

February 22, 2012

Mr. Thomas P. Young
Vice-President of Operations
Cameco Resources
2020 Carey Ave., Suite 600
Cheyenne, WY 82001

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR ALTERNATE
DECOMMISSIONING (GROUNDWATER RESTORATION) SCHEDULE, CROW
BUTTE RESOURCES, INC., CRAWFORD, NEBRASKA, SOURCE MATERIALS
LICENSE SUA-1534

Dear Mr. Young:

By a letter dated December 21, 2010, Crow Butte Resources, Inc. submitted a request for an alternate groundwater restoration schedule for the Crow Butte facility to the U.S. Nuclear Regulatory Commission (NRC) for mine unit 6. NRC staff has completed its technical review of the subject request for an alternate decommissioning (groundwater restoration) schedule. During the technical review, NRC staff identified certain areas of deficiency for which we are requesting additional information. The staff's request for additional information (RAI) is presented below for this mine unit.

- Staff is uncertain if the ground water remediation system upgrades are anticipated to result in indicated restoration efficiency for mine unit (MU) 6. Staff noted that the time period of completed ground water restoration for MU-1 and MU-2 was longer than the proposed period of restoration for MU-6. Please provide further justification for proposed MU-6 restoration time period using actual MU ground water restoration time(s) observed for completed restoration.
- Based on staff observations at the July 2011 Crow Butte facility inspection, the current total restoration flow at the Crow Butte is 1,150 gallons per minute (gpm). Staff notes that the subject alternate decommissioning schedule request indicates that the proposed Reverse Osmosis (RO) treatment flow rate for MU-6 is 400 gpm. Considering this RO treatment flow rate is 35 percent of the total restoration flow, staff is uncertain whether total restoration flow from MU-2 through MU-6 at any given time in the future will be within the total flow capacity of the restoration system. Please demonstrate that the total restoration capacity will be sufficient to handle flows from MU-2 to MU-6 at any given time. To facilitate staff's independent review, please provide the current schedule of restoration phases and associated flow rates of restoration phase for MU-2 to MU-5.

Please either respond to the RAIs, or provide a schedule for submitting the RAIs, within 30 days of receipt of this letter.

T. Young

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In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Sincerely,

/RA/

Ronald A. Burrows, 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

Docket No.: 40-8943
License No.: SUA-1534

cc:
Larry Teahon, Cameco Resources
Crow Butte Operation
Michael Linder, NDEQ

T. Young

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Sincerely,

Ronald A. Burrows, Project Manager
Uranium Recovery Licensing Branch
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