October 22, 2008

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	Docket No. 40-8943
CROW BUTTE RESOURCES, INC.	)	
	)	ASLBP No. 08-867-02-OLA-BD01
(License Renewal for the In Situ Leach Facility,	)	
Crawford, Nebraska)	)	

NRC STAFF'S (1) RESPONSES TO THE BOARD'S "FOLLOW UP" QUESTIONS DURING THE SEPTEMBER 30-OCTOBER 1, 2008 ORAL ARGUMENT AND (2) STATEMENT OF CLARIFICATION RELATING TO THE SCOPE OF NRC'S JURISDICTION TO REGULATE THE RELEASE OF NON-RADIOLOGICAL CONTAMINANTS

INTRODUCTION

On September 30 and October 1, 2008, the Board heard oral argument ("Oral Argument") in Chadron, Nebraska on issues relating to the Petitioners'[1] standing in this proceeding and the admissibility of their contentions relating to Crow Butte Resources, Inc.'s (the "Applicant") license renewal application for the continued operation of its in-situ leach uranium extraction facility in Crawford, Nebraska. During the Oral Argument, the Board posed several questions for the Staff to follow up on after the adjournment of the Oral Argument. The Staff provides the following information in response to those questions. In addition, the Staff takes the opportunity to clarify its position relating to the scope of NRC's jurisdiction to regulate the release of non-radiological contaminants.

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[1] Petitioners are (1) the Consolidated Petitioners (comprised of Beatrice Long Visitor Holy Dance, Joe American Horse, Sr., Debra White Plume, Loretta Afraid of Bear Cook, Thomas Kanatakeniate Cook, Dayton O. Hyde, Bruce McIntosh, Afraid of Bear/Cook Tiwahe, American Horse Tiospaye, Owe Aku/Bring Back the Way, and Western Nebraska Resources Council), (2) the Oglala Delegation of the Great Sioux Nation Treaty Council and (3) the Oglala Sioux Tribe.

DISCUSSION

I. The Board's Questions[2]

A. In its National Environmental Policy Act ("NEPA") review, does the Staff verify that the Applicant has established procedures or processes to meet the Nebraska Department of Environmental Quality ("NDEQ") requirements?[3]

The Staff reviews the Applicant's violations of NDEQ requirements, if any, and considers the environmental impacts of those violations as part of its NEPA review. Moreover, pursuant to its standard review plan, the Staff determines whether "the applicant has satisfied all license, permit, and other approvals of construction and operations that are required by federal, state, local, and regional authorities with jurisdiction for the protection of the environment."[4] The Staff does not, however, verify that the Applicant has established procedures or processes to comply with NDEQ requirements.

Separately, the Staff performs a compliance review but such review is part of its safety evaluation and not its NEPA review. Such compliance review is limited to verification of the Applicant's compliance with NRC regulations and not any other agency's regulations or requirements.

B. Did the NRC issue a notice of opportunity for hearing regarding the Applicant's initial NRC license application?[5]

The Staff did not find any documents indicating that a notice of opportunity for a hearing relating to the Applicant's initial NRC license application was issued. However, the Staff did obtain documents relating to two public hearings that were held on August 23, 1988 and May

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[2] Counsel for the Staff paraphrased the Board's questions based on the transcripts.

[3] *See* Oral Argument, Tr. at 327 (Oct. 1, 2008).

[4] *See* NUREG-1569, *Standard Review Plan for In Situ Leach Uranium Extraction License Applications: Final Report,* at 10-1 (June 2003).

[5] *See* Oral Argument, Tr. at 384 (Oct. 1, 2008).

11, 1989, in connection with the operation of the Crow Butte Resources, Inc. facility in Crawford, Nebraska. On August 23, 1988, a public hearing was held before the U.S. Environmental Protection Agency ("EPA") relating to the Applicant's predecessor's application to the EPA for an aquifer exemption permit.[6] Separately, the Nebraska Department of Environmental Control ("NDEC") issued a notice of permit issuance and hearing on March 13, 1989.[7] NDEC held that public hearing on May 11, 1989 relating to the Applicant's predecessor's application for issuance of an Underground Injection Control permit.[8] The Staff notes that in addition to other members of the public, representatives of the Western Nebraska Resource Council ("WNRC") were present, and participated in both public hearings.[9] A NRC representative attended the May 11, 1989 public hearing.[10]

In its September 18, 2008 Order, the Board listed 12 items it expected the parties to address during the Oral Argument. In item 12, the Board directed the Staff to "identify the notice(s), if any, by which the public was afforded the opportunity to participate in previous licensing actions at Crow Butte's existing ISL mining facility."[11] The Staff supplements the information it provided to the Board during the Oral Argument with the information in the following table.

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[6] Letter from Stephen P. Collings, Vice President, Ferret Exploration Company of Nebraska, to Gary Konowinski, U.S. NRC (Aug. 31, 1988) (Attached hereto as Attachment A).

[7] Letter from Stephen P. Collings, Vice President, Ferret Exploration Company of Nebraska, Inc. to Gary Konwinski, U.S. NRC (March 27, 1988) (Attached hereto as Attachment D).

[8] Memorandum from Noel S. DeKalb, Hearing Officer, to Dennis Grams (Apr. 20, 1990). (Attached hereto as Attachment B).

[9] *Id*.

[10] *See* Letter from Edward F. Hawkins, Branch Chief, U.S. NRC to Steve Collings, Ferret Exploration Company of Nebraska, Inc. (May 16, 1989) (Attached hereto as Attachment C).

[11] Notice and Order (Regarding Oral Argument) (Sept. 18, 2008).

Document Date	Action	Federal Register Notice (Date)	Summary
11/17/1988	Notice of draft finding of no significant action	53 FR 48596 (12/1/1988)	To issue a commercial source and byproduct material license to allow in situ leach uranium recovery.
12/11/1989	Notice of final finding of no significant action	54 FR 53200 (12/27/1989)	To issue a commercial source and byproduct material license to allow in situ leach uranium recovery.
5/16/1990	Notice of final finding of no significant impact	55 FR 22869 (6/4/1990)	To terminate the source and byproduct material license authorizing FEC to operate the Crow Butte uranium in-situ leach research and development facility.
3/4/1993	Final finding of no significant impact	58 FR 13651 (3/12/1993)	To issue a license amendment authorizing increased maximum flow rates from 2500 gallons per minute to 3500 gallons per minute.
2/21/1996	Final Finding of No Significant Impact Notice of Opportunity for Hearing	61 FR 7541 (2/28/1996)	To amend NRC Source Material License SUA-1534 to allow CBR to increase the maximum processing flow rate at its in-situ leach uranium mining facility in Dawes County, Nebraska from 3500 gallons per minute to 5000 gallons per minute.
6/25/1996	Final Finding of No Significant Impact Notice of Opportunity for Hearing	61 FR 34451 (7/2/1996)	To amend NRC Source Material License SUA-1534 to allow CBR to increase the maximum concentrations of radium, uranium, and sulfate in process waste fluids to be disposed by deep well injection at its in-situ leach uranium mining facility in Dawes, County, Nebraska.

Document Date	Action	Federal Register Notice (Date)	Summary
5/23/1997	Final Finding of No Significant Impact Notice of Opportunity for Hearing	62 FR 30355 (6/3/1997)	To amend NRC Source Material License SUA-1534 to allow CBR to process the approved maximum production flow rate of 5000 gallons per minute using existing up flow ion exchange (IX) columns, rather than the previously-approved combination of up flow and pressurized down flow IX columns, at its in-situ leach uranium mining facility in Dawes County, Nebraska.
2/13/1998	Final Finding of No Significant Impact Notice of Opportunity for Hearing	63 FR 9023 (2/23/1998)	To renew NRC Source material License SUA-1534 to authorize CBR for continued commercial operation of its in-situ leach (ISL) uranium mine and processing faculty, located in Dawes County, Nebraska.

C. Was a Section 106 Consultation performed relating to the initial license application in 1987?[12]

The Staff did not perform a cultural consultation with Indian tribes relating to the Applicant's initial license application in 1987. Prior to 1992, a Federal agency such as the NRC was not mandated to consult with any Indian tribe under the National Historic Preservation Act ("NHPA").[13] In 1992, NHPA was amended, changing the manner by which a consultation pursuant to section 106 of NHPA ("Section 106 Consultation")[14] was to be performed.[15] Among

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[12] *See* Oral Argument, Tr. at 416 (Oct. 1, 2008).

[13] *See* 16 U.S.C.A § 470a (1990).

[14] 16 U.S.C.A. § 470a (2008).

[15] 16 U.S.C.A. § 470a(d)(6)(B); s*ee also* 65 Fed. Reg. 77698.

other changes, it required that "[in] carrying out its responsibilities under section 106, a Federal agency shall consult with any Indian tribe . . . that attaches religious and cultural significance to properties" of traditional religious and cultural importance to an Indian tribe.[16]

D. Was a Section 106 Consultation performed relating to the Applicant's 1995 license renewal application?[17]

In December 1995, the Applicant submitted its "Application for Renewal of USNRC Radioactive Source Materials License SUA-1534" to the NRC.[18] According to a letter dated, December 31, 1997, the Staff performed its Section 106 Consultation requirements by consulting with the Nebraska State Historical Preservation Officer.[19] On March 4, 1998, the NRC issued a Materials License No. SUA-1534, including condition 9.9, in part, requiring that the Applicant "[b]efore engaging in any construction activity not previously assessed by NRC, the licensee [the Applicant] shall complete a cultural resource inventory."[20] Accordingly, CBR retained Resource Technologies Group, Inc. ("RTG") in order to satisfy that condition. On April 2, 1998, RTG issued a report, titled "Survey of Traditional Cultural Properties Crow Butte Project, Dawes County, Nebraska," which, in part, summarized RTG's mostly unsuccessful efforts in contacting various Native American organizations.[21] On May 4, 1998, the Nebraska

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[16] *Id.*

[17] *See* Oral Argument, Tr. at 416 (Oct. 1, 2008).

[18] *See* ADAMS No. ML082140217.

[19] *See* Letter from Joseph J. Holonich, Chief Uranium Recovery Branch, U.S.NRC to Lawrence J. Sommer, Director, Nebraska State Historical Society (Dec. 31, 1997) (Attached hereto as Attachment E). As a result of that consultation, the Staff, in part, proposed, with respect to future actions, to "include in the renewal license . . . a condition requiring CBR [the Applicant] to conduct a cultural inventory prior to engaging in any developmental activity not previously assessed by NRC." *Id.* at 2.

[20] *See* ADAMS No. ML081080333.

[21] Letter from Bartley W. Conroy, Vice President, Resource Technologies Group, Inc. to L. Robert Puschendorf, Deputy Nebraska State Historic Preservation Officer, Nebraska State Historical (Continued. . .)

State Historical Society provided the RTG report to the NRC.[22] And on June 26, 1998, the Staff expressed its understanding that "CBR ha[d] conducted a good faith effort in attempting to identify TCPs and that no such properties were identified as a result of CBR's efforts."[23]

The Staff was unable to find any documentation reflecting a direct NRC contact with any Indian tribe.

E. Where can a member of the public obtain the Periodic Monitoring Data Reports submitted to the NRC by the Applicant?[24]

Generally speaking, the Applicant generates four types of sampling data. The first type of sampling data is pre-operational sampling data, which the Applicant included in its 1987 license application. The Applicant's initial license application may be found in the NRC's Agencywide Documents Access and Management System ("ADAMS").[25] The second type of sampling data is baseline sampling data which was required to be submitted to the NRC until 1998 after which the NRC added the performance based license conditions, no longer requiring such reporting. The pre-1998 baseline monitoring data may be found in the NRC's Public

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(. . . Continued)

Society (April 3, 1998) with attachment (Attached hereto as Attachment F); s*ee also* Letter from Stephen P. Collings, President, Crow Butte Resources, Inc. to Joseph J. Holonich, Chief Uranium Recovery Branch, Division of Waste Management, U.S. NRC with attachment (Jan. 15, 1998) (Attached hereto as Attachment I).

[22] Letter from L. Robert Puschendorf, Deputy State Historic Preservation Officer, Nebraska State Historical Society to Joseph J. Holonich, Chief Uranium Recovery Branch, U.S. NRC (May 4, 1998) (Attached hereto as Attachment G).

[23] Letter from Joseph J. Holonich, Chief Uranium Recovery Branch, U.S. NRC to L. Robert Puschendorf, Deputy State Historic Preservation Officer, Nebraska State Historical Society (June 26, 1998) (Attached hereto as Attachment H).

[24] *See* Oral Argument, Tr. at 222-224 (Sept. 30, 2008).

[25] The accession numbers for the sections of the application are as follow: ML080940306, ML080940308, ML080940309, ML080940310, ML080940346, ML080940347, ML080940367, ML080940368, ML080940369, ML080940370, ML080940371, ML080940372 and ML080940373.

Document Room ("PDR") (the abstracts of which may be found in legacy documents section of ADAMS). The third type of sampling data is excursion monitoring data which is performed on a biweekly basis. Such sampling data is not submitted to the NRC; however, this data is available to the NRC during inspections.[26] The fourth type of sampling data is offsite data which is included in the Applicant's Semiannual Radiological Effluent & Environmental Monitoring Reports which may be found in ADAMS and the PDR.[27]

II. Staff's statement of clarification regarding the scope of its authority relating to the regulation of non-radiological contaminants

During the Oral Argument, while acknowledging the NRC's consideration of non-radiological health effects of effluents as part of its standard review plan for in-situ leach uranium extraction license applications,[28] Counsel for the Staff stated that ". . . the NRC staff does not have the jurisdiction to regulate the release of non-radiological contaminants."[29] Counsel for the Staff herein clarifies that the Uranium Mill Tailings Radiation Control Act of 1978 (the "UMTRCA") which amended the Atomic Energy Act of 1954 (the "AEA"), *inter alia*, tasked the NRC with ensuring that the management of certain byproduct material would be carried out in a manner to protect public health and safety.[30] It authorized the NRC as the agency "deems appropriate to protect the public health and safety and the environment from radiological and

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[26] To the extent an excursion occurs, the Applicant is required to notify the NRC in writing. Such reports are found in ADAMS.

[27] The Staff did not confirm that each and every report is in ADAMS but did a sample check to confirm that the type of documents cited above may be found in ADAMS or the PDR (as the case may be).

[28] *See* NUREG-1569, *Standard Review Plan for In Situ Leach Uranium Extraction License Applications: Final Report,* at 7-17 (June 2003).

[29] *Id*. at 73.

[30] 42 U.S.C.A § 2114(a)(1) (2008).

non-radiological hazards [*emphasis added*]" associated with such material.[31] Therefore, the NRC has the authority to regulate the non-radiological hazards associated with byproduct material as reflected, *inter alia*, in 10 C.F.R. § 40, Appendix A, Criterion 13.

Signed (electronically) by
Shahram Ghasemian
Counsel for NRC Staff
U.S. Nuclear Regulatory Commission
Office of the General Counsel
Mail Stop: O-15 D21
Washington, D.C. 20555-0001
(301) 415-3591
Shahram.Ghasemian@nrc.gov

[31] *Id.*