UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
612 EAST LAMAR BLVD, SUITE 400
ARLINGTON, TEXAS 76011-4125

October 17, 2008

Ernest Y. Scott
Union Pacific Resources
Bear Creek Uranium Co.
2515 Foothill Blvd.
Rock Springs, WY 82901

SUBJECT: NRC INSPECTION REPORT 040-08452/08-001

Dear Mr. Scott:

This refers to the inspection conducted on September 22, 2008, at the Bear Creek Uranium site in Converse County, Wyoming. The inspection was an examination of activities conducted under your possession-only license as they relate to safety and compliance with the Commission's rules and regulations and conditions of your license. Within these areas, the inspection consisted of observations of site status and discussions with Gary Chase, former Radiation Safety Officer. The inspection findings were discussed with Mr. Chase at the exit briefing conducted at the conclusion of the onsite inspection. The enclosed report presents the scope and results of the inspection. The inspection determined that you have conducted licensed activities at your former uranium mill site in a safe and effective manner and in compliance with regulatory and license requirements.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, if you choose to provide one, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC website at http://www.nrc.gov/reading-rm/adams.html. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

Should you have any questions concerning this inspection, please contact Linda M. Gersey, Health Physicist, at (817) 860-8299, or the undersigned at (817) 860-8197.

Sincerely,

/RA/

Jack E. Whitten, Chief
Nuclear Materials Safety Branch B

Docket No.: 040-08452
License No.: SUA-1310

Enclosure:
NRC Inspection Report

040-08452/08-001
cc w/enclosure:

Mr. LeRoy Feusner, Administrator
Solid and Hazardous Waste Division
Department of Environmental Quality
122 W. 25th Street, Herschler Bld.
Cheyenne, Wyoming 82002

Mr. Don McKenzie, Administrator
Land Quality Division
Department of Environmental Quality
122 W. 25th Street, Herschler Bld.
Cheyenne, Wyoming 82002

Wyoming Radiation Control Program Director

cc w/enclosure
ATHowell
CLCain
BillvonTill, FSME/DWMEP/DURLD
TMcLaughlin, FSME/DWMEP/EPPAD
RTadesse, FSME/DWMEP/EPPAD
JEWhitten
LMGersey
RJEvans
FEE Coordinator

SUNSI Review Completed: LMG ADAMS: ■ Yes □ No Initials: LMG
■ Publicly Available □ Non-Publicly Available □ Sensitive ■ Non-Sensitive
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ADAMS No.: final r:_dnms

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LMGersey	RJEvans	JEWhitten	
/RA RJT FOR/	***/RA RJT FOR/***	***/RA/***	
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U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket No.:	040-08452
License No.:	SUA-1310
Report No.:	040-08452/08-001
Licensee:	Bear Creek Uranium Co.
Facility:	Former Bear Creek Uranium Mill
Location:	Converse County, Wyoming
Date:	September 22, 2008
Inspector:	Linda M. Gersey, Health Physicist Nuclear Materials Safety Branch B
Approved by:	Jack E. Whitten, Chief Nuclear Materials Safety Branch B
Attachment:	Supplemental Inspection Information

ENCLOSURE

Executive Summary

Bear Creek Uranium Co.
NRC Inspection Report 040-08452/08-001

This inspection included a review of site status, management organization and controls, environmental protection, and a site tour. In summary, the licensee was in compliance with the regulations and their possession-only license requirements.

Management Organization and Controls

- Staffing levels were sufficient for the limited work required at the site (Section 1).

Effluent Control and Environmental Protection

- The licensee conducted groundwater monitoring and the annual land use surveys in accordance with license requirements (Section 2).

Report Details

Site Status and Tour

The Bear Creek Uranium Company (BCUC) Bear Creek site, in Converse County, Wyoming, is a former conventional mill that has been decommissioned and reclaimed by the licensee under 10 CFR Part 40, Appendix A. In March 2000, BCUC submitted the *Bear Creek Tailings Reclamation Construction Report* to document the completion of reclamation of the tailings disposal cell. NRC conducted a final inspection of the completed reclamation construction activities in July 2000. In May 2001, the licensee submitted the results of the gamma radiation survey of the reclaimed tailings impoundment. By letter dated July 3, 2001, the NRC concluded that the reclamation of the tailings disposal cell had been completed in accordance with NRC requirements and the conditions of BCUC's Source Materials License.

The inspector toured the site with the former radiation safety officer, because the licensee's single site employee, the mine operations advisor, was out of the country. The inspector observed the integrity of the tailings impoundment and the diversion ditches. The rock placement appeared to be stable and in good condition. The areas covered with topsoil and seeded with native species also appeared to be in good condition with few weeds. The fencing surrounding the restricted area was in good condition and appropriately posted. The inspector also viewed the permanent site land marker.

During the site tour, the inspector performed a gamma survey using a Ludlum Model 19 microRoentgen meter (calibration due date 2/14/2009, calibrated with Radium-226, NRC number 015540). The site background was 10 microRoentgens per hour. The highest measurement on top of the tailings pile was 20 microRoentgen per hour. These measurements agreed with the May 2001 licensee submission of the final gamma survey of the site.

At the time of the inspection, the licensee is still reviewing its legal mechanism for transferring the property deed to the U.S. Department of Energy.

1 Management Organization and Controls (88005)

1.1 Inspection Scope

Determine if the licensee had sufficient resources to perform the requirements of the license and applicable regulations.

1.2 Observations and Findings

The mining operations advisor is the only employee associated with the license and generates the annual land use surveys. The annual groundwater sampling is conducted by a contractor. The mining operations advisor has consultants available, including the former site radiation safety officer, to perform any needed duties.

1.3 Conclusions

Staffing levels were sufficient for the limited work required at the site.

2 Effluent Control and Environmental Protection

2.1 Inspection Scope

Review environmental and effluent monitoring programs to assess the effectiveness of the licensee to monitor the impacts of site activities on the local environment

2.2 Observations and Findings

License Condition 21 requires, in part, that an annual survey of land use within two kilometers of the restricted area boundary be submitted to the NRC, and any changes identified. Since 2001, the license has submitted the required land area surveys. The primary land uses include sheep and cattle grazing.

License Condition 47 contains the groundwater compliance monitoring program. There are eleven wells, including two point-of-compliance wells and one background well, which are required to be sampled annually. Since 2001, all wells have been sampled at the appropriate frequency and no point-of-compliance well has exceeded the groundwater protection standard. Sampling results have been submitted in a timely manner to the NRC.

2.3 Conclusions

The licensee conducted groundwater monitoring and the annual land use surveys in accordance with license requirements.

3 Exit Meeting Summary

The inspector presented the inspection results to the licensee's representative at the conclusion of the onsite inspection on September 22, 2008. The mining operations advisor will be notified of the inspection results at a later date when he becomes available. During the inspection, the licensee did not identify any information reviewed by the inspectors as propriety.

SUPPLEMENTAL INSPECTION INFORMATION

Partial List of Persons Contacted

Licensee Representative

Gary Chase	Former Radiation Safety Officer

Items Opened, Closed, and Discussed

Open

None

Closed

None

Discussed

None

Inspection Procedures Used

IP 88005	Management Organization and Controls
IP 88045	Effluent Control and Environmental Protection

List of Acronyms Used

BCUC	Bear Creak Uranium Company
IP	Inspection Procedure
NRC	Nuclear Regulatory Commission