# SAFETY EVALUATION REPORT

Date:	September 29, 2008
Docket No.:	040-08502
License No.:	SUA-1341
Facility:	COGEMA Mining, Inc., Irigaray and Christensen Ranch Facility
Project Manager:	Ron C. Linton
Technical Reviewer:	Ron C. Linton

### Summary and Conclusions:

By letter to the U.S. Nuclear Regulatory Commission (NRC) dated April 3, 2007, COGEMA Mining, Inc. (COGEMA) requested an amendment to Materials License SUA-1341 to revert from the current restoration and decommissioning status to operating (uranium production) status (COGEMA 2007a). COGEMA has requested that the license be returned essentially to operating conditions that were approved in License Amendment 2, dated November 15, 1999. COGEMA also requested that this action be categorically excluded under Title 10 of the *Code of Federal Regulations* (10 CFR) 51.22(c)(11) from an environmental review. NRC staff reviewed the request and determined that an environmental review was required. The environmental assessment (EA) was completed and published in the NRC docket file 040-08502. An EA summary was published in the *Federal Register* as a Notice of Availability and Finding of No Significant Impact (FONSI) (*Federal Register*, 2008). License conditions determined by the EA have been included in this safety evaluation report (SER).

NRC staff has evaluated this request and has determined that changes from the current decommissioning and restoration license to an operating license as evaluated in this SER can be approved as stated in 10 CFR 40.32 because: (a) the application is for a purpose authorized by the Atomic Energy Act of 1954, as amended; (b) the applicant is qualified by reason of training and experience to use the source material for the purpose requested in such manner as to protect health and minimize danger to life or property; (c) the applicant's proposed equipment, facilities, and procedures are adequate to protect health and minimize danger to life or property; and (d) the issuance of the license will not be inimical to the common defense and security or to the health and safety of the public. The license conditions evaluated in the SER during the last license renewal that formed the basis of the renewed license also forms the basis of this License Amendment 13. The previous license renewal SER is incorporated into this SER by reference.

A successful NRC preoperational inspection and an updated surety, approved by the NRC, will be required prior to start up of operations. The expiration date of the license SUA-1341, Amendment 13, has been changed from "until terminated or renewed."

On May 31, 2008, COGEMA submitted a license renewal application to the NRC for renewal of its license for an additional 10 years. The NRC is in the process of evaluating the license renewal application.

#### Background:

The Irigaray Project was licensed for commercial operation in August 1978. In 1988, License SUA-1341 was amended to add the Christensen Ranch satellite ion exchange plant and associated mine units. The project has had various owners and names since initial licensing in 1978. COGEMA took ownership of the project in 1993 (NRC 1998).

COGEMA's License SUA-1341 was renewed on June 30, 1998, with an expiration date of June 30, 2008 (NRC 1998). The last operating license was License Amendment 3, which is essentially identical to License Amendment 2, with the addition of a date when COGEMA would submit a decommissioning plan. On November 10, 2000, COGEMA requested that its license be changed from an operating license to a possession only license for decommissioning and restoration due to the low market price of uranium (COGEMA 2000). Uranium extraction was completed in Irigaray mine units 1 through 9 in 2001. License Amendment 4, dated March 29, 2001, changed COGEMA's status from operating to decommissioning and restoration and allowed for possession only of limited amounts of uranium produced during restoration (NRC 2001a). License Amendment 6 approved the decommissioning plan for the site. License Amendments after License Amendment 6 have been in response to minor changes in the decommissioning plan or for updates in surety, which occur annually. A list of license amendments and the nature of each amendment is discussed later in this safety evaluation. COGEMA currently is operating in restoration and decommissioning status under License SUA-1341, Amendment 12, approved March 15, 2007 (NRC 2007a).

During the time COGEMA was in decommissioning and restoration status, restoration was completed and approved by NRC in September 2006 for Irigaray mine units 1 through 9 (NRC 2006b). At Christensen Ranch, *in situ* recovery (ISR) of uranium was suspended in 2001. However, only a portion of the uranium resource was extracted from mine units 5 and 6 and production and extraction well installations in mine unit 7 were approximately one-half complete when production was suspended. During the decommissioning and restoration period, the ion exchange facility at Christensen Ranch and the central processing facility at Irigaray were used to produce yellowcake from uranium recovered in the groundwater restoration phase. Both facilities have been operating and recovering uranium from restoration activities as recently as May 2005 (COGEMA 2007c).

COGEMA has requested an amendment to its NRC Materials License to revert from the current restoration and decommissioning status to an operating status. COGEMA's current license allows for possession of uranium recovered during the groundwater restoration process, but not the injection of lixiviant to mobilize and recover additional uranium. COGEMA's intention is to resume operating conditions as stated in its last operating license that allowed for injection of lixiviant. The current license would have expired on June 30, 2008, but on May 31, 2008, COGEMA submitted a license renewal application to the NRC for renewal of its license for an additional 10 years. The NRC is in the process of evaluating the license renewal application.

#### Safety Evaluation:

COGEMA has requested to revert from a restoration and decommissioning status license to an operating status license with essentially the same conditions that were approved in License Amendment 2. However, as discussed above, the last operating status license was License Amendment 3. The License Conditions in License Amendment 3, when the facility was last in operating status, were subject to a health and safety review during the last renewal (NRC, 1998). The License Conditions in Amendment 3 are the same as the License Conditions when the license was renewed in June 1998, with minor exceptions. License Amendments 1 and 2 were for surety updates only and License Amendment 3 was for the addition of a date for the submission of a decommissioning plan. The previous license renewal SER, completed in 1998, formed the basis for the license that was renewed in 1998 (NRC, 1998), as well as License Amendments 1, 2, and 3. Since this license amendment request will reinstate the license conditions that existed from License Amendment 3, the SER completed in 1998 analysis are considered still valid.

If the request is approved, COGEMA will be allowed to inject lixiviant solution of sodium bicarbonate and/or  $CO_2$  gas and oxygen or hydrogen peroxide, as described in the approved license application, to dissolve uranium so that it can be pumped to the surface for recovery (COGEMA 1996). COGEMA would be able to conduct operations at a maximum flow rate of 4000 gallons per minute, exclusive of restoration flow, with an annual dried yellowcake production not to exceed 2.5 million pounds.

Although COGEMA has not been in operating status during the entire 10-year license term, the Irigaray central processing facility and the Christensen Ranch satellite facility have been fully functional during decommissioning status and the groundwater restoration process. The primary difference between decommissioning and restoration status and operating status is that lixiviant is not authorized for injection into the well field for uranium recovery while the facility is in decommissioning and restoration status. However, during decommissioning and restoration, residual uranium remaining in solution from prior operating activities is recovered from the well field and passed through processing plants at both Irigaray and Christensen Ranch. Uranium recovered during decommissioning and restoration is processed the same way as uranium recovered when the facility is in operating status, i.e., uranium in solution is passed through ion exchange columns, eluted from the exchange resin, and finally dried to produce uranium oxide, commonly known as yellowcake.

Throughout decommissioning and restoration, NRC inspections have maintained oversight of the site status, ISR operations, radioactive waste management, radiation protection, environmental protection, radioactive waste/transportation activities, follow-up of event reports on excursions and spills, and management organization and controls.

During the last inspection in 2007, NRC determined that two Severity Level IV violations had occurred. The first violation was that COGEMA was exceeding the 50,000 pounds per year yellowcake production limit, and the second was the failure to notify NRC of the expiration of a waste disposal agreement (NRC 2007b). For the first violation, COGEMA acknowledged that dried and barreled yellowcake production exceeded the annual limit, however, they questioned how yellowcake was defined, as either dried yellowcake or yellowcake slurry. COGEMA had

produced less than the annual limit of yellowcake slurry for several years, but then dried the yellowcake in one year causing the 50,000 pounds per year exceedance (COGEMA, 2007d). While the license did not specify the yellowcake form, the NRC technical evaluation that supported the yellowcake production limit indicated the yellowcake form was dried yellowcake (NRC 2001b). COGEMA has taken corrective actions to avoid further violations (COGEMA, 2007d). For the second violation, COGEMA's management failed to realize the waste disposal contract had expired. The waste disposal contract is with a sister company, Pathfinder Mines Corporation. Both Pathfinder and COGEMA are subsidiaries of AREVA. COGEMA executed a replacement waste disposal agreement on July 20, 2007 (COGEMA, 2007d). Despite these violations, NRC inspectors found that overall the licensee was operating the facility in a safe manner (NRC 2007b).

In order to restart recovery and milling operations at the COGEMA facility, or any uranium recovery facility, a pre-operational inspection is required by NRC Inspection Manual Chapter 2801, "Uranium Mill and 11e.(2) Byproduct Material Disposal Site and Facility Inspection Programs." Section 05.02 states, "Pre-operational inspections will be conducted at least once before start up of facility operations (NRC 2000)." Items found during the preoperational inspection that are unsatisfactory will need to be addressed by COGEMA and approved prior to start up.

There are a few minor operating changes requested by COGEMA that differ from the License Conditions in License Amendment 3, but these primarily involve minor changes in language, the deletion of several small evaporation ponds at Irigaray that were decommissioned, and the deletion of references to monitoring wells at Irigaray Mine units 1 through 9 where restoration is complete. The current License Amendment is numbered 12. The language of License Amendment 3 (when the facility was in operating status) has been combined with the language of License Amendment 12 to form the new License Amendment 13.

Since the relicensing of the Irigaray/Christensen Ranch Facility in 1998, there have been 12 License Amendments. The following is a list of those amendments and a synopsis of what each amendment was intended to do:

### **License Amendment 1**

January 12, 1999 (NRC 1999a). Decrease in surety. Action categorically excluded under 10 CFR 51.22(c)(11).

#### License Amendment 2

November 15, 1999 (NRC 1999b). Decrease in surety. Action categorically excluded under 10 CFR 51.22(c)(10).

#### **License Amendment 3**

November 29, 1999 (NRC 1999c). Added a date to License Condition 12.5 for COGEMA to submit a decommissioning plan. Action categorically excluded under 10 CFR 51.22(c)(11).

#### License Amendment 4

March 29, 2001 (NRC 2001a). Removed or modified several license conditions to change license from an operating license to a possession only license. Action categorically excluded under 10 CFR 51.22(c)(11).

# License Amendment 5

October 4, 2001 (NRC 2001b). Changed License Condition 10.5 by increasing annual production limit of uranium from groundwater restoration activities from 30,000 pounds per year of yellowcake to 50,000 pounds per year. Action categorically excluded under 10 CFR 51.22(c)(10).

# **License Amendment 6**

December 31, 2001 (NRC 2001c). Approved the Decommissioning Plan for the Irigaray and Christensen Ranch Projects, approved a small decrease in the surety amount, and made minor changes in standard performance-based license language. An EA was completed in support of the Decommissioning Plan (NRC 2001c). A FONSI was published in the *Federal Register* (*Federal Register* 2002).

### License Amendment 7

January 28, 2003 (NRC 2003a). Decrease in surety. Action categorically excluded under 10 CFR 51.22(c)(10).

### **License Amendment 8**

November 4, 2003 (NRC 2003b). Removed seven monitoring wells from excursion status at the Irigaray site. Action categorically excluded under 10 CFR 51.22(c)(11).

### **License Amendment 9**

February 6, 2004 (NRC, 2004a). Decrease in surety. Action categorically excluded under 10 CFR 51.22(c)(10).

### License Amendment 10

December 21, 2004 (NRC 2004c). Decrease in surety. Action categorically excluded under 10 CFR 51.22(c)(10).

### License Amendment 11

February 8, 2006 (NRC 2006a). Decrease in surety. Action categorically excluded under 10 CFR 51.22(c)(10).

# License Amendment 12

March 15, 2007 (NRC 2007a). Decrease in surety. Action categorically excluded under 10 CFR 51.22(c)(10).

# **Proposed License Amendment 13**

If this amendment is approved, License Amendment 13 will contain License Conditions that are nearly the same as those approved during the previous license renewal. These conditions were fully evaluated in the SER written in support of the previous renewal and is incorporated into this SER by reference (NRC, 1998).

For the Irigaray and Christensen Ranch Projects to return to operating status, the following changes will be required to License SUA-1341, Amendment 12:

# License Condition 4:

The license expiration date will be changed from "until terminated" to "until terminated or renewed."

COGEMA has submitted a license renewal application to the NRC for review. The previous license was renewed June 30, 1998, for a 10-year period. The license is considered in timely renewal per 10 CFR 2.109.

### License Condition 9.3:

The following language will be modified in the last paragraph in License Condition 9.3 to read, "The land and structures will be decommissioned according to the Decommissioning Plan submitted December 19, 2000, as revised by submittals dated June 15, June 18, and August 31, 2001 and in accordance with 10 CFR 40.42. Whenever the word "will" is used in the above referenced documents, it shall denote a requirement."

This change adds a reference to the decommissioning requirements in 10 CFR 40.42.

### License Condition 9.5:

The following language will be modified in the last paragraph in License Condition 9.5 to read, "The licensee's currently approved surety, Irrevocable Standby Letter of Credit issued by the Credit Industriel et Commercial (CIC) in favor of the State of Wyoming, Department of Environmental Quality (WDEQ), shall be continuously maintained in an amount no less than \$9,336,189 for the purpose of complying with 10 CFR 40, Appendix A, Criterion 9, until a replacement is authorized by both the State of Wyoming and the NRC."

This change is in response to a letter from COGEMA dated May 8, 2007, requesting the name change for the surety irrevocable standby letter of credit currently held by the State of Wyoming (COGEMA, 2007b).

COGEMA's annual surety estimate was submitted to the NRC on March 19, 2008 (COGEMA, 2008a). NRC staff reviewed the surety and found the estimate acceptable and the current surety has been updated. The current surety is \$9,336,189, which is a decrease of \$229,584. The reduction in surety reflects the completion of the abandonment process for most of the wells at the Irigaray site over the past year, but does not reflect a return to operating status. An updated surety will be required for the facility, to reflect the change from decommissioning status to operating status. License Condition 9.5 currently contains the following language: "At least 90 days prior to beginning construction associated with any planned expansion or operational change which was not included in the annual surety update, the licensee shall provide, for NRC approval, an updated surety will need to be submitted 90 days prior to the return to operating status.

# License Condition 9.7:

The following language will be added: A new agreement shall be submitted for NRC approval within 90 days after expiration or termination, or the licensee will be prohibited from further lixiviant injection.

This is consistent with the language approved during the 1998 license renewal and the language in License Amendment 3.

# License Condition 9.13:

The previous language related to the Mountain Plover will be deleted and the following language will be added: "Sage Grouse leks at the Irigaray and Christensen Ranch sites shall be monitored on an annual basis. The licensee shall consult with the Fish and Wildlife Service or the Bureau of Land Management for mitigative measures to reduce potential impacts."

This is a change from the language approved during the 1998 license renewal and the language in License Amendment 3 which previously identified the Mountain Plover as a potentially endangered species. The Mountain Plover is no longer a listed species. However, the EA has identified the Sage Grouse as a species that has garnered much interest in conservation of habitat and nesting sites in Wyoming. This License Condition was identified in the EA.

### License Condition 10.1:

The following language will be added: "The licensee shall use a lixiviant composed of native groundwater, with added sodium bicarbonate and/or CO2 gas and oxygen or hydrogen peroxide, as described in the approved license application."

This is consistent with the language approved during the 1998 license renewal and the language in License Amendment 3.

### License Condition 10.2:

The following language will be added: "The licensee shall perform well integrity tests on each injection and production well before the wells are utilized and on wells that have been serviced

with equipment or procedures that could damage the well casing. Additionally, each well shall be retested at least once every five years. Integrity tests shall be performed in accordance with Section 3.3.2.2 of the approved license application."

This is consistent with the language approved during the 1998 license renewal and the language in License Amendment 3.

### License Condition 10.5:

The following language will be added: "The licensee is authorized to conduct operations at a maximum flow rate of 4000 gallons per minute, exclusive of restoration flow. Annual dried yellowcake production shall not exceed 2.5 million pounds."

This is consistent with the language approved during the 1998 license renewal and the language in License Amendment 3, with the addition of the term "dried" to specify the form of yellowcake.

#### **License Condition 10.6**

The following language will be added: "Solution evaporation ponds A, B, C, D, and E shall have at least 2 feet of freeboard."

This is consistent with the language approved during the 1998 license renewal and the language in License Amendment 3, with the exception of the 517 ponds, which have been completely decommissioned.

### License Condition 10.16

The following language will be modified to the first paragraph in License Condition 10.16 to read, "The licensee shall conduct ground water restoration and post-restoration monitoring as described in Section 6.1 of the approved license application. The primary goal of restoration shall be to return the ground water quality, on a production-unit average, to baseline concentrations on a parameter-by-parameter basis. If the primary goal cannot be achieved, the ground water will, at a minimum, be returned to an alternate standard approved by the NRC."

This change removes pre-mining groundwater use category as a standard for restoration if the primary goal cannot be met and replaces it with an alternate standard as approved by the NRC. This language is consistent with the alternate concentration requirements for groundwater restoration as found in 10 CFR 40, Appendix A, Criterion 5B(5).

#### License Condition 10.19

The following language will be added: "The licensee is hereby authorized to receive contaminated process equipment for reuse from licensed uranium recovery operations. Records of all receipts shall be maintained."

This is consistent with the language approved during the 1998 license renewal and the language in License Amendment 3.

### License Condition 10.20

The following language will be added: "The licensee is hereby authorized to transfer source material to any facility licensed by NRC or an NRC Agreement State to receive source material for purposes of drying and storage. The licensee shall follow Standard Operation Procedure No. E-11 in the event of a transportation or storage accident."

This is consistent with the language approved during the 1998 license renewal and the language in License Amendment 3.

# License Condition 10.21

The following language will be added: "Prior to initiating vanadium separation processing, the licensee's Safety and Environmental Review Panel (SERP), in accordance with License Condition 9.4, shall assess the potential safety and environmental impacts of that process. If those impacts are outside the scope of the impacts considered by NRC in the EA as part of the license renewal review, the licensee shall submit a license amendment request to NRC for review and approval."

This is consistent with the language approved during the 1998 license renewal and the language in License Amendment 3.

### License Condition 10.22

The following language will be added: "The licensee shall use its SOP PBLC-02, approved by NRC in December 1996, including the guidance for evaluating hydrologic connectivity between aquifers, in accessing the potential start up of new mine units."

This is consistent with the language approved during the 1998 license renewal and the language in License Amendment 3.

### License Condition 11.2

The following language will be deleted: "Irigaray monitor wells SSM-3, SSM-18, SSM-40, SSM-41, SSM-42, SSM-43 and DM-10 are excluded from the excursion confirmation and reporting requirements of this license condition pursuant to the licensee's May 14, 2003 submittal and the excursion removal approval granted by WDEQ dated July 28, 2003. However, if during a sampling event, the chloride level in any of these wells should exceed the Wyoming Class III Livestock Standard for chloride, then the excursion confirmation and reporting requirements of this license condition will be reinstated for that particular well."

This change excludes references to monitoring wells at the Irigaray site that are no longer necessary where groundwater restoration has been approved by the NRC (NRC 2006b).

# License Condition 11.3

The following language will be added: "The licensee shall conduct effluent, personnel, and environmental monitoring programs in accordance with Sections 5.7 and 5.8 of the approved license application."

This is consistent with the language approved during the 1998 license renewal and the language in License Amendment 3 and adds Section 5.7 as a tie down condition that references radiological monitoring of personnel as requested by COGEMA.

# License Condition 11.5

The following language will be added: "The licensee shall conduct the in-plant inspection and audit programs described in Section 5.3 of the approved license application. In addition, the RSO or designee shall document a daily walk-through of the Irigaray and Christensen Ranch Satellite facilities to determine that radiation control practices are being implemented appropriately."

This is consistent with the language approved during the 1998 license renewal and the language in License Amendment 3.

# **License Condition 11.6**

The current License Condition will be modified to read: "The results of the following activities, operations, or actions shall be documented: sampling, analyses, surveys and monitoring, survey/monitoring equipment calibration, results of reports on audits and inspections, all meetings and training courses required by this license, and any subsequent reviews, investigations and corrective actions. Unless otherwise specified in the NRC regulations, all such documentation shall be maintained for a period of at least five (5) years."

The change deletes unnecessary repetition of the phrase, "shall be documented."

### License Condition 11.7

The current License Condition will be modified to read: "The licensee shall monitor for external exposure in accordance with 10 CFR 20.1502(a)(1), and Section 5.7.2 of the approved license application. The licensee shall monitor for internal exposure in accordance with 10 CFR 20.1502(b)(1) and Section 5.7.3 of the approved license application."

This change clarifies the text of the license condition.

# License Condition 12.1

The current License Condition will be modified to read: "Effluent and environmental monitoring program results provided in the annual report and in accordance with 10 CFR 40.65, "Effluent monitoring reporting requirements," shall be reported in the format shown in Table 3 of

Regulatory Guide 4.14, (Rev. 1) entitled, "Sample Format for Reporting Monitoring Data." The report shall also include injection rates, recovery rates, and injection manifold pressures."

This revision adds reference to the reporting requirements of 10 CFR 40.65.

# **License Condition 12.6**

The current License Condition will be modified to read, "An annual report will be submitted to the NRC in accordance with License Condition 9.2 that includes the ALARA audit report, land use survey, monitoring data, and the SERP information required under License Condition 9.4(d). The report shall include a summary of the daily walk-through inspections."

With a return to operating status, daily walk-through inspections by the RSO or designee will occur, regardless of dryer status. This is consistent with the language approved during the 1998 license renewal and the language in License Amendment 3.

### **Environmental Review:**

NRC staff completed an environmental review in support of this licensing action. The EA was placed in the COGEMA docket file 040-08502 (NRC, 2008b). A *Federal Register* Notice of Availability of Environmental Assessment and Finding of No Significant Impact for License Amendment Request to Revert to Operating Status from Restoration and Decommissioning Status, Cogema Mining Inc., Christensen and Irigaray Ranch Facilities, Johnson and Campbell Counties, Wyoming, was published on September 12, 2008 (*Federal Register*, 2008). The EA analyzed multiple resource areas and incorporated environmental information from previous environmental assessments and incorporated them by reference.

As a result of the environmental analysis, the NRC staff identified that License Condition 9.13 should be changed as follows:

Remove: "If evidence of the migratory bird and potentially endangered species, Mountain Plover, or its nesting sites is found at the Irigaray or Christensen sites, the licensee shall consult with the Fish and Wildlife Service before proceeding with development or ground disturbing activity in that area."

Replace: "Sage Grouse leks at the Irigaray and Christensen Ranch sites shall be monitored on an annual basis. The licensee shall consult with the Fish and Wildlife Service or the Bureau of Land Management for mitigative measures to reduce potential impacts."

This change has been incorporated into this SER and License Amendment 13.

### **References:**

COGEMA ,1996. Submittal of Supplemental Information for the Renewal of Source Material License SUA - 1341, Irigaray and Christensen Ranch Sites and Request for Performance Based License, Agencywide Document and Management System (ADAMS) Accession No. ML9601180201 and ML9601180205, January 5.

COGEMA, 2000. Request to Amend License to Possession only Status, ADAMS Accession No. ML003769836, November.

COGEMA, 2007a. Letter T. Hardgrove to K. McConnell, Request to revert to an operating status, Christensen and Irigaray Ranch Project, ADAMS Accession No. ML071020274, April 3.

COGEMA, 2007b. Letter T. Hardgrove to K. McConnell reference to surety irrevocable standby letter of credit, ADAMS Accession No. ML0715001432, May 8.

COGEMA, 2007c. Annual Report for Wyoming DEQ Permit to Mine No. 478, ADAMS Accession No. ML072420052, August.

COGEMA, 2007d. Reply to Notice of Violation, ADAMS Accession No. ML0724100192, August 20.

COGEMA Mining, Inc. 2008a, Surety Update, Cogema Mining, Inc, Irigaray and Christensen Ranch Project, Campbell And Johnson Counties, Wyoming, March 19, ADAMS Accession No. ML0809400790.

COGEMA Mining, Inc. 2008b, Irigaray and Christensen Ranch Projects, U.S. NRC License Renewal Application Source Material License SUA-1341, May 31, ADAMS Accession No. ML081850687.

*Federal Register*, 2008. Notice of Availability of Environmental Assessment and Finding of No Significant Impact for License Amendment Request to Revert to Operating Status from Restoration and Decommissioning Status, Cogema Mining Inc., Christensen and Irigaray Ranch Facilities, Johnson and Campbell Counties, Wyoming, Vol. 73, No. 178, page 53052, September.

NRC 1998. Renewal of Source Material License No. SUA-1341 for the Irigaray/Christensen Ranch ISL Facilities, ADAMS Accession No. ML9807100178, June 30.

NRC 1999a. Irigaray/Christensen Ranch ISL; Review of 1998-1999 Annual Surety Update for Source Renewed Material License SUA-1341: Amendment 1. ADAMS Accession No. ML9901220330 and ML9901220333, January 12.

NRC 1999b. 1999-2000 Annual Surety Update, Irigaray and Christensen Ranch *In Situ* Leach Uranium Project, License SUA- 1341, Amendment 2, ADAMS Accession No. ML9932404340 and ML9932404360, November 15.

NRC 1999c. Decommissioning Plan Submittal, Irigaray and Christensen Ranch *In Situ* Leach Uranium Projects, License SUA-1341: Amendment 3, ADAMS Accession No. ML993400518, November 29.

NRC 2000. NRC Inspection Manual Chapter 2801, "Uranium Mill and 11e.(2) Byproduct Material Disposal Site and Facility Inspection Program," August 8.

NRC 2001a. COGEMA Request for License Condition Changes and Possession Only Status; Source Materials License SUA- 1341, Amendment 4, ADAMS Accession No. ML0629000151 and ML0629000172, March 29.

NRC 2001b. Amendment 5 for SUA-1341, Irigaray and Christensen Ranch Projects, License Conditions 10.5, ADAMS Accession No. ML012820334, October 4.

NRC 2001c. Amendment 6 for SUA-1341, Irigaray and Christensen Ranch Projects, Surface Decommissioning Plan, ADAMS Accession No. ML020020527, December 31.

NRC 2003a. 2002 Annual Surety Update - Amendment 7 (TAC#L52454), ADAMS Accession No. ML030290747, January 28.

NRC 2003b, Removal of Seven Irigaray Monitor Wells from Excursion Status in License Condition 11.2 - Amendment 8 (TAC# LU0006), ADAMS Accession No. ML033160637, November 4.

NRC 2004a. COGEMA 2003 Annual Surety Update - Amendment 9 SUA - 1341 (TAC No. LU0002), ADAMS Accession No. ML040400485, February 6.

NRC 2004b. NRC Inspection Report 40-08502/04-001, ADAMS Accession No. ML0427101240, September 24.

NRC 2004c. COGEMA 2004 Annual Surety Update - Amendment 10 SUA - 1341 (TAC LU0060), ADAMS Accession No. 043570055, December 21.

NRC 2006a. COGEMA Mining Inc., Source Materials License SUA -1341, Amendment No. 11 -Annual Surety Estimate Adjustment (TAC LU0109), ADAMS Accession No. ML060320181, February 8.

NRC 2006b. Review of Cogema Mining, Inc., Irigaray Mine Restoration Report, Production Units 1 through 9, Source Materials License SUA-13412, ADAMS Accession No. ML062570175, September.

NRC 2007a. COGEMA Mining, Inc., Source Materials License SUA - 1341, Amendment No. 12 - Annual Surety Estimate Adjustment (TAC J00505), ADAMS Accession No. ML070540011, March 15.

NRC 2007b. NRC Inspection Report 40-08502/07-001, ADAMS Accession No. ML072080382, July 27.

NRC 2008. Environmental Assessment Regarding the License Amendment Request to Return to Operating Status from Decommissioning Status, Cogema Mining, Inc. Irigaray and Christensen Ranch Projects Wyoming, ADAMS Accession No. ML0821100262, September.