, removal, transportation, and disposal of equipment from the main process and satellite plants and associated buildings. No costs were revised. The January 2004 actual costs for round-trips to the licensed disposal site and to the landfill were used for the 2003 estimate (submitted January 22, 2004). Therefore, the inflation increased values are conservative.

Pond Reclamation

Worksheet 4 contains the costs for decommissioning the evaporation ponds. The total cost for this category was reduced by \$560,880 to reflect the work completed at the Irigaray ponds. Photographs were included to document that four ponds have been decommissioned. Also, the 517 pond has been backfilled and that item was removed from the worksheet list.

Topsoil Restoration

Worksheet 7 lists costs to replace topsoil in areas where the topsoil was stripped and stockpiled, cleanup verification, and re-vegetation. The spill cleanup cost was increased \$913 after correcting the transportation costs.

TABLE 1 - Summary of Bond Estimate

The "Groundwater Restoration" and "Decommissioning and Surface Reclamation" categories reflect the total cost estimate from each worksheet.

The "Miscellaneous Costs Associated with Third Party Contractors" category lists percentages assigned to items (project design, contractor profit and mobilization, site security, project management). The percentages of reclamation and restoration costs required and approved by WDEQ are listed, but different values are justified for the NRC for a total of 8.5 percent (\$706,379), based on NRC guidance. Some aspects of project management such as salary for the radiation safety officer, are included in the worksheets. Also, the hourly rates in the worksheets include overhead.

The contingency amount is, as required by the NRC, a minimum of 15 percent to cover unknown conditions that could occur during decommissioning or groundwater restoration or

land reclamation. The contingency was applied to the subtotal for a total bond estimate of \$10,369,238.

CONCLUSIONS:

The staff determined that cost changes to several itemized activities were appropriate and the CPI was correctly applied to the revised subtotal construction amount. Therefore, License Condition 9.5 should be revised to include the surety amount of \$10,369,238.