



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

September 29, 1999

Mr. Michael L. Griffin
Manager of Environmental and Regulatory Affairs
Crow Butte Resources, Inc.
86 Crow Butte Road
P.O. Box 169
Crawford, NE 69339-0169

SUBJECT: REVIEW OF 60 DAY EXCURSION REPORT FOR MONITOR WELL CM6-6
SOURCE MATERIAL LICENSE SUA-1534 (DOCKET NUMBER 40-8943) CROW
BUTTE URANIUM PROJECT, NEBRASKA

Dear Mr. Griffin:

The U.S. Nuclear Regulatory Commission (NRC) staff has completed its review of the July 7, 1999, letter from Crow Butte Resources, Inc. The NRC staff has determined that Crow Butte Resources, Inc., is conducting an aggressive effort to correct the well CM6-6 excursion. The staff also concludes that the injection of lixiviant has been terminated in enough wells to encourage correction of the excursion in a timely manner.

This letter and its enclosure were submitted in compliance with License Condition 12.2. This license condition requires the licensee to submit a written report *"to NRC within 60 days of excursion confirmation. The report shall describe the excursion event, corrective actions taken, and results obtained. If the well(s) are still on excursion when the report is submitted, the report also must contain a schedule for the submittal of future reports to NRC which will provide an update of corrective actions taken and the results obtained. In addition, if the well(s) are still on excursion at the time the 60-day report is submitted, the licensee shall terminate injection of lixiviant into the well field on excursion until such time that aquifer cleanup is complete."*

Well CM6-6 is a lateral monitor well completed in the ore zone in Mine Unit 6 that on July 2, 1999, went on excursion status. The multiple upper control limit was exceeded for all the upper control limit parameters (carbonate, chloride, conductivity, sodium, and sulfate). For sulfate, the single upper control limit was also exceeded. To correct the excursion, Crow Butte Resources, Inc., has over pumped production wells adjacent to well CM6-6 by 202 gallons-per-minute. Crow Butte Resources Inc., has also ceased injection of lixiviant in 12 injection wells adjacent to the monitor well. These corrective action activities have caused water levels at monitor well CM6-6 to decline by 29 feet, indicating that ground water is flowing from well CM6-6 back towards the well field. Sulfate concentrations at well CM6-6 have fallen below the single upper control limit concentration and have almost reached the multiple upper control limit concentration. Alkalinity and chloride concentrations have fallen below the multiple upper control limit concentration, while sodium and conductivity have almost reached the multiple upper control limit concentration.

Based on the falling upper control limit parameter concentrations, Crow Butte Resources, Inc., believes that corrective actions will be successful in removing well CM6-6 from excursion status in the near future. However, should corrective activities take longer than expected, Crow Butte Resources, Inc., will provide reports to the NRC on the corrective action activities every 90 days until well CM6-6 is off excursion status. Based upon this schedule, the next report would be due to the NRC on November 28, 1999. In addition, when the excursion is terminated, Crow Butte Resources, Inc. will provide NRC with a final report that will discuss the results achieved.

The NRC staff concludes that Crow Butte Resources, Inc., is in compliance with the reporting requirements of License Condition 12.2. The staff further concludes that Crow Butte Resources, Inc., is taking effective measures to return upper control limit parameters in well CM6-6 to their pre-excursion concentration. Therefore, the staff does not see the need to require the termination of lixiviant injection in additional wells in Mine Unit 6. The staff also agrees that a 90-day reporting period is adequate for the NRC staff to monitor the effectiveness of excursion correction activities for well CM6-6.

If the excursion has not been corrected by the time another excursion report is due, at that time the NRC will reevaluate the effectiveness of excursion correction activities and the need to further terminate lixiviant injection. When Crow Butte Resources, Inc., reports that the Well CM6-6 is no longer on excursion, NRC staff will review that conclusion when Crow Butte Resources, Inc., submits the final report on the Well CM6-6 excursion.

If you have any questions concerning this letter, please contact the NRC Project Manager, Mr. William Ford, at (301) 415-6630.

Sincerely,

[Signed by]
John Surmeier, Chief
Uranium Recovery and
Low-Level Waste Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Docket No. 40-8934
License No. SUA-1534

~~Enclosure: As stated~~

cc: H. Borchert, RCPD, NE
NDEQ
PDR, NE
Dave Meisback, NDEQ

Case Closed: L L51860

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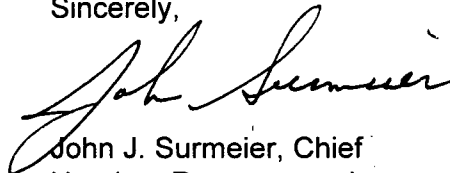
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