

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

March 7, 2018

MEMORANDUM TO:	Bill Von Till, Chief Uranium Recovery Licensing Branch Division of Decommissioning, Uranium Recovery, and Waste Management Office of Nuclear Material Safety and Safeguards	
FROM:	Douglas Mandeville, Project Manager Uranium Recovery Licensing Branch Division of Decommissioning, Uranium Recovery, and Waste Management Office of Nuclear Material Safety and Safeguards	/RA/
SUBJECT:	SUMMARY OF FEBRUARY 21, 2018, MEETING RESOURCES, INC. ON NRC REQUESTS FOR A INFORMATION ON HEALTH PHYSICS TOPICS A	DDITIONAL

On February 21, 2018, NRC staff held a teleconference with Power Resources, Inc. (PRI), doing business as Cameco Resources. The purpose of the meeting was to discuss the NRC staff's requests for additional information on health physics topics related to the renewal of Source Material License SUA-1548 at its Smith Ranch-Highland Uranium Project (SR-HUP) insitu recovery facility. The meeting summary; list of attendees; and meeting agenda are enclosed.

WITH THE SMITH RANCH HIGHLAND LICENSE RENEWAL

Docket Number: 40-8964 License Number: SUA-1548

Enclosures:

- 1. Meeting Summary
- 2. List of Attendees
- 3. Meeting Agenda

cc: Meeting Attendees (via email)

CONTACT: Douglas Mandeville, NMSS/DUWP (301) 415-0724

SUBJECT: SUMMARY OF FEBRUARY 21, 2018, MEETING WITH POWER RESOURCES, INC. ON NRC REQUESTS FOR ADDITIONAL INFORMATION ON HEALTH PHYSICS TOPICS ASSOCIATED WITH THE SMITH RANCH HIGHLAND LICENSE RENEWAL

DATE March 7, 2018

DISTRIBUTION:

MSampson

attendees via email

ADAMS Accession Number: ML18058B183

NAME D. Mandeville	
D. Manucville	
DATE 3/7/18	

OFFICIAL RECORD COPY

MEETING SUMMARY

DATE: February 21, 2018

<u>TIME</u>: 10:15 a.m. to 10:55 a.m.

- PLACE: Teleconference
- <u>PURPOSE</u>: The purpose of the meeting was to discuss the U.S. Nuclear Regulatory Commission (NRC) staff's requests for additional information (RAIs) on health physics topics related to renewal of the Smith Ranch-Highland Uranium Project (SR-HUP) source material license.

ATTENDEES:

See List of Attendees (Enclosure 2).

BACKGROUND:

Power Resources, Inc., (PRI) doing business as Cameco Resources, is the licensee for the SR-HUP uranium in situ recovery (ISR) facility in Converse County, Wyoming. PRI is authorized to operate SR-HUP under Source Material License SUA-1548.

PRI and the NRC staff last met to discuss PRI's RAI responses on the license renewal application on January 17, 2018. The summary of that meeting, dated January 25, 2018 (NRC's Agencywide Documents Access and Management System (ADAMS) Accession Number ML18022A872) contains a comprehensive background of the interactions and correspondence between PRI and the NRC staff related to this review. Since the January 17, 2018 meeting, PRI has continued to work on its RAI responses. The purpose of this meeting was to discuss the remainder of PRI's health physics RAI responses.

DISCUSSION:

Key discussion points from the meeting are summarized below. Doug Mandeville read the opening statement for the meeting, which included an overview of the discussion topics planned for this meeting. Enclosure 3 summarizes the meeting agenda.

Larry Reimann provided an update on the RAI response being prepared by PRI. PRI's focus has been on addressing the hydrological / groundwater RAIs, and plans to submit them to the NRC in early March 2018.

The attendees reviewed the summary of the previous meeting on health physics issues, dated January 28, 2018. Doug Mandeville asked PRI representatives if there were questions about the meeting summary or open items for discussion at this meeting. No items were identified.

The following additional RAIs were discussed at this meeting. The RAI numbers below refer to the NRC staff's May 2, 2013 letter (ADAMS Accession Number ML13098A040).

<u>RAI 38</u>

This RAI relates to in-plant airborne sampling for natural uranium, Ra-226, Po-210, and Pb-210. PRI plans to follow the same approach that it uses at its Crow Butte facility, which involves conducting isotopic analysis every 6 months for 2 years for each in-plant air particulate sampling location. After 2 years, sampling could be reduced to an annual frequency to ensure compliance with 10 CFR 20.1204(g). PRI will submit a revised write-up for Appendix I of the Technical Report that describes this approach for NRC staff review.

<u>RAI 40</u>

This RAI relates to the location of airborne effluent and environmental monitoring stations. PRI stated that it collected an additional two years of monitoring data from an on-site meteorological station installed at the Smith Ranch facility. The meteorological data was collected from 2015 to 2017. PRI will use this data to re-evaluate the monitoring station locations and determine if they are consistent with guidance in NRC Regulatory Guide 4.14. Also, PRI plans to submit information on the meteorological tower location, instrumentation, and data collected during this period, for NRC staff review.

<u>RAI 44</u>

This RAI relates to the frequency of sampling for air particulate samples. PRI stated that it has additional technical information that explains its sampling frequency. This item was evaluated under its safety and environmental review panel (SERP) process and reviewed by NRC inspectors. PRI will submit information on the SERP decision to the NRC staff as part of its response to this RAI.

<u>RAI 47</u>

This RAI relates to the use of on-site meteorological data for the North Butte and Gas Hills remote satellite facilities for the MILDOS analysis. PRI stated that it did use on-site meteorological data for the analysis and will provide additional information in its RAI response.

<u>RAI 48</u>

This RAI relates to air particulate data for the Gas Hills and North Butte remote satellite facilities. PRI stated that it does have pre-operational air particulate data for the North Butte facility, and plans to provide additional information and air particulate data in its RAI response. PRI stated that the Gas Hills facility has not operated and will not operate in the near future, so air particulate data will not be provided to the NRC staff in the RAI response.

<u>RAI 58</u>

This RAI relates to ground water stability monitoring after completion of ground water restoration activities, and is not a health physics topic. PRI stated that its RAI response will reflect the monitoring plan that is in its forthcoming alternate concentration limit application for Mine Unit 1 at Smith Ranch. The NRC staff understands PRI's proposed approach for addressing this RAI.

<u>RAI 60</u>

This RAI relates to the radium benchmark dose approach that is used when conducting post reclamation and decommissioning radiological surveys. PRI stated that spills remediated to date were performed at the request of the Wyoming Department of Environmental Quality and did not include remedial actions based on cleanup criteria for radioactive material. PRI stated that it plans to provide its radium benchmark dose approach when the final decommissioning plan for the facility is developed. This approach has been approved for other facilities and is considered acceptable. PRI will summarize this information in their response to this RAI.

<u>RAI 36</u>

This RAI relates to the training and education requirements of a designee who will review radiation work permits when the RSO is not available. PRI stated that it will likely develop an RAI response that is similar to the approach used at its Crow Butte facility. PRI will summarize this information in their response to this RAI.

<u>RAI 43</u>

This RAI related to the detection sensitivity of instrumentation used for contamination surveys, as recommended in Regulatory Guide 3.46. The NRC staff previously noted that survey instrumentation needs to be able to detect contamination levels described in the contamination control program. PRI stated that instrumentation and procedures used at the Smith Ranch facility will be identical to those approved for use at their Crow Butte facility. PRI also stated that it plans to address all RAIs related to survey instruments and detection capabilities by referencing the methods and instruments used at their Crowe Butte facility.

ACTION ITEMS:

The following action items were identified during the meeting:

- 1. The NRC staff will complete the meeting summary within 30 working days, including citations for information discussed at the meeting.
- 2. PRI will review the information discussed during this meeting and inform the NRC staff of its plans to resolve the RAIs discussed during this meeting. PRI may be able to support another meeting on health physics RAIs in March 2018.

No members of the public participated in the meeting. Therefore, there were no questions from members of the public.

The meeting concluded at approximately 10:55 a.m. EST.

Meeting Attendees Wednesday February 21, 2018 Teleconference 10:15 a.m. to 10:55 a.m.

Topic: Discuss RAIs related to health physics for PRI's Smith Ranch Highland license renewal.

NAME	AFFILIATION
Doug Mandeville	NRC
Dave Brown	NRC
Tony Huffert	NRC
Jim Park	NRC (via telephone)
Bill VonTill	NRC
Larry Reimann	PRI (via telephone)
Beth Frye	PRI (via telephone)
Doug Pavlick	PRI (via telephone)

PUBLIC MEETING AGENDA:

Public Meeting with PRI to Discuss RAIs for the SR-HUP License Renewal Request February 21, 2018, 10:15 a.m. to 1:00 p.m. EST

<u>Time</u>	Topic	Lead
10:00 a.m.	Introductions	All
10:05 a.m.	Opening Remarks	PRI
10:10 a.m.	Discussion of PRI's responses	PRI
12:40 p.m.	Remarks from Public	Public
12:55 p.m.	Review of Action Items	NRC
1:00 p.m.	End meeting	All