# February 28, 2013

MEMORANDUM TO: Bill Von Till, Chief

Uranium Recovery Licensing Branch Decommissioning and Uranium Recovery

Licensing Directorate

Division of Waste Management and Environmental Protection Office of Federal and State Materials

and Environmental Management Programs

FROM: Douglas Mandeville, Project Manager ... /RA/

Uranium Recovery Licensing Branch Decommissioning and Uranium Recovery

Licensing Directorate

Division of Waste Management and Environmental Protection Office of Federal and State Materials

and Environmental Management Programs

SUBJECT: PUBLIC MEETING SUMMARY

On February 7, 2013, a Public Meeting was held with Cameco Resources, doing business as Power Resources, Inc., (PRI) at U.S. Nuclear Regulatory Commission Headquarters. The purpose of the meeting was to discuss three issues: (1) PRI's license renewal application; (2) PRI's Amendment Request dated December 19, 2012; and (3) future licensing actions. A summary of the meeting is enclosed.

Docket No: 40-8964 License No: SUA-1548

**Enclosure: Meeting Summary** 

cc: Meeting Attendees (via email)

CONTACT: Douglas Mandeville, FSME/DWMEP

(301) 415-0724

MEMORANDUM TO: Bill Von Till, Chief

Uranium Recovery Licensing Branch
Decommissioning and Uranium Recovery

Licensing Directorate

Division of Waste Management and Environmental Protection

Office of Federal and State Materials

and Environmental Management Programs

FROM: Douglas Mandeville, Project Manager

Uranium Recovery Licensing Branch Decommissioning and Uranium Recovery

Licensing Directorate

Division of Waste Management and Environmental Protection

Office of Federal and State Materials

and Environmental Management Programs

SUBJECT: PUBLIC MEETING SUMMARY

On February 7, 2013, a Public Meeting was held with Cameco Resources, doing business as Power Resources, Inc., (PRI) at U.S. Nuclear Regulatory Commission Headquarters. The purpose of the meeting was to discuss three issues: (1) PRI's license renewal application; (2) PRI's Amendment Request dated December 19, 2012; and (3) future licensing actions. A summary of the meeting is enclosed.

Docket No: 40-8964 License No: SUA-1548

**Enclosure: Meeting Summary** 

cc: Meeting Attendees (via email)

CONTACT: Douglas Mandeville, FSME/DWMEP

(301) 415-0724

<u>DISTRIBUTION:</u> DPersinko BSpitzberg/RIV LGersey/RIV Meeting Attendees

#### ML13053A516

OFFICE	DWMEP	DWMEP	DWMEP
NAME	DMandeville	BGarrett	DMandeville
DATE	2/25/13	2/26/13	2/28/13

OFFICIAL RECORD COPY

#### MEETING REPORT

DATE: February 7, 2013

TIME: 10:15 a.m. to 12:40 p.m.

PLACE: U.S. Nuclear Regulatory Commission

Two White Flint North, Rockville, Maryland

Room T7A3

PURPOSE: This meeting was held at the request of Cameco Resources,

doing business as Power Resources, Inc., to discuss three issues:

(1) PRI's license renewal application; (2) PRI's Amendment Request dated December 19, 2012; and (3) future licensing

actions.

ATTENDEES:

See Attendees List (Attachment 1).

BACKGROUND:

Power Resources, Inc. (PRI), doing business as Cameco Resources (Cameco), currently operates the Smith Ranch-Highland Uranium Project (SRHUP) under NRC License SUA-1548. This License authorizes Cameco to recover uranium from underground ore bodies using in-situ recovery (ISR) techniques.

# License Renewal

By letter dated February 1, 2012, Cameco submitted a request to the U.S. Nuclear Regulatory Commission (NRC) to renew Source Material License SUA-1548. This license authorizes Cameco to perform uranium in-situ recovery (ISR) operations at SRHUP sites consisting of the contiguous Smith Ranch, Highland, and Reynolds Ranch properties and at the related remote satellite facilities at the Gas Hills, Ruth, and North Butte properties. Cameco has requested that License SUA-1548 be renewed as a performance-based license for an additional 10-year period. The renewal, if granted, would allow for continued operations and the recovery of uranium using ISR techniques as previously licensed by the NRC. The staff's acceptance of the license renewal request is documented in a letter dated July 5, 2012 (ADAMS Accession No. ML12159A511). The staff is proceeding with its detailed technical review of the document.

## December 19, 2012 Administrative Amendment Request

By letter dated December 19, 2012, Cameco Resources submitted a request for administrative changes to conditions in License SUA-1548. In the letter, Cameco requested that four license conditions be removed. This meeting was held to discuss Cameco's request and clarify staff questions.

# **Future Licensing Actions**

Cameco has submitted a letter of intent to the staff identifying submittal of a license amendment request for its Ruby Ranch property. This meeting provided Cameco with the opportunity to discuss progress on its Ruby Ranch amendment and other potential major licensing actions.

#### DISCUSSION:

NRC staff read the opening statement for the meeting and Cameco proceeded with a discussion of the License Renewal application. Staff then provided comments on Cameco's December 19, 2012 administrative amendment request. The final topic discussed during the meeting was future licensing actions. The attendance list is included in Attachment 1. Attachment 2 contains the meeting agenda included in the original meeting notice. Discussion topics from the meeting are presented below.

# License Renewal

- Intent of the meeting is to provide Cameco with staff observations to date on the contents of the license renewal application.
- Staff observations discussed have not been through our review process.
- Staff observations may be formalized as a request for additional information (RAI) during the review process or they may be resolved by staff during the review.
- Staff is not expecting a response to the items identified at this time.
- Past performance is an important aspect of the review.

## Safety Review Items

- The application does not appear to have sufficient information related to oil and gas
  wells within the license area. Staff is interested in well locations, permit number, and
  horizontal extent of drilling for wells located near mine units and within the area of review
  for the deep disposal wells. Any measures Cameco has taken to coordinate well
  placement with oil and gas producers should be discussed.
- The application does not appear to discuss coal bed methane impoundments in the vicinity of the North Butte satellite. If they exist, they should be identified.
- The application does not appear to discuss the plans for purge storage reservoir 1 (PSR 1)
- The application may not be using the most current water balance estimates in presenting restoration timeframes.
- For the Gas Hills remote satellite, the application does not clearly identify which ore sands will be targeted for extraction and the overlying and underlying aquifers in mine units 1 to 5. If aquifers in different sands are to be combined into a single production aquifer at a mine unit, the application should state which sands will be combined and in which locations of the mine unit.
- The application does not describe if the ore zone aquifers at Gas Hills will act as confined or unconfined aquifers during operations. It does not address the safety issues associated with ISR operations in unconfined aquifers.

- The application does not discuss aspects of well twinning or recompletion in stacked ore zones at Smith Ranch, Reynolds Ranch, North Butte, and Gas Hills. Staff was not able to identify a discussion on how: (1) the original extraction zone will be isolated from the new extraction zone; (2) the mine unit hydrologic package would address the issue of stacked ore zones; (3) how the overlying and underlying aquifers will be defined in mine units with stacked ore zones; (4) how the vertical or horizontal monitoring wells would be established for recompletions in another ore zone; (5) how baseline water quality will be established for the recompleted ore zone and monitoring wells and how it will be approved; (6) how restoration will be done and restoration stability established for all extraction zones in a well which has multiple completions; (7) how pore volumes will be determined for each zone.
- The application does not appear to discuss what actions will be taken to quantify any groundwater impacts if a well fails a mechanical integrity test.
- The application does not appear to provide the number of MIT failures in each mine unit at Smith Ranch.
- The application does not appear to discuss the progress of the casing leak investigation of MUs C, E, and F at SRHUP.
- The application does not appear to discuss the current investigation of ground water impacts from seepage from purge storage reservoir 2 (PSR2).
- The application does not appear to fully address aspects of decommissioning such as the radium benchmark dose approach as described in Appendix E to NUREG 1569.
- The application does not appear to address calculation of public dose in a manner consistent with the NRC's draft interim staff guidance on demonstration of compliance with 10 CFR 20.1301. The NRC's draft interim staff guidance is available in ADAMS under accession number ML112720481. While it is not required that licensees follow guidance, licensees should be able to explain why a different approach was taken and how the different approach meets the regulations.
- The application identifies several areas where further evaluation or study was in progress, such as the uranium solubility study.
- Staff recognizes that the facility has expanded its footprint within the license area since the last renewal. However, staff did not observe an analysis or evaluation of monitoring locations to determine if they remain correctly located.
- The application does not present the use of a radiation safety officer designee in a manner that is consistent with NRC's approach.
- The application does not appear to clearly identify how the licensee responds to spills and leaks and how cleanup levels are determined.
- The application does not clearly identify how equipment is released when moving around the site among restricted, controlled, and unrestricted areas.

# **Environmental Review Items**

- Cameco should provide updates to its renewal application to reflect current permitting status, completed surveys, and site data collected since the renewal application was submitted to NRC.
- Archeological and cultural resource survey reports for the different properties are needed to assist NRC's consultation efforts under Section 106 of the National Historic Preservation Act.

- Additional information concerning ongoing mitigation and surface reclamation would support Cameco's impact conclusions in the renewal application.
- A consistent approach to cumulative impact assessments in the renewal application appears needed.

# December 19, 2012 Administrative Amendment Request

- Staff review is in progress.
- Understand request is to
  - Modify condition 9.1 to allow yellowcake processing at Highland
  - o Remove condition 10.1.2c related to notification prior to restart of Highland dryer
  - o Remove condition 10.1.12 related to processing of toll resins
  - o Remove condition 10.2.1 related to approval of an operations plan at North Butte
- Cameco is currently reviewing its operations plan for North Butte under the safety and environmental review panel (SERP) process.

# **Future Licensing Actions**

- Cameco is continuing preparation of a license amendment request for its Ruby Ranch and Brown Ranch projects.
- Anticipated submittal is the end of calendar year 2013 and first quarter of calendar year 2014.
- Staff suggested that Cameco submit an updated letter of intent for these two projects so that staff can project resource needs.

# Action Items

One action item was identified. Cameco asked about the timing of staff's review of the December 19, 2012 administrative amendment request. Staff is currently reviewing the request. Completion of the staff's review will depend on a timely response to any requests for additional information.

The meeting concluded at approximately 12:40 p.m. eastern time. There were no questions from the public.

#### Attachments:

- 1. List of Attendees
- 2. Meeting Agenda

# Attachment 1 Meeting Attendees Date: Thursday February 7, 2013 Room T7A3 10:00 am to 12:40 pm

Topics: License Renewal, Administrative Amendment Request, Future Licensing Actions

NAME	AFFILIATION
Doug Mandeville	U.S. NRC
Elise Striz	U.S. NRC
Jim Park	U.S. NRC
Varughese Kurian	U.S. NRC
Mirabelle Schoemaker	U.S. NRC
Josh Leftwich	Cameco
John McCarthy	Cameco
Miriam Whatley	Cameco
John Schmuck	Cameco

# MEETING AGENDA Cameco Resources/Smith Ranch License Renewal February 7, 2013

MEETING PURPOSE: Meeting to Discuss Issues on Smith Ranch License Renewal

MEETING PROCESS:

<u>Time</u>	<u>Topic</u>	
		<u>Lead</u>
10:15 a.m.	Introductions	All
	License Renewal Safety Issues	NRC
	License Renewal Environmental Issues	NRC
	Discussion of December 9, 2012 Request	NRC
	Discussion of Future Licensing Actions	Cameco
	Public Comment/Questions	Moderator
2:30 p.m.	Adjourn	

Attachment 2