

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Michael M. Gibson, Chairman
Dr. Richard F. Cole
Brian K. Hajek

In the Matter of

CROW BUTTE RESOURCES, INC.

(License Renewal for the In Situ Leach Facility,
Crawford, Nebraska)

Docket No. 40-8943

ASLBP No. 08-867-02-OLA-BD01

December 10, 2008

ORDER

(Ruling on Motion to Admit New Contention)

On November 21, 2008, this Board issued an Order granting standing to Consolidated Petitioners¹ and the Oglala Sioux Tribe. The Board also admitted nine contentions asserted against Crow Butte Resources, Inc. (Crow Butte), which seeks to renew its license for an in-situ leach uranium mine in Crawford, Nebraska.²

Before the Board issued its Order, Consolidated Petitioners moved for leave to file a new contention regarding public health and safety concerns related to arsenic in Consolidated Petitioners' drinking water.³ The Consolidated Petitioners allege that the arsenic is present because of Crow Butte Resources, Inc.'s (Crow Butte) mining activities in the Brule Chadron

¹ The admitted Consolidated Petitioners consist of Beatrice Long Visitor Holy Dance, Debra White Plume, Thomas Kanatakeniate Cook, Loretta Afraid of Bear Cook, Afraid of Bear/Cook Tiwahe, Joe American Horse, Sr., American Horse Tiospaye, Owe Aku/Bring Back the Way and the Western Nebraska Resources Council. Standing was not granted to two of the Consolidated Petitioners (Dayton O. Hyde and Bruce McIntosh). See Crow Butte Resources, Inc. (License Renewal for the In-Situ Leach Facility, Crawford, Nebraska), LBP-08-24, 68 NRC - -, -- (slip op. at 82) (Nov. 21, 2008).

² See id.

³ See Petition for Leave to File a New Contention Re: Arsenic (Sept. 22, 2008) [hereinafter Pet. New Cont.].

aquifer.⁴ On October 3, 2008, the Oglala Delegation of the Great Sioux Nation Treaty Council moved to join with Consolidated Petitioners in their motion for leave to file this new contention regarding arsenic.⁵

In their motion, Consolidated Petitioners allege a connection between low levels of arsenic in drinking water and a high incidence of diabetes in Chadron, Nebraska and on the Pine Ridge Indian Reservation.⁶ To support this allegation, Consolidated Petitioners refer to an August 2008 study conducted by the Johns Hopkins Bloomberg School of Public Health establishing a link between low levels of arsenic in drinking water and a high incidence of type-2 diabetes in persons consuming the affected water.⁷ Though a link between arsenic contamination and diabetes has been considered likely for some time,⁸ the Johns Hopkins study focuses on low to moderate levels of arsenic contamination, the effects of which had not previously been studied.⁹ Consolidated Petitioners further allege that there is a correlation between diabetes and pancreatic cancer,¹⁰ and provide evidence that cancer cases in Chadron appear to be above the national average.¹¹ Consolidated Petitioners then aver that the Johns Hopkins study and specific cases of pancreatic cancer in persons living near Consolidated

⁴ See Pet New Cont. at 3-4.

⁵ See Petitioner Oglala Delegation of the Great Sioux Nation Treaty Council's Motion to Join Consolidated Petitioners [sic] Petition For Leave to File New Contention Re: Arsenic (Oct. 3, 2008). Crow Butte and NRC Staff have opposed this motion. See Crow Butte Resources, Inc's Response to Oglala Delegation's Motion to Join Late-Filed Contention (Oct. 14, 2008); NRC Staff's Response in Opposition to Petition for Leave to File New Contention Re: Arsenic (Oct. 14, 2008). A decision on the Treaty Council's Motion to Join will be deferred until a later date.

⁶ See Pet. New Cont. at 3-4.

⁷ See *id.* at 1 (citing Ana Navas-Acien, et al., Arsenic Exposure and Prevalence of Type 2 Diabetes in U.S. Adults, 300 J. Am. Med. Ass'n, 814 (2008) [hereinafter Johns Hopkins study]).

⁸ Mei-Shwu Lai, et al., Ingested Inorganic Arsenic and Prevalence of Diabetes Mellitus, 139 Am. J. Epidemiology, 484 (1994).

⁹ Ana Navas-Acien, et al., Abstract, Arsenic Exposure and Prevalence of Type 2 Diabetes in U.S. Adults, 300 J. Am. Med. Ass'n, 814 (2008).

¹⁰ See Affidavit of David C. Frankel (Sept. 22, 2008) at 2 [hereinafter Frankel Aff.] (citing Suresh T. Chari, et al., Probability of Pancreatic Cancer Following Diabetes: A Population-Based Study, 129 J. Inst. Am. Gastroenterological Ass'n, 504 (2005); Pancreatic Cancer UK: Pancreatic Cancer Symptoms and Signs, <http://www.pancreaticcancer.org.uk/PCSymptoms.htm>).

¹¹ See Pet. New Cont. at 4. See also Frankel Aff. at 1-2 (Sept. 22, 2008) (citing Surveillance Epidemiology and End Results Fact Sheet, <http://seer.cancer.gov/statfacts/html/pancreas.html>).

Petitioners provide new information, not available to them at the time they filed their petition, that materially alters their understanding of the impact of arsenic contamination on the public health and safety.¹²

In its response to Consolidated Petitioners' motion, Crow Butte maintains that Consolidated Petitioners' new contention does not meet the requirements for "late-filed" contentions under 10 C.F.R. § 2.309(c)(i)-(viii).¹³ Furthermore, Crow Butte challenges Consolidated Petitioners' assertion that its operations are detrimental to public health and safety by insisting that Consolidated Petitioners cannot establish a causal connection between mining activities and arsenic contamination or between arsenic contamination and pancreatic cancer or diabetes.¹⁴

In its response to Consolidated Petitioners' motion, the NRC Staff claims that Consolidated Petitioners' new contention falls "within the purview of contentions already proffered in this proceeding" because arsenic was mentioned in Consolidated Petitioners' initial pleading.¹⁵ Moreover, the NRC Staff asserts that Consolidated Petitioners do not rely on new information that is materially different from information available to them when their initial pleadings were filed, and so the submission of the new contention cannot be considered "timely."¹⁶ Finally, the NRC Staff posits that Consolidated Petitioners' new contention does not meet the general admissibility requirements of 10 C.F.R. § 2.309(f)(1)(i)-(vi).¹⁷

¹² See id. at 3-4.

¹³ See Crow Butte Resources, Inc.'s Response to Consolidated Petitioners' Late-Filed Contention (Oct. 14, 2008) at 3-4.

¹⁴ See App. Resp. at 6-7.

¹⁵ Staff Resp. at 3. See also Pet. New Cont. at 2 (citing Consolidated Request for Hearing and Petition for Leave to Intervene (July 28, 2008) at 16-17 [hereinafter Cons. Pet]).

¹⁶ See Staff Resp. at 10.

¹⁷ See id. at 12-14.

We first note the basic rule governing contentions (10 C.F.R. § 2.309(f)), which indicates that contentions “must be based on documents or other information available at the time the petition is to be filed....”¹⁸ To that end, new or amended contentions can be filed with leave of the Board if (i) the information upon which the amended or new contention is based was not previously available; (ii) the information upon which the amended or new contention is based is materially different from information previously available; and (iii) the amended or new contention has been submitted in a timely fashion based on the availability of the subsequent information.¹⁹ Non-timely contentions may be accepted under § 2.309(c)(1) only upon a showing of “good cause” for failure to file in a timely manner and a weighing of a number of factors.²⁰ Previous Boards have concluded that, when new contentions are based on “breaking developments of information, they are to be treated as ‘new or amended,’ not as ‘non-timely.’”²¹ This Board adopts that reasoning here.

¹⁸ 10 C.F.R. § 2.309(f)(2).

¹⁹ 10 C.F.R. § 2.309(f)(2)(i)-(iii).

²⁰ These factors are: the nature of the petitioner’s right to be a party to the proceeding; the nature and extent of the petitioner’s property, financial, or other interest in the proceeding; the possible effect of any order that may be entered in the proceeding on the petitioner’s interest; the availability of other means whereby the petitioner’s interest will be protected; the extent to which the petitioner’s interests will be represented by existing parties; the extent to which the petitioner’s participation will broaden the issues or delay the proceeding; and the extent to which the petitioner’s participation may reasonably be expected to assist in developing a sound record. 10 C.F.R. § 2.309(c)(1)(ii)-(viii).

²¹ Shaw Areva Mox Services (Mixed Oxide Fuel Fabrication Facility), LBP-07-14, 66 N.R.C. 169 (Oct. 31, 2007). See also AmerGen Energy Co. (Oyster Creek Nuclear Generating Station), LBP-06-11, 63 NRC 391, 395-96 & n.3 (2006); and Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), LBP-05-32, 62 NRC 813, 821 & n.21 (2005).

We are satisfied that Consolidated Petitioners' new contention meets the requirements of 10 C.F.R. § 2.309(f)(2). Contrary to Crow Butte's position, the Board finds that the contention need not meet the stricter requirements required of untimely contentions under Section 2.309(c)(i)-(viii) because it is based on information heretofore unknown to Consolidated Petitioners. Though arsenic was referenced in Consolidated Petitioners' initial pleading,²² they filed their initial pleading on July 28, 2008, one month before the Johns Hopkins study was available to the public. The information in the Johns Hopkins study is therefore both new to Consolidated Petitioners and, because the study focuses on the effects of low level arsenic contamination, is materially different from information previously available to them.²³ Furthermore, the Johns Hopkins study was published on August 20, 2008 and the new contention was filed one month later on September 22, 2008. The Board is therefore satisfied that "[t]he amended or new contention has been submitted in a timely fashion based on the availability of the subsequent information."²⁴

²² See Cons. Pet. at 14.

²³ 10 C.F.R. § 2.309(f)(2).

²⁴ 10 C.F.R. § 2.309(f)(2)(iii).

In addition to meeting the requirements in 10 C.F.R. § 2.309(f)(2), a newly filed contention must meet the six basic contention admissibility standards set forth in 10 C.F.R. § 2.309(f)(1)(i)-(vi) as well.²⁵ In the Board's view, that obligation has been met here. To begin with, we are satisfied that Consolidated Petitioners raised a specific issue of law or fact to be controverted and provided an explanation of the basis for the contention.²⁶ Furthermore, the Board agrees that Consolidated Petitioners' proposed contention is clearly within the scope of the present proceeding and material to the findings the NRC must make because allegations that mining activities may cause harm to public health and safety are related to the reissuance of Crow Butte's license.²⁷ Additionally, the Board finds that Consolidated Petitioners have provided facts that support their contention in accordance with 10 C.F.R. § 2.309(f)(1)(v). Section 2.309(f)(1)(v)'s requirement of factual support "is not intended to prevent intervention when material and concrete issues exist."²⁸ Consolidated Petitioners rely on information in the License Renewal Application and their own pleadings, on the Johns Hopkins study showing a link between low levels of arsenic in drinking water and type 2 diabetes, and on affidavits supporting a high incidence of pancreatic disease and diabetes near the mine and on the Reservation. These facts adequately meet the requirements of section 2.309(f).

Still further, Consolidated Petitioners raise a genuine dispute with the License Renewal Application in accordance with 10 C.F.R. § 2.309(f)(1)(vi). They contend that both the AEA and the NRC's implementing regulations require Crow Butte to operate its mining activities so as to avoid contamination that would harm the public health and safety.²⁹ Consolidated Petitioners are framing the environmental impact from arsenic transport in groundwater as a safety

²⁵ See Entergy Nuclear Vermont Yankee, LLC & Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), LBP-06-14, 63 NRC 568, 575 (May 25, 2006).

²⁶ 10 C.F.R. § 2.309(f)(1)(i)-(ii).

²⁷ 10 C.F.R. § 2.309(f)(1)(iii)-(iv).

²⁸ Fansteel, Inc. (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003). See also Duke Energy Corp. Inc. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 342 (1999) (Expert support is not required for admission of a contention; a fact-based argument may be sufficient on its own.).

²⁹ See Pet. New Cont. at 7.

contention by claiming that Crow Butte's ISL mine is causing harm to the public. Thus, if Consolidated Petitioners are correct that Crow Butte's mining activities cause releases of arsenic that harm the public health and safety, both the AEA and the NRC's implementing regulations would prohibit the NRC from renewing Crow Butte's license.

The Board also finds that Consolidated Petitioners have provided sufficient information to show that a genuine dispute exists with Crow Butte on a material issue of fact as required by 10 C.F.R. § 2.309(f)(vi). Consolidated Petitioners have provided more than "bare assertions and speculation."³⁰ They support this contention by referencing the License Renewal Application where it states that the ISL uranium mining process increases the arsenic levels in the aquifer, and they incorporate by reference their original petition, which claims that there are intervening faults and fractures that enable the higher concentrations of arsenic to migrate from the mined aquifer to the Reservation.³¹ We find this information adequate to establish a genuine dispute on a material issue.

Consolidated Petitioners' proposed contention will be admitted as Consolidated Petitioners' Safety Contention A³² as follows:

The oxidation of uranium due to Crow Butte's mining operations releases low-levels of arsenic that contaminates drinking water. This contamination threatens the health and safety of the public in that it contributes to an increase in diabetes and pancreatic cancer. The AEA and NRC regulations require Crow Butte's operations to be conducted without harm to the public health and safety.

³⁰ Fansteel 58 NRC at 203.

³¹ See Pet. New Cont. at 7. See also Application for 2007 License Renewal USNRC Source Materials License SUA-1534 Crow Butte License Area, Section 2.9.6 (Nov. 2007).

³² Because the Petitioners are basing this contention on requirements under the AEA, it is not an environmental contention that may be resolved through NEPA, but is instead a safety contention claiming Crow Butte's ISL mine is causing harm to the public.

For the foregoing reasons, Consolidated Petitioners' new contention regarding arsenic is admitted.³³

It is so ORDERED.

THE ATOMIC SAFETY
AND LICENSING BOARD³⁴

/RA/

Michael M. Gibson, Chairman
ADMINISTRATIVE JUDGE

/RA/

Dr. Richard F. Cole
ADMINISTRATIVE JUDGE

/RA/

Brian K. Hajek
ADMINISTRATIVE JUDGE

Rockville, Maryland
December 10, 2008

³³ In some respects, the Oglala Sioux Tribe's Environmental Contention A (which has previously been admitted herein pursuant to our November 21, 2008 Order at 29) implicates many of the same concerns that are raised in Consolidated Petitioners' new contention. As discussed above, however, as pleaded, this is a safety contention and not an environmental contention. Oglala Sioux Tribe's Environmental Contention A states: "There is no evidence based science for [Crow Butte's] conclusion that ISL mining has 'no non-radiological health impacts' (see Table 8.6-1 of application), or that non radiological impacts for possible excursions or spills are 'small' (see 7.12.1 of application)." Request for Hearing and/or Petition to Intervene, Oglala Sioux Tribe (July 28, 2008) at 6. As we noted during the September 30-October 1, 2008 Oral Argument, the Board may combine for hearing some of the admitted contentions, and in some ways these two contentions appear to be good candidates for a combined evidentiary presentation. See Tr. at 211. However, because one is an "environmental" contention and the other a "safety" contention, they will not be consolidated.

³⁴ Copies of this memorandum and order were sent this date by the agency's E-Filing system to the counsel/representatives for (1) applicant Crow Butte Resources, Inc.; (2) Consolidated Petitioners; (3) NRC Staff; (4) Oglala Delegation of the Great Sioux Nation Treaty Council; and (5) Oglala Sioux Tribe.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing LB ORDER (RULING ON MOTION TO ADMIT NEW CONTENTION) (LBP-08-27) have been served upon the following persons by Electronic Information Exchange.

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[Original signed by Nancy Greathead]

Office of the Secretary of the Commission

Dated at Rockville, Maryland
this 10th day of December 2008