

**SAFETY EVALUATION REPORT  
PROPOSED CHANGE OF CONTROL FOR SOURCE MATERIALS LICENSE SUA-1341  
IRIGARAY AND CHRISTENSEN RANCH FACILITIES, WYOMING**

**DATE:** December 17, 2009

**DOCKET NO.:** 040-08502

**LICENSEE:** Cogema Mining, Inc

**SITE:** Irigaray and Christensen Ranch Facilities, Wyoming

**PROJECT MANAGER:** Ron C. Linton

**TECHNICAL REVIEWERS:** John L. Saxton, Roman Przygodzki

**SUMMARY AND CONCLUSIONS:**

The Nuclear Regulatory Commission (NRC) staff reviewed an application submitted by Cogema Mining, Inc. (Cogema), an NRC licensee, and Uranium One Exploration U.S.A., Inc., (Uranium USA), the co-applicant, with regard to an indirect change of control of Cogema's Source Materials License SUA-1341. NRC Source Materials License SUA-1341 allows for the *in situ* recovery (ISR) of uranium at the Irigaray and Christensen Ranch facilities, Johnson and Campbell Counties, Wyoming. The proposed change of control is from Cogema, a subsidiary of Cogema Resources, Inc., a subsidiary of Areva NC, Inc., to Uranium USA, a subsidiary of Uranium One Americas, Inc., a subsidiary of Uranium One Investments, Inc., a subsidiary of Uranium One, Inc.

The application was reviewed by NRC staff for an indirect change in control of a 10 CFR 40 license using the guidance in NUREG 1556, Volume 15. NRC staff finds that the information submitted by Cogema and Uranium USA sufficiently describes and documents the transaction and documents Uranium USA's understanding of commitments made by Cogema in NRC Source Material License SUA-1341.

As required by 10 CFR 40.46, NRC staff has reviewed the application and finds that the proposed change in control is in accordance with the Atomic Energy Act of 1954 (the Act), as amended. The staff finds that, after the change of control, Cogema will remain qualified to use source material for the purpose requested, and will continue to have the equipment, facilities, and procedures needed to protect health and minimize danger to life or property.

**INTRODUCTION**

On September 18, 2009, and in supplemental information dated October 23, 2009, November 18, 2009, and December 3, 2009 (the application), Cogema and Uranium USA submitted a request to the NRC for consent to allow the change of control of Cogema's Source Materials License SUA-1341 from Cogema to Uranium USA. Cogema operates the Irigaray and

Christensen Ranch commercial uranium recovery facilities, which are located in Johnson County, and Johnson and Campbell Counties, Wyoming, respectively. The facilities are currently in operating status, but no uranium is currently being produced at either facility.

### **SUA-1341 LICENSE HISTORY**

Prior to becoming the present-day facility with Source Materials License SUA-1341 for commercial operations, the Irigaray facility was included as one of several research and development (R&D) sites in Wyoming and South Dakota under Source Materials License SUA-1204. The R&D license was issued by the U.S. Atomic Energy Commission in 1974 to the Wyoming Mineral Corporation (WMC), a subsidiary of Westinghouse Electric Corporation. Under this license, WMC was licensed to perform research at two pilot sites, which are referred to as site 517 and the 9AI or USMT site, at the Irigaray facility.

In 1978, WMC obtained Source Materials License SUA-1341 for commercial operations at the Irigaray facility from the NRC. In 1982, the facility was placed on standby status due to the depressed market for uranium. In addition, the R&D License SUA-1204 was terminated in 1982, provided that monitoring at the former R&D sites was continued under license SUA-1341. In 1987, Malapai Resources Company, a subsidiary of Pinnacle West Capital Corporation, acquired License SUA-1341 for the Irigaray facility from WMC and resumed operations.

During this period, the Christensen Ranch facility was also being developed under R&D License SUA-1337, which was issued by NRC in 1978, to Western Nuclear, Inc., a subsidiary of J&P Corporation. In 1981, J&P Corporation sold its interest in the Christensen Ranch R&D project to the Arizona Public Service Company (Malapai Resources Company), whereas Western Nuclear, Inc. continued as the designated licensee. In 1985, Malapai Resources Company acquired all interests in the project from Western Nuclear, Inc. During this period, research had been performed at one location, the Willow Creek R&D site, at the Christensen Ranch project.

In 1988, Malapai Resources Company amended the Source Materials License SUA-1341 to include Christensen Ranch as a satellite to the Irigaray facility. In 1989, the Christensen Ranch R&D License SUA-1337 was terminated.

In 1990, Pinnacle West Capital Corporation sold Malapai Resources Company to Fuel International Trading Company (FITC), a subsidiary of Electricite de France, a French utility. FITC entered into an agreement with Total Minerals Corporation, another French company, as operator of the Malapai Wyoming project.

In 1993, a stock ownership transfer occurred which resulted in Cogema becoming the licensee for, the Irigaray and Christensen Ranch facilities. Cogema has been licensee since that time, operating as a subsidiary of Cogema Resources, Inc., a subsidiary of Areva NC.

### **REGULATORY FRAMEWORK**

License SUA-1341 was issued under 10 CFR 40, Domestic Licensing of Source Material. The Commission is required by 10 CFR 40.46 to determine if the change of control is in accordance with the provisions of the act and give its consent in writing.

10 CFR 40.46 states:

No license issued or granted pursuant to the regulations of this part shall be transferred, assigned, or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of any license to any person, unless the Commission shall after securing full information, find that the transfer is in accordance with the provisions of this act, and shall give its consent in writing.

The staff's evaluation is based on guidance in NUREG-1556, Volume 15, "*Guidance About Changes of Control and About Bankruptcy Involving Byproduct, Source, or Special Nuclear Materials Licenses*," dated November 2000, and the regulatory issue summary 2008-19 "*Lessons-Learned from Recent 10 CFR Part 70 License-Transfer Application Reviews*," dated August 2008, and regulations pertaining to specific licenses in 10 CFR 40.

As discussed in NUREG-1556, Volume 15, NRC is generally using the term "change of control" rather than the statutory term "transfer" to describe the variety of events that could require prior notification and written consent of the NRC.

*Notice of Application From Cogema Mining, Inc, for Consent to an Indirect Change of Control for Source Materials License SUA-1341, Opportunity To Provide Comments and To Request a Hearing* was published in the *Federal Register* (FR) on October 30, 2009 (72 FR 56241) with a deadline for submitting a request for hearing of November 19, 2009, and a deadline for submitting comments of November 30, 2009. No requests for hearing or comments were received.

## **DEFINITION OF A CHANGE OF CONTROL**

The central issue is whether the authority over the license has changed.

The application states the only change will be having a different parent company exerting control over the licensee. The new parent company, Uranium USA, will have some control over when and how the licensee will conduct its operation. Therefore, the proposed change is an indirect change of control of a 10 CFR 40 license, and requires NRC consent.

## **DESCRIPTION OF TRANSACTION**

The proposed change of control is based on the application submitted to the NRC on September 18, 2009 by Cogema, the licensee, and Uranium USA, the proposed direct future parent company of Cogema, entitled "*Notice of Change of Control and Ownership Information: Material License SUA-1341: COGEMA Mining, Inc., Irigaray & Christensen Ranch Facilities, Johnson & Campbell Counties, Wyoming*" (ML092660641). The application was supplemented by submissions dated October 23, 2009 (ML093090468), November 18, 2009, (ML093290146 and ML093360303), and December 3, 2009 (ML093420030).

As previously stated, Cogema is a wholly owned subsidiary of Cogema Resources, Inc. (Cogema Resources), which is a wholly owned subsidiary of Areva NC. Cogema Resources is planning to sell Cogema to Uranium USA, which, through several subsidiaries, is wholly owned

by Uranium One, Inc., a Canadian company that will be the ultimate parent corporation of Cogema. On August 7, 2009, Uranium USA entered into a Purchase Agreement with Cogema Resources, a Delaware corporation, to acquire 100 percent of the shares in Cogema (as well as all interests of Fuel International Trading Corporation, a Delaware corporation whose subsidiary, Malapai Resources Company is a joint venture partner at the Wyoming facilities with Cogema Resources). Consummation of the transaction will thus result in the indirect change of control of Cogema and License SUA-1341 from Cogema Resources to Uranium USA.

The application includes a discussion of the transaction, a new corporate organizational chart and contact number for the authorized agent. Cogema will remain as the licensee. The parent company ownership will change control in this transaction as a result of the share purchase agreement by Uranium USA for the shares of Cogema.

The NRC staff finds that the application adequately provides a complete and clear description of the transaction, and is consistent with the guidance in NUREG-1556.

## **CHANGES OF PERSONNEL**

The application indicates that certain Cogema personnel will not be changed as part of the change of control. The application explicitly states that the Radiation Safety Officer (RSO) for Cogema will continue after the change in control. The RSO has the responsibility of assuring changes conform to radiation safety and environmental requirements as documented in the last NRC inspection report dated November 6, 2009 (ML093100142). NRC inspectors reviewed the qualification records of the RSO and concluded that these qualifications were in compliance with Materials License SUA-1341, License Condition 9.12, that states, "The RSO shall have the health physics authorities, responsibilities, and technical qualifications identified in Regulatory Guide 8.31."

In Exhibit 4 of the application, Uranium USA provided an organization chart of the following positions the RSO will report to after the change of control is completed: Senior Vice President, ISR Operations; Operations Manager; and Manager, Environmental and Regulatory Affairs, Wyoming. Uranium USA has provided the proposed names and relevant experience of the Senior Vice President, ISR Operations, and Manager, Environmental and Regulatory Affairs, Wyoming, for Cogema after the change of control is completed. The proposed Operations Manager position has not been named. NRC staff notes that Ms. Donna Wichers, Sr. Vice President, ISR Operations, Uranium One Americas, Inc., and co-signatory of application, was previously employed by Cogema as General Manager until February 19, 2007, and is thus familiar with the Irigaray and Christensen Ranch facilities. Ms. Wichers is anticipated to become the Sr. Vice President, ISR Operations for Cogema after the change of control is completed.

The NRC staff finds that key personnel that have control over licensed material, specifically the RSO, will not change. The preservation of key personnel meets the requirements of 10 CFR 40 and is consistent with the guidance in NUREG-1556. Additionally, new personnel in the organization above the RSO have extensive uranium ISR experience and are qualified to control licensed material.

## **CHANGES OF LOCATION, EQUIPMENT AND PROCEDURES**

The application indicates that there will be no changes to the location of operations, equipment or procedures as a result of this change of control. After the change of control, Cogema proposes to operate Irigaray and Christensen Ranch under the current Standard Operating Procedures. One change is the emergency number for a representative of the parent for the licensee.

NRC staff conducted a routine annual inspection of the Irigaray and Christensen Ranch facilities on September 30 and October 1, 2009 (ML093100142). The inspection report notes the facilities are undergoing routine maintenance and overhaul of the infrastructure that would be needed for startup of operations. The facilities are currently in operating status, but no uranium production is occurring at this time.

The NRC staff finds that a complete description of the planned location, facilities, equipment, and procedures has been included in the application. There are no proposed changes in the location, equipment, and procedures for the site and the documentation submitted meets the requirements of 10 CFR 40 and is consistent with the guidance in NUREG-1556.

## **SURVEILLANCE RECORDS**

The application states that all required surveillance for the Irigaray and Christensen Ranch facilities has been performed, documented, and reviewed by Uranium USA and found acceptable with the exception of the requirement for 5-year mechanical integrity testing (MIT) of production wells in Mine Unit 6. The application states that at the time of its submittal, approximately 38 percent of the wells had been tested and anticipates that the remainder will be completed by December 4, 2009.

As stated above, recent inspections of the Irigaray and Christensen Ranch facilities were conducted. Results of the surveillance record review for that inspection are consistent with the application statement that the surveillance records are up to date with the exception of the MITs.

With regard to the MITs, the NRC inspection report indicates that the MITs were not performed within the prescribed 5-year timeframe (License Condition 10.2) for wells in mine units 2 and 6, as well as possibly other mine units. The inspection report noted that although the license condition does not make this distinction, the license application stated that all "operational wells" will be tested every 5 years. Because the wells were not operational at the time of inspection, the NRC inspection report concluded that the failure to conduct the MITs within the prescribed timeframe was not a safety issue. The report concluded that the failure to conduct the tests within the prescribed timeframe was not a violation of the license because the application allows the licensee to conduct MITs on only operating wells.

The inspection report did discuss future plans for completion of the MIT prior to any future startup of operations. The licensee committed to completing the MITs prior to startup of operations.

With the above commitments with regard to completion of all MITs prior to startup, the NRC staff finds that for surveillance items not completed, the applicant has committed to adequate

corrective actions as required by 10 CFR 40 and recommended in NUREG-1556. The staff concludes that the application submitted contains a statement that all required surveillance has been performed, documented, and reviewed, as required by 10 CFR 40 and recommended in NUREG-1556.

## **DECOMMISSIONING AND RELATED RECORDS TRANSFERS**

NUREG 1556 recommends that license transfer applications include (1) information that ensures the proper transfer and maintenance of records important to the safe and effective decommissioning of facilities involved in licensed activities, and (2) a description of the status of the licensed facility with regard to ambient radiation levels and fixed and/or removable contamination as a result of NRC licensed activities. The application should confirm that the transferee accepts full responsibility for the decommissioning of the site, including any contaminated facilities and equipment.

### Record Transfer

In the application, Cogema and Uranium USA confirmed that all Cogema's records will remain in possession of Cogema after the change of control. In addition, Cogema committed to maintaining the records after the change of control. The NRC staff finds that the application contains information on the maintenance of all records, consistent with the guidance in NUREG-1556.

### Contamination Status

In the application and responses to NRC's request for additional information (RAI), Uranium USA stated that a due diligence investigation into the current contamination status of the facilities was conducted by Uranium USA and an independent third party consultant contracted by Uranium USA. Uranium USA stated its confidence that it had a thorough understanding of the current radiological status of the facilities given its experience at other ISR facilities, including historic spills or leaks that may need remediation during decommissioning in order for the facilities to be released for unrestricted use. In responses to RAIs, Uranium USA showed an understanding of the current status of non-radiological contamination issues, including several issues currently under NRC review (e.g., license renewal application, wellfield restoration reports). As discussed previously, Ms. Donna Wichers, Sr. Vice President, ISR Operations, Uranium One Americas, Inc., and co-signatory of the application, was previously employed by Cogema as General Manager until February 19, 2007, and so is familiar with the status of the Irigaray and Christensen Ranch facilities.

The NRC staff finds that the submitted information sufficiently demonstrates Uranium USA's understanding of the current status of the contamination levels at the facilities, consistent with the guidance in NUREG-1556.

### Decommissioning Commitment

The application stated that Uranium USA and Cogema are aware of the current status of the facilities, the regulatory actions under review by the NRC, the potential for additional remedial

actions and assume full responsibility for decommissioning of the facilities. Uranium USA performed a due diligence investigation of the status of the facilities, including relevant decommissioning records, plans, and procedures.

The NRC staff finds that the application sufficiently describes Uranium USA's and Cogema's commitment to decommissioning of the facilities, in accordance with NUREG-1556.

### Financial Surety

10 CFR 40 ISR licensees are subject to financial assurance requirements for decommissioning, decontamination, and reclamation pursuant to 10 CFR 40, Appendix A, Criterion 9. The indirect change of control will not affect Cogema's continued compliance with the requirements for financial assurance. Cogema, and its parent company Uranium USA, will be responsible for the current status and future decommissioning of the licensed facilities that are subject to the indirect change of control. Cogema's current financial assurance is in the form of an irrevocable letter of credit naming the Wyoming Department of Environmental Quality (WDEQ) and the U.S. Department of the Interior (DOI) as the beneficiary. The letter of credit follows the language requirements of the WDEQ. The executed original copy is held by the State of Wyoming.

Uranium One, Inc., on behalf of Cogema, will provide financial assurance in the form of an irrevocable letter of credit following the indirect change of control. Uranium One, Inc. provided a draft irrevocable letter of credit that is to be executed and to replace the existing letter of credit on the day the transaction closes. This draft letter of credit follows the language requirements of the WDEQ and is issued by a financial institution regulated by the State of New York. The draft letter of credit is in the amount of \$9,714,299, which is equal to the current reclamation cost estimate approved by NRC on February 25, 2009 (ML090160045). The existing letter of credit must remain in-force until superseded by the aforementioned replacement letter of credit. Otherwise, the licensee would not have adequate financial surety to satisfy NRC regulations. Cogema has indicated that, should the required amount of surety increase before the transaction closes, Cogema will secure a letter of credit in the greater amount, effective as of the close of the transaction.

10 CFR 40, Appendix A, Criterion 9, allows the NRC to accept financial sureties that have been consolidated with financial or surety arrangements established to meet requirements of other Federal or State agencies and/or local governing bodies, subject to restrictions. Therefore, the proposed financial surety naming the WDEQ and the DOI as the beneficiary is deemed acceptable to NRC.

Cogema has provided an unexecuted, draft copy of a Certification of Financial Assurance, whose certification amount of \$9,714,299 is equivalent to the current reclamation cost estimate approved by NRC on February 25, 2009. The NRC staff has determined that the Certification of Financial Assurance is acceptable and conforms to guidance pursuant to NUREG 1757, Volume 3, Appendix A.2. Additionally, the draft Certification of Financial Assurance designates an authorized officer/employee of Cogema to sign the certification. Cogema will be required to fax the executed copy immediately upon the close of the transaction and mail the executed original to NRC headquarters. Further, Cogema indicated that it will not have a corporate seal at the time the document is to be executed; therefore, NRC proposed that the document be notarized. Cogema agreed to this proposal.

Per Regulatory Issue Summary (RIS) 2008-19, Uranium One, Inc. provided NRC with two years (fiscal years 2007 and 2008) of audited financial statements (balance sheets, income statements, cash flow statements) detailing financial results before the license change of control. Additionally, Uranium One, Inc., provided NRC with five years (fiscal years 2009 through 2013) of projected (*pro forma*) financial statements (balance sheets and cash flow statements only) detailing projected financial results after the license change of control. Uranium One, Inc. requested that the *pro forma* data be withheld from public release as confidential commercial and financial information pursuant to 10 CFR 2.390. NRC staff agreed to the request. NRC staff compared the *pro forma* financial data after the change of control to financial data prior to the change of control and finds adequate assurance that Uranium One, Inc. will remain solvent.

Uranium USA and Cogema provided NRC with corporate organizational charts before and after the close of the transaction. After the close of the transaction, Cogema will be owned by Uranium USA.

Uranium USA has also submitted certifications of incorporation for its parent corporations, as follows: Uranium One, Inc. (a Canadian Corporation); Uranium One Investments, Inc. (a Canadian Corporation); Uranium One Americas, Inc. (a Nevada Corporation); and Uranium One Exploration U.S.A. Inc. (a Delaware Corporation). The NRC staff used these documents to verify the state/country of incorporation.

The NRC staff finds that the submitted information sufficiently describes Cogema's ability to decommission and provide adequate financial surety consistent with the guidance in NUREG-1556, Volume 15, NUREG-1757, Volume 3, and the requirements of 10 CFR 40.46 and 10 CFR 40, Appendix A, Criterion 9.

#### **TRANSFeree'S COMMITMENT TO ABIDE BY THE TRANSFEROR'S COMMITMENTS**

In the application, Uranium USA agreed to abide by all constraints, conditions, requirements, representations, and commitments of the license. The application also stated that no unresolved enforcement or inspection issues existed at this time. In response to RAIs, Uranium USA also confirmed its knowledge of commitments for a pre-startup inspection, revised surety, and completion of outstanding MITs prior to the startup of operations.

The NRC staff finds that the submitted information sufficiently describes Uranium USA's commitment to abide by commitments made by Cogema, consistent with the guidance in NUREG-1556.

#### **ENVIRONMENTAL REVIEW:**

This NRC action is not subject to further environmental review. This action is categorically excluded from further environmental review pursuant to 10 CFR 51.22 (c)(21).

## **CONCLUSIONS**

The staff has reviewed the application submitted by Cogema and Uranium USA with regard to an indirect change of control of Source Materials License SUA-1341, and approves the application pursuant to 10 CFR 40.46.

The submitted information sufficiently described the transaction; documented Uranium USA's understanding of the license and commitments; demonstrated that Cogema and Uranium USA's personnel have the experience and training to properly implement and maintain the license and that they will maintain the existing records; and, in the future, will abide by all existing commitments to the license, consistent with the guidance in NUREG-1556, Volume 15.

Therefore, the staff concludes that the proposed change in control would not alter the previous findings, made pursuant to 10 CFR 40.32(d), that licensed operations will not be inimical to the common defense and security, or to the health and safety of the public.