



April 10, 2015

ATTN: Document Control Desk, Director
Office of Nuclear Material Safety and Safeguards
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001

CAMECO RESOURCES

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Cameco Response to U.S. Nuclear Regulatory Commission Request for Additional Information for License Renewal of Cameco Resources Smith Ranch-Highland Uranium Project Source Materials License SUA-1548 (TAC J00635)

Dear Director,

By letter dated February 1, 2012, Power Resources, Inc., doing business as Cameco Resources (Cameco), submitted to the U.S. Nuclear Regulatory Commission (NRC) a request to renew Source Materials License SUA-1548. License SUA-1548 authorizes Cameco to operate a uranium in-situ recovery (ISR) facility at its Smith Ranch-Highland Uranium Project, including its associated remote satellites at their North Butte, Gas Hills and Ruth sites.

The NRC staff completed their acceptance review on July 5, 2012. At the completion of their safety, technical and environmental reviews in April 2013, staff issued Cameco a request for additional information (RAI) on May 2, 2013. Attached to this letter, Cameco is providing responses to the environmental review RAI for cultural resources to support staff's review of the license renewal request.

Attachment 1 to this letter provides responses to each of the cultural RAI comments. Attachment 2 is an *Affidavit to Withhold Cultural Resource Information from Public Disclosure*, signed and notarized by the General Manager of US Operations. Appendix F is the complete supplement to the ER and shall remain as a confidential document as specified under 10 CFR 2.390 and withheld from public disclosure under the National Historic Preservation Act of 1966, as amended (NHPA), Section 304 (16 U.S.C. 470w-3(a)). Appendix F contains 4 Volumes comprised of all completed surveys available to Cameco with corresponding site maps and tables.

If you have any questions regarding this submittal please contact Jeanie Wolford at 307-333-7644 or by email jeanie_wolford@cameco.com.

Sincerely,



Larry McGonagle
SHEQ Division Manager
Cameco Resources

cc.: Document Control Desk, Director

Attachments: RAI Responses
Affidavit to Withhold Cultural Resource Information from Public Disclosure
Appendix F; Volumes I-IV
Disc.

RAI CR -1

Please provide a comprehensive summary of all past historical- and cultural-resource surveys (or inventories) that have been conducted within the proposed Smith Ranch Project boundaries.

- A. Please provide a table identifying each survey, the number of acres surveyed, the respective survey's sponsor, the organization that conducted the survey, the year of the respective survey, a description of the survey methodology, and a list of all historical and/or cultural properties identified during each survey. Please provide a brief summary discussion of each cultural and/or historical survey effort, including the methodology for each survey.**

Cameco has prepared Appendix F; Volume I, Table A and Volume IV, Map A – SRH Cultural Surveys

- B. Please provide the following maps:**

- i. Please provide maps which indicate the current SUA-1548 license boundaries and the superimposed boundaries of each of the previous cultural-resource surveys at all of the Smith Ranch Project sites (one map per site) to facilitate comparison of the respective survey areas.**

Cameco has provided Appendix F; Volume VI, Maps 1-18 for each of the identified survey areas.

- ii. Please provide redacted and un-redacted maps which identify the locations of all historical and/or cultural properties that have been identified within each of the Project sites' boundaries.**

Cameco has created maps of the identified sites based on the legal descriptions provided, Appendix F; Volume IV.

It is to be noted that the locations are not exact coordinates as that information is not provided to Cameco. Please note that several of the individual reports that are included within Appendix F include site maps of identified properties. Cameco did not recreate each of these individual maps.

- iii. Please provide maps which indicate the areas within all of the Project sites' boundaries that have not been addressed through an intensive-level historical- and cultural-resource survey.**

Please see Appendix F; Volume VI, Map C – SRH Unevaluated Areas.

- iv. Please provide a map(s), assessment(s), and/or review(s) of all Project sites where areas may be sensitive for deeply-buried prehistoric properties that are typically not identifiable by surface examinations or shallow probing.**

Cameco is not aware of any Project sites where areas may be sensitive for deeply buried pre-historic properties.

RAI CR-2

Please discuss Cameco's plans to address the potential impacts to historical and/or cultural properties in areas that have not been covered by intensive cultural-resource surveys and/or areas that were surveyed prior to 2004.

Appendix F; Volume I, Table A, and Volume VI, Map B, depicts sites that need additional evaluation. Cameco will complete this evaluation if a site is determined to be in an area of proposed development or disturbance.

It has been and will continue to be Cameco's intent to not impact any historical or cultural properties whether previously discovered by surveys or not. Cameco will not conduct any surface disturbing activities in areas that have not been previously inventoried and cleared for cultural resources or have approved mitigation. Cameco commits to meeting the requirements as defined by License Condition 9.9 and all commitments defined in each LQD Permit to Mine covered in this license.

Condition 9.9

Before engaging in any developmental activity not previously assessed by the NRC, the licensee shall administer a cultural resource inventory. All disturbances associated with the proposed development will be completed in compliance with the National Historic Preservation Act (as amended) and its implementing regulations (36 CFR 800), and the Archaeological Resources Protection Act (as amended) and its implementing regulations (43 CFR 7),

Before engaging in any development activity in T35N, R74W that would physically disrupt or disturb inventoried cultural sites that have been designated eligible for the National Register of Historic Places, the licensee shall propose mitigation measures, for NRC review and approval, which will preserve the integrity of these sites, as defined by the Advisory Council on Historic Preservation. These include inventoried sites 48CO352, 48CO1288, 48CO1289, 48CO1291, 48CO2462, 48CO2463, and 48CO2464.

In order to ensure that no unapproved disturbance of cultural resources occurs, any work resulting in the discovery of previously unknown cultural artifacts shall cease, The artifacts shall be inventoried and evaluated in accordance with 36 CFR Part 800, and no disturbance of the area shall occur until the licensee has received authorization from the NRC to proceed.

For the Gas Hills Project, the licensee shall comply with the stipulations for cultural resource protection in the Programmatic Agreement provided in the NRC letter to the Advisory Council on Historic Preservation, dated December 16, 2003.

For the Reynolds Ranch Project, prior to any developmental activity conducted in the following list of Sections, the licensee shall administer a cultural resource inventory in any area of the

Section not previously inventoried: T36N R73W Sec 5, Sec 7, Sec 17, and Sec 18; T36N R74W Sec 11, Sec 12, Sec 13, and Sec 14; and T37N, R73W Sec 30. This condition has been satisfied

RAI CR-3

Please provide all State of Wyoming Cultural Resource Site forms for all identified historical and/or cultural properties within the existing and proposed Smith Ranch Project boundaries.

Please note that copies of all Site forms where the respective properties have been formally designated as "Not Eligible for Inclusion on the National Register of Historic Places" through a deliberate consensus determination with the Wyoming SHPO and/or the National Register of Historic Places will not be needed by the NRC. These Site forms will provide the NRC with additional information to use in its cultural-resource impacts analysis.

Cameco has created Tables and Maps identifying sites from each of the survey reports. It was noted during the process that several sites were revisited through the survey process. Cameco has tried to identify these sites with the most current information available. Not all reports provided site forms to Cameco or their predecessors, therefore the attached tables and maps is Cameco's best efforts to supply the information requested.

RAI CR-4

Please provide additional information regarding all historical and/or cultural properties located within all Smith Ranch Project boundaries.

A. Please provide a table with information concerning each historical and/or cultural property presently identified within the current and proposed Project boundaries, indicating each respective Determination of Eligibility (DOE).

Please refer to Appendix F; Volume I, Table A – SRH Cultural Surveys

B. Please identify which historical and/or cultural properties have the potential to be directly or indirectly impacted by proposed uranium-recovery activities at all Smith Ranch Project sites during all Project phases. Please also identify those historical and/or cultural properties that, in Cameco's opinion, it would deliberately avoid during any Smith Ranch Project activities.

The Holdup Hollow area defined in Appendix F; Volume IV, Map B will be avoided. Sites identified as needing further evaluation depicted on Map B/Table B will be evaluated if they fall within future development and mitigated if avoidance cannot be met. Currently Cameco is working on a proposal to complete further evaluation and surveys for areas that are proposed to be disturbed within the next two years.

CAMECO RESOURCES
AFFIDAVIT TO WITHHOLD CULTURAL RESOURCE INFORMATION
FROM PUBLIC DISCLOSURE

1. Cameco Resources (Cameco) is requesting by this affidavit that the cultural resource information submitted as Appendix F of the Environmental Report be considered confidential information under 10 CFR 2.390 and withheld from public disclosure under the National Historic Preservation Act of 1966, as amended (NHPA), Section 304 (16 U.S.C. 470w-3(a)).

2. The specific information to be withheld from public disclosure is contained in the following documents:

Nuclear Regulatory Commission Source Material License No. SUA-1548
License Renewal Application
Environmental Report - Appendix F
Volumes I – IV

3. Name and title of official position of the person making the Affidavit:

Doug Pavlick, General Manager, US Operations,
Cameco Resources

4. Basis for proposing that the information be withheld:

In accordance with the NHPA Section 304 (16 U.S.C. 470w-3(a)), information on the nature or location of archaeological and historical sites shall not be made available to the public. Accordingly, disclosure is specifically exempted by statute as specified in 10 CFR 2.390(a)(3). The information contained in the above-referenced volumes has been held in confidence by Cameco. Cameco does not provide such information to public or private entities nor is it available in any public sources.

5. Statement of harm that would result if the information sought to be withheld is disclosed to the public:

Federal agency policies hold that public disclosure of information on the nature and location of archaeological and historic sites will increase the potential for trespassing, vandalism and theft resulting in the loss or destruction of potentially significant cultural and historic artifacts and illegal traffic in antiquities.

6. Cameco understands that withholding the designated cultural and historical information does not deprive any independent party from inspecting the confidential information under the terms of an appropriate protective order in the context of an NRC licensing hearing or other administrative proceeding.



Doug Pavlick
Cameco Resources

State of Wyoming
County of Natrona

The foregoing Affidavit was affirmed and acknowledged before me by Doug Pavlick
on this 10 day of April 2015.

Witness my hand and official seal

[notary seal]



Sally I. Cook
Notary Public

Sally I. Cook
Name printed or typed

My Commission Expires: 6/30/2018