Opposition to Uranium Development in Northwestern Nebraska

ince 1991, uranium mining has been underway in the Crow Butte area of northwestern Nebraska, south of the Oglala Sioux (Lakota) Reservation in South Dakota. The Crow Butte after which the mine is named is a prominent formation along the Pine Ridge that dominates the regional landscape. Crow Butte is a culturally significant landmark and a pilgrimage site. Historically, Crow Butte marks the location of an 1875 U.S. government-sponsored treaty council that unsuccessfully attempted to buy the Black Hills from the Sioux, which had been designated as its territory in the Ft. Laramie Treaty of 1868.

The *in situ* uranium mine is operated by Cameco Resources (also called Crow Butte Resources), part of the largest uranium mining firm in the world, Canada's Cameco, Inc. In 2007, the company filed applications to expand the mining operations to more than 2,000 acres of land, where it hopes to produce 500,000 to 600,000 pounds of uranium yellowcake (U3O8) for 11 years, and to renew the existing operating license. The existing uranium operation produced about 700,000 pounds of U3O8 in 2007 and is located in agricultural fields and grazing pastures crisscrossed by local roads in the rolling hills west of Chadron just south of the White River at Crawford, Nebraska.

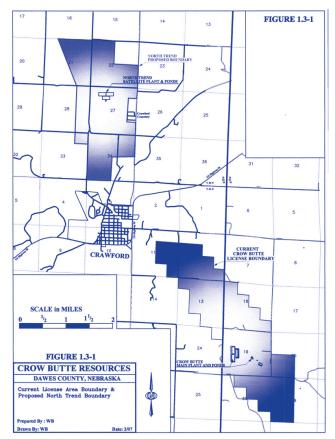
Because *in situ* uranium mines involve injection of fluids that mobilize radionuclides and heavy metals that can degrade water quality, aquifers with high quality water where *in situ* uranium mining is planned require the issuance of "aquifer exemptions" by the U.S. Environmental Protection Agency or the affected state. The State of Nebraska requires that an exempted aquifer cannot currently serve as a source of drinking water and will not in the future serve as a source of drinking water.

In November 2007, the Nebraska Department of Environmental Quality (NDEQ) rejected Crow Butte Resources' Aquifer Exemption Petition as inadequate for acceptance for public notice and detailed evaluation because it "lack[ed] site specific data, inclusion of recent research, and the presentation of well supported scientific interpretations to be considered acceptable." NDEQ determined that, among other defects, the geologic "nomeclature utilized by Crow Butte Resources is outdated and does not conform to widely accepted and published geologic literature from the area." NDEQ also rejected Crow Butte Resources' assertion that the North Trend — the proposed new mining area — is comparable to the original Crow Butte Study Area and concluded, "[o]ther than on a gross formational level scale, there is no evidence collected at North Trend to support this claim."

Oglala Sioux tribal members and local citizen organizations filed petitions to intervene in the Crow Butte expansion licensing proceedings before the Nuclear Regulatory Commission (NRC). The intervenors include Oglala-based Owe Aku — Bring Back the Way, Western Nebraska Resources Council, Slim Buttes Agricultural District and individual Oglala tribal members Debra White Plume and Thomas Kanatakenaite Cook. The issues ("contentions") raised included: a) alleged contamination of water resources, b) alleged environmental and health

impacts, c) alleged need to inspect a prehistoric Indian camp, d) alleged terrorist risk and potential truck accidents, e) alleged foreign ownership of the mine, and f) alleged non-sharing of economic benefits.





Trecent ientific

Dunling Ridgemont Rocky Ford Heppner III Sulfagemont Rocky Ford Hepp

In May 2008, the NRC's three-judge Atomic Safety and Licensing Board ("the Panel") admitted Owe Aku, Western Nebraska Resources Council, and Debra L. White Plume as parties and granted a hearing on their joint contentions as reframed by the Panel:

Contention A: The Application does not accurately describe the environment affected by its proposed mining operations or the extent of its impact on the environment as a result of its use and potential contamination of water resources, through mixing of contaminated groundwater in the mined aquifer with water in

surrounding aquifers and drainage of contaminated water into the White River,

Contention B: The proposed expansion will use and contaminate water resources, resulting in harm to public health and safety, through mixing of contaminated groundwater in the mined aquifer with water in surrounding aquifers and drainage of contaminated water into the White River, and

Contention C: Legally required reasonable consultation with Tribal Leaders regarding the prehistoric Indian camp located in the area surrounding the expansion has not occurred.

In accepting Contentions A and B, the Panel relied heavily on evidence from the NDEQ aquifer exemption rejection, which the judges found "to be persuasive and strong support for Petitioners' arguments regarding the inadequacy of the Application in addressing issues of conductivity, at least between the Chadron and Brule aquifers, and between groundwater and the White River. Taking this in conjunction with Petitioners' references to prior excursions and spills, including that onto the frozen White River, we find that Petitioners have sufficiently supported Contentions A and B." In admitting the contentions, the Panel also rejected the NRC staff argument that the NDEQ evidence should not be included in the licensing proceeding.

The Panel also admitted the Oglala Sioux Tribe and the International Indian Treaty Council to the proceeding and scheduled a pre-hearing conference on July 23, 2008,

in Chadron, Nebraska regarding the foreign ownership contention. During that hearing, both Crow Butte

Resources and the NRC staff argued that the foreign ownership issue should be addressed during the uranium export license proceedings in the future, rather than during the expansion proceedings. Following the one-day pre-hearing conference, the Panel convened a tour of the Crow Butte uranium mine so that the judges, staff, and intervenors could visit the site.

Cameco Resources staff stated during the tour that all uranium from the Crow Butte mine is transported to Canada where its parent company Cameco conducts uranium processing and operates nuclear power reactors. At the invitation

of Owe Aku and Western Nebraska Resources Council, SRIC's Paul Robinson participated in the pre-hearing conference and mine tour.

Following the pre-hearing conference and mine tour, Owe Aku, Western Nebraska Resources Council, Debra White Plume and other organizations and individuals petitioned the NRC to intervene in the license renewal

proceeding. As of October 15, 2008, the Panel had not yet issued any decisions regarding the foreign ownership contention or the petitions to intervene in the license renewal proceeding.

FOR MORE INFORMATION CONTACT

Owe Aku, Bring Back the Way: P.O. Box 2508 • Rapid City, SD 55709 • c /o Debra White Plume • lakota1@gwtc.net
Western Nebraska Resources Council: P.O. Box 3014 • Pine Ridge, SD 57770 • c /o David Frankel • davidcoryfrankel@gmail.com
Crow Butte Resources, Inc.: 86 Crow Butte Road • Crawford, NE 69339-1718 • www.cameco.com/operations/uranium/crow_butte/
Nuclear Regulatory Commission: www.nrc.gov/info-finder/materials/uranium/licensed-facilities/crow-butte.html