

ATTACHMENT 2

Comments submitted by Petitioner Oglala Sioux Tribe to EPA on December 9, 2019

(with attachments)

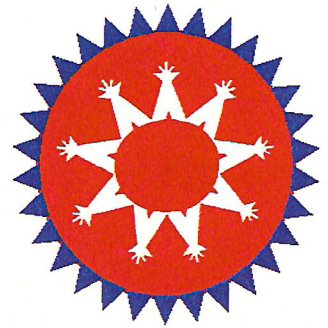


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December 9, 2019

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Via e-mail to: robinson.valois@epa.gov

RE: Comments on USEPA's revised draft Underground Injection Control permits – Dewey Burdock

Dear Ms. Robinson:

This letter provides comments from the Oglala Sioux Tribe (OST or Tribe) on the EPA's 2019 revised draft Underground Injection Control (UIC) permits and the aquifer exemption for the proposed Dewey-Burdock uranium project by Powertech/Azarga (Permittee). The Tribe submitted detailed comments on this same matter during the public comment period for the original draft documents in 2017. The Tribe's review of the updated supporting documents for the 2019 draft permits indicate that EPA has not resolved the issues raised in the Tribe's 2017 comments. Indeed, in many respects, it appears EPA is backsliding in terms of providing the necessary comprehensive technical analysis and ensuring the protection of valuable ground water resources. As such, the Tribe hereby incorporates herein its previous comments.

As EPA is aware, the OST has long-standing and substantial concerns with the Dewey-Burdock project as it is currently proposed. Many of these serious concerns relate to issues related directly to potential groundwater contamination; the fate and transport of radioactive wastes from the operation; the lack of a thorough review of the direct, indirect and cumulative impacts from the project; and of course, the lack of any competent cultural resources survey at the site which fully ensures that the Tribe's cultural and spiritual values are protected.

The Tribe hopes that EPA will take the comments contained herein seriously and will work to improve the analysis and the permitting process in a manner that provides transparency and adequate protections for groundwater, cultural, and other resources at risk from this proposal. The Tribe understands that EPA's Tribal consultation efforts are ongoing in this matter and looks forward to the opportunity to provide additional input through that process in the near future in accordance with the Tribe's law and policies governing such government-to-government engagement.

Respectfully,

Julian R. Bear Runner
President, Oglala Sioux Tribe

Functional Equivalence for National Environmental Policy Act (NEPA) and EPA's Cumulative Effects Requirement

The National Environmental Policy Act 42 U.S.C. §§ 4321, et seq. ("NEPA") requires all federal agencies, including EPA, unless specifically exempted by statute, to take a "hard look" at the environmental impacts from all major federal actions. NEPA "prevent[s] or eliminate[s] damage to the environment and biosphere by focusing government and public attention on the environmental effects of proposed agency action." Marsh v. Oregon Natural Resources Council, 490 U.S. 360, 371 (1989).

NEPA requires that federal agencies fully consider all direct, indirect, and cumulative environmental impacts of the proposed action. 40 C.F.R. §§1502.16; 1508.8; 1508.25(c). Direct effects are caused by the action and occur at the same time and place as the proposed project. §1508.8(a). Indirect effects are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. §1508.8(b). *Id.* Cumulative impacts are: "[T]he impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." §1508.7. For instance, for mining operations, the agency must fully review the impacts from off-site ore or waste processing and transportation. South Fork Band Council of W. Shoshone of Nev. v. U.S. Dep't of the Interior, 588 F.3d 718, 725 (9th Cir. 2009). Similarly, because impacts of the federal and state governments' foreseeable failure to ensure radioactive waste disposal facilities for past, present and future ISL projects could require wastes to be "stored on site [...] on a permanent basis," NEPA requires that the action agency "must assess the potential environmental effects of such a failure." *New York v. NRC*, 681 F.3d 471, 479 (2012).

Federal courts have dealt squarely with situations where a federal agency "says that cumulative impacts from non-Federal actions need not be analyzed because the Federal government cannot control them. That interpretation is inconsistent with 40 C.F.R. § 1508.7, which specifically requires such analysis." Center for Biological Diversity v. NHTSA, 508 F.3d 508, 517 (9th Cir. 2007). For example, an agency was required to consider the impacts of power turbines in Mexico in their EIS reviewing a U.S. transmission line because the projects were "two links in the same chain." Border Power Plant Working Group v. Dep't of Energy, 260 F. Supp. 2d 997, 1016 (S.D. Cal. 2003).

The EPA maintains a somewhat special status with regard to NEPA. Federal courts have allowed EPA to forgo strict and formal compliance with NEPA under a doctrine labeled "functional equivalence." The term "functional equivalent" was coined by the D.C. Circuit in Portland Cement Assoc. v. Ruckelshaus, 486 F.2d 375 (1973), cert. denied 417 U.S. 921 (1974). Its requirements can be concisely summarized:

The functional equivalency test provides that, where a federal agency is engaged primarily in an examination of environmental questions, and where substantive and

procedural standards ensure full and adequate consideration of environmental issues, then formal compliance with NEPA is not necessary, [and] functional compliance [is] * * * sufficient.

Warren County v. North Carolina, 528 F. Supp. 276, 286 (E.D. N.C. 1981).

The central requirement of the functional equivalence test is that the Agency's procedures provide for the same consideration of diverse environmental issues as required by NEPA. In International Harvester Co. v. Ruckelshaus, 478 F.2d 615 (D.C. Cir. 1993), the court said that:

we see little need in requiring a NEPA statement from an agency whose raison d'être is the protection of the environment and whose decision ... is necessarily infused with the environmental consideration so pertinent to Congress in designing the statutory framework of NEPA. To require a "statement", in addition to a decision setting forth the same considerations, would be a legalism carried to the extreme.

478 F.2d at 650, n. 30. Thus, according to the federal courts, as interpreted by the Environmental Appeals Board, "functional equivalence could be present in cases where the statute mandated 'orderly consideration of diverse environmental factors,' rather than the five specific NEPA-EIS elements. Amoco Oil Co. v. EPA, 501 F.2d 722, 750 (D.C. Cir. 1974)." In re: Phelps Dodge Corporation, Verde Valley Ranch Development, 10 E.A.D. 460 (May 21, 2002).

Importantly, the SDWA does not exempt EPA's UIC program from NEPA. Rather, for EPA's UIC permits issued under the SDWA, EPA regulations provide that "all [UIC] permits are not subject to the environmental impact statement provisions of ... [NEPA]." 40 C.F.R. § 129.9(b)(6). As described, the basis for a regulatory exemption from NEPA, as opposed to statutory exemption, is the "orderly consideration of diverse environmental factors" in the same manner required by NEPA. In re: Phelps Dodge Corporation, Verde Valley Ranch Development, 10 E.A.D. 460 (May 21, 2002). One aspect of this required "orderly consideration of diverse environmental factors" is embodied in the EPA regulations providing that, for area Class III UIC permits, such as that at issue here, EPA must evaluate "[t]he cumulative effects of drilling and operation of additional injection wells...." 40 C.F.R. § 144.33(c)(3). In other words, EPA enjoys no automatic exemption from NEPA, and the regulations confirm that the question of compliance with NEPA's cumulative effects analysis mandate must be found in the EPA documents offered to meet NEPA's "twin aims" - informed decisionmakers and public involvement. *Baltimore Gas & Electric Co. v. Natural Resources Defense Council, Inc.*, 462 U.S. 87 (1983),

In the present permitting exercise, EPA has not met the applicable standard. In other cases where the EAB has upheld an EPA cumulative effects analysis, it found that the agency had considered a diverse range of environmental impacts. For instance, in In re Avenal Power Center, LLC, 15 E.A.D. 384 (EAB 2011), the Board upheld an EPA cumulative effects analysis in the air pollution context because:

Agency provided an extensive discussion of the various projects and mitigation strategies underway in the area surrounding the proposed facility that are intended to mitigate the impacts of multiple existing sources on the communities located in close proximity to the proposed facility. *See* Response to Comments at 83-85. Specifically, the Agency determined that based on the types of environmental conditions already present in the area surrounding the proposed facility, the Agency believed these conditions would be more effectively addressed through actions that the Agency can take in conjunction with state and local governments. *See id.* (discussing mitigation strategies including, but not limited to, enforcement actions against a local hazardous waste facility, addressing nonattainment pollutants through the ongoing state and local air quality planning process, and issuing administrative compliance orders to address local violations of the Safe Drinking Water Act).

Id., slip. op. at 15. This type of analysis is not presented in this case, and EPA's Response to Comments do not contain the type of detail necessary to demonstrate compliance with the cumulative effects review requirements.

The 2019 Draft Cumulative Effects Analysis of the Dewey-Burdock Uranium In-Situ Recovery Underground Injection Control Area Permits fails to account for all of the cumulative impacts of the project. For instance, the company has recently released documents that demonstrate a planned expansion of the disturbed area from the project. See attached Map included in the applicant's December 2018 press release (Attachment 1) compared to the attached Map from the 2014 NRC Final Supplemental Environmental Impact Statement (Attachment 2). The company has even more recently proposed an increase in the amount of uranium ore it proposes mine from the property in a December 4, 2019 press release. See attached Azarga December 4, 2019 press release (Attachment 3). Unfortunately, the company appears to not be releasing the actual technical report accompanying the December 4, 2019 announcement for an additional 45 days. EPA should pause the public comment period and/or reopen that period based on the new maps and data being withheld by the company until after the close of public comment. Otherwise, EPA staff and the public are left without the necessary opportunity to analyze and comment on the expanded project Azarga has publicly announced, in violation of EPA regulations. See 40 C.F.R. § 124.11. In any case, the expanded mining area requires an updated analysis, for which additional EPA analysis must be conducted to meet SDWA and NEPA mandates, followed by public comment and review that must be provided to meet NEPA's requirement that the scope of analysis correspond with the scope of the proposal.

The cumulative effects analysis also fails to adequately discuss or review the cumulative effects associated with the transport of radioactive byproduct waste material to the White Mesa Mill in Utah. While the documents acknowledges White Mesa as the destination for the waste and includes waste disposal transport in its analysis of local truck traffic air impacts, the document does not review the associated impacts associated with such things as inevitable spills or the associated cumulative impacts at the White Mesa Mill, which has experienced and continues to experience significant problems – as detailed in the Tribe's 2017 comments to EPA. Significant environmental justice issues are presented by a project involving radioactive waste impacts in that disproportionately impact Native American Tribes' interests and their members' interests in

the Black Hills and in the Four Corners region (*e.g.* Ute Mt. Ute, Hopi, and Navajo) where Energy Fuel's White Mesa disposal facility is located.

The storage capacity at White Mesa mill, if used up by others processing and disposal streams, will result in a default on-site disposal until a disposal site is identified and secured. Basically, the same sorry state of affairs that plagues reactor wastes. The licensed-disposal capacity of the White Mesa cells is a valuable (albeit toxic) commodity. A proper cumulative impacts analysis may reveal that the disposal capacity required for existing ISL licensees/UIC permittees exceeds existing (and planned) disposal capacity. EPA's cumulative effects analysis must address this issue.

The cumulative effects analysis also fails to account for other projects not just in and around the Black Hills, which cumulatively impact the Tribe culturally and spiritually, but also additional projects proposed in close proximity to the Dewey-Burdock property. For instance, Powertech has proposed opening satellite mines, including in the Dewey Terrace area, that would feed the processing facilities at the Dewey-Burdock site. Indeed, the company is on record specifically stating that the Dewey Terrace project is proposed as "a nearby satellite project, within 10 miles of the Dewey Burdock Project, the Company's initial development priority." See attached Azarga press release dated October 31, 2017 (Attachment 4). This project is in addition to others, such as the Aladdin and Savageton project the company promotes. The impact of these satellite mines must be incorporated into the cumulative effects analysis.

Azarga/Powertech has long admitted that the Dewey-Burdock facility is proposed to be used as a processing site for ongoing uranium mineral development in the region, even identifying specific projects that would provide future feed the Burdock regional processing/milling facility:

It is likely that the CPP at the Burdock site will continue to operate for several years following the decommissioning of the Proposed Action well fields. The CPP may continue to process uranium from other ISL projects such as the nearby Powertech (USA) satellite ISL projects of Aladdin and Dewey Terrace planned in Wyoming, as well as possible tolling arrangements with other operators.

See attached Dewey-Burdock Project Application for NRC Uranium Recovery License Fall River and Custer Counties South Dakota Technical Report (excerpt) at page 1-8 (Attachment 5); see also Powertech (USA) Inc. Dewey-Burdock Project Class III Underground Injection Control Permit Application at page 10-14 (Attachment 6).

Powertech has specifically asserted that future processing of ore from the Aladdin and Dewey Terrace facilities are part of the "Proposed Action" included in the Dewey-Burdock license application:

It is likely that the CPP at the Burdock site will continue to operate for several years following the D&D of the project well fields. The Proposed Action is for the plant to continue to receive and process uranium loaded resins from other Proposed Projects such as Powertech's nearby Aladdin and Dewey Terrace Proposed Satellite Facility Projects planned in Wyoming or from other licensed ISL operators or other licensed facilities

generating uranium-loaded resins that are compatible with the Powertech (USA) production process.

See attached Dewey-Burdock Project Application for NRC Uranium Recovery License Fall River and Custer Counties, South Dakota, Environmental Report, February 2009 (excerpt) at page 1-25 (Attachment 7). The handling of these foreseeable waste streams is not addressed, and there has not been an opportunity for public comment.

These foreseeable processing and tolling arrangements require a careful analysis of the actual effect of the EPA approval. It is foreseeable that the continuing processing could turn the Dewey-Burdock facility into a *de facto* waste facility, much as the White Mesa mill has transitioned from a uranium mill that rarely processes conventional ore into an alternate feed/ISL disposal facility. NRC, like EPA, has identified the use of a mill for disposal as potentially inviting “sham processing” and cannot ignore this foreseeable, and indeed espoused, aspect of the Azarga business plan. *In the Matter Of International Uranium (USA) Corporation* 51 N.R.C. 9, 2000 NRC LEXIS 21, (N.R.C. February 10, 2000).

Further, the mineral exploration and development activities around the Black Hills should be accounted for in the cumulative effects review, given the spiritual and cultural import Lakota people place on the Black Hills as a whole. For instance, publicly available records demonstrate oil and gas exploration/development operations in the direct vicinity of the proposed Dewey-Burdock project. See attached State of South Dakota approval in Case No. 5-2019 (Attachment 8). EPA must review this, and all similar, projects as part of the cumulative effects analysis. In addition, several gold mining companies are proposing mineral development projects on the east side of the Black Hills, particularly in the Rochford area, which is compounded by the long-standing contamination from the Homestake properties in the same area. Other mining development in and around the Black Hills region must be evaluated, including the Cameco operations in Nebraska and the proposed Bear Lodge rare earth minerals mine.

Also of concern with respect to cumulative effects are those associated with the Black Hills Ordnance Depot. Issues of soil and ground water contamination associated with this site are well documented. The cumulative impact analysis must address potential exacerbation of ground water contamination associated with chemicals from the Depot caused by the proposed Dewey-Burdock project, including ground water pumping both for mining purposes and for freshwater use, along with deep injection disposal.

Lastly, EPA’s cumulative effects analysis fails to discuss the past uranium mining on the Dewey-Burdock property, left unreclaimed, and the associated cumulative contamination potential from those mines. The Darrow/Freezeout/Triangle mines have been the subject of some review by EPA and are recognized as potential pollution sources to groundwater that simply must be accounted for in the cumulative effects review. See attached Preliminary Assessment of Darrow/Freezeout/Triangle mines (Attachment 9). These mines are but one potential pollution source that are contributing to contamination of the Cheyenne River. The Tribe has conducted sampling in the Cheyenne River downstream of the proposed Dewey-Burdock site and found elevated levels of contaminants, including uranium. See attached Cheyenne River sampling data (Attachment 10). EPA must review these, and all other, pollution sources to the Cheyenne

River, which may result in cumulative impacts to the water quality in the River when combined with the threats from the Dewey-Burdock project.

National Historic Preservation Act

The federal courts have addressed the strict mandates of the National Historic Preservation Act, 16 U.S.C. §§ 470, et seq.:

Under the NHPA, a federal agency must make a reasonable and good faith effort to identify historic properties, 36 C.F.R. § 800.4(b); determine whether identified properties are eligible for listing on the National Register based on criteria in 36 C.F.R. § 60.4; assess the effects of the undertaking on any eligible historic properties found, 36 C.F.R. §§ 800.4(c), 800.5, 800.9(a); determine whether the effect will be adverse, 36 C.F.R. §§ 800.5(c), 800.9(b); and avoid or mitigate any adverse effects, 36 C.F.R. §§ 800.8[c], 800.9(c). The [federal agency] must confer with the State Historic Preservation Officer (“SHPO”) and seek the approval of the Advisory Council on Historic Preservation (“Council”).

Muckleshoot Indian Tribe v. U.S. Forest Service, 177 F.3d 800, 805 (9th Cir. 1999). See also, 36 C.F.R. § 800.8(c)(1)(v)(agency must “[d]evelop in consultation with identified consulting parties alternatives and proposed measures that might avoid, minimize or mitigate any adverse effects of the undertaking on historic properties....”).

The Advisory Council on Historic Preservation (“ACHP”), the independent federal agency created by Congress to implement and enforce the NHPA, determines the methods for compliance with the NHPA’s requirements. See National Center for Preservation Law v. Landrieu, 496 F. Supp. 716, 742 (D.S.C.), *aff’d per curiam*, 635 F.2d 324 (4th Cir. 1980). The ACHP’s regulations “govern the implementation of Section 106,” not only for the Council itself, but for all other federal agencies. Id. See also National Trust for Historic Preservation v. U.S. Army Corps of Eng’rs, 552 F. Supp. 784, 790-91 (S.D. Ohio 1982).

NHPA § 106 (“Section 106”) requires federal agencies, prior to approving any “undertaking,” to “take into account the effect of the undertaking on any district, site, building, structure or object that is included in or eligible for inclusion in the National Register.” 16 U.S.C. § 470(f). Section 106 applies to properties already listed in the National Register, as well as those properties that may be eligible for listing. See Pueblo of Sandia v. United States, 50 F.3d 856, 859 (10th Cir. 1995). Section 106 provides a mechanism by which governmental agencies may play an important role in “preserving, restoring, and maintaining the historic and cultural foundations of the nation.” 16 U.S.C. § 470.

If an undertaking is the type that “may affect” an eligible site, the agency must make a reasonable and good faith effort to seek information from consulting parties, other members of the public, and Native American tribes to identify historic properties in the area of potential

effect. 36 C.F.R. § 800.4(d)(2). See also, Pueblo of Sandia, 50 F.3d at 859-863 (agency failed to make reasonable and good faith effort to identify historic properties).

The NHPA also requires that federal agencies consult with any “Indian tribe ... that attaches religious and cultural significance” to the sites. 16 U.S.C. § 470(a)(d)(6)(B). Consultation must provide the tribe “a reasonable opportunity to identify its concerns about historic properties, advise on the identification and evaluation of historic properties, including those of traditional religious and cultural importance, articulate its views on the undertaking’s effects on such properties, and participate in the resolution of adverse effects.” 36 C.F.R. § 800.2(c)(2)(ii). As such, the Tribe must be involved in all three of these efforts – 1) identifying historic or cultural resources; 2) evaluating impacts on historic or cultural resources and those resources’ eligibility for inclusion on the National Register of Historic Places (NRHP); and 3) developing project alternatives or mitigation measures to protect those resources that are or may be eligible.

The administrative record, including EPA’s draft decision documents and the EPA’s Response to Comments, fails to demonstrate that EPA complied with the consultation and historic resources protection requirements of the National Historic Preservation Act. Specifically, there has never been conducted a competent Lakota cultural resources survey of the Dewey-Burdock site. This has been the incontestable fact since the Nuclear Regulatory Commission’s Atomic Safety and Licensing Board (ASLB) issued its ruling in LBP-15-16 in 2015. *In The Matter of Powertech (USA), Inc.* (Dewey-Burdock ISR Project), LBP-15-16, 81 NRC 618 (2015). This ruling has been repeatedly upheld by both the ASLB and the Nuclear Regulatory Commission itself. As such, without a competent cultural resources survey and analysis of the property, there is no way for the EPA to meaningfully consult with the Oglala Sioux Tribe – or any other Tribe – as to the identification, evaluation, or mitigation of impacts to those cultural resources. Given NRC Staff’s abject failure to meet its obligations to ensure a competent cultural resources survey and analysis, EPA is legally obligated to do so. The Tribe remains ready, willing, and able to assist in this effort – short of being asked to expend entirely its own resources to pay professional survey staff, as NRC Staff has wrongfully attempted to date. Given the ASLB’s ruling regarding the lack of identification of Lakota cultural resources, EPA cannot lawfully rely on its statement in the 2019 National Historic Preservation Act Draft Compliance and Review Document that:

Based on the information the EPA has reviewed to date, and subject to any further developments in the course of the NRC administrative review process, the EPA believes that the identification of historic properties completed under the auspices of the NRC through the Class III Cultural Resources Survey appears sufficient for the APE defined by the NRC.

EPA National Historic Preservation Act Draft Compliance and Review Document at 2.

EPA asserts that it continues to evaluate simply signing on to the Programmatic Agreement (PA) developed by NRC Staff in order to attempt to fulfill its NHPA duties. However, the lack of a competent cultural resources survey has poisoned the Programmatic Agreement such that it is not a viable means for NHPA compliance. Specifically, the PA was finalized in 2014 at the time

NRC Staff issued its Record of Decision for its licensure process for the project. As a fundamental basis for the PA, that document states in its recitals that “WHEREAS, surveys to identify historic properties have been completed for the project including Class III archaeological surveys and tribal surveys to identify properties of religious and cultural significance.” Final PA at 3 (Attachment 11). As discussed, this assertion is demonstrably false, as the ASLB subsequently found that NRC Staff had objectively failed to conduct any competent “surveys to identify properties of religious and cultural significance.” As such, the PA is not a lawful document for purposes EPA’s NHPA compliance.

Notably, the Tribe contests the EPA’s assumption of the Area of Potential Effect (APE) in the draft permitting documents. The APE appears to rely entirely on ground disturbance with an arbitrary buffer zone, but makes no effort to explain the basis for the limits of its “buffer zone” nor account for impacts to the cultural resources that may extend beyond the buffer zone. This speaks to the problems with proceeding toward permitting prior to having conducted a cultural resources survey and analysis. For instance, the Tribe believes that cultural resource sites present at the Dewey-Burdock property are significant for their ceremonial and/or spiritual values and purposes, which even if outside EPA’s buffer zone, could still be dramatically and negatively affected by the project. This is but one example, but demonstrates that these issues have not been sufficiently reviewed or analyzed in EPA’s draft permit documents. Further, as discussed herein, Powertech/Azarga has recently announced expansions of the projected disturbed area at the site, which do not appear to have been incorporated in any respect into EPA’s analysis.

In addition to the Section 106 NHPA duties, NHPA Section 110 imposes responsibilities on EPA to ensure a proper identification and evaluation of cultural resources. These duties cannot be dispensed with simply through attempts to contact the Tribe in the Section 106 consultation context. Further, NEPA imposes a separate but closely related set of duties on federal agencies when addressing cultural resources. NRC has found the EIS inadequate to meet NEPA’s statutory mandates, and EPA has made no serious effort to address these deficiencies – rendering EPA’s analysis legally deficient with respect to a cultural resource impacts analysis. While NRC Staff is currently attempting to escape its NEPA responsibilities – arguing that the cultural resources information is “unavailable”, the Tribe vigorously contests this argument. In any case, EPA may not rely on such arguments as NRC’s position in this regard is highly specific to its own administrative process, timing, and financial constraints.

I. INTRODUCTION

This is the Oglala Sioux Tribe's response to the Environmental Protection Agency (EPA) requesting the Tribe's position on the applicability of tribal treaty rights to the Dewey Burdock In Situ Uranium Project in the Southern Black Hills. To understand what Sioux treaties, pertain to the Dewey Burdock Project, it is first important to understand the legal background of each treaty, the identity of each the tribe that signed them, and the applicability of the treaties (or acts implementing them) to the Project.

II. THE OTECI SAKOWIN (SIOUX NATION)

First, it is important to understand that the Oteci Sakowin ("Sioux Nation") is comprised of seven divisions: (1) Medawakanton; (2) Sisseton; (3) Wahpakoota; (4) Wahpeton; (5) Yankton; (6) Yanktonai; and (7) Teton.¹

Secondly, it is important to understand that the Teton Division of the Sioux Nation is comprised of seven distinct, sovereign bands: (1) Blackfeet; (2) Brule; (3) Hunkpapa; (4) Miniconjou; (5) No Bows; (6) Oglala; and (7) Two Kettle.¹ Members of these Teton bands currently reside on the following Indian reservations in North and South Dakota and Nebraska:

<u>TETON BAND</u>	<u>RESERVATION</u>
Blackfeet	Cheyenne River Reservation (S.D.)
Brule	Rosebud Reservation and Lower Brule Reservation (S.D.)
Hunkpapa	Standing Rock Reservation (N.D. & S.D.)
Minneconjou	Cheyenne River Reservation (S.D.)
No Bows	Cheyenne River Reservation (S.D.)
Oglala	Pine Ridge Reservation (S.D. & Neb.)
Two Kettle	Cheyenne River Reservation (S.D.)

Also, members of the Teton bands also reside on the Fort Peck Reservation in Montana.

III. IDENTIFICATION OF SIOUX BANDS THAT HAVE ABORIGINAL RIGHTS AND/OR TREATY RIGHTS TO THE BLACK HILLS

There are three Sioux treaties that recognized aboriginal title of the Sioux tribes to the Black Hills, and that are relevant to Sioux claims to cultural resources, water rights and fishing rights, and other rights, in the Black Hills.

A. Aboriginal rights to the Black Hills

Exclusive use and occupation "for a long time" prior to the loss of the property

¹ *Sioux Nation v. United States*, 24 Ind. Cl. Comm. 147, 162 (1970).

by a tribe is sufficient to give aboriginal title.² That a ‘long time’ ran during the period of United States sovereignty over [an] area . . . is irrelevant insofar as the perfecting of Indian title is concerned.³ “For a long time” can be from time immemorial or for a given number of years, even “20 to 50 years under appropriate circumstances.”⁴ So, it is undisputed that the Teton Sioux bands held aboriginal Indian title to the Black Hills under federal law, since they occupied the Black Hills “for a long time” prior to and subsequent to an assertion of United States dominion over the area under the Louisiana Purchase.⁵

B. Treaty rights to the Black Hills.

The three treaties that are pertinent to the Oglala Sioux Tribe’s land claims and/or usufructuary rights in the Black Hills, and in particular, the Dewey-Burdock Project Area. The treaties are as follows:

- (1) **1825 TREATY:**⁶ Only **Oglala and Yanktonai bands** were parties to the 1825 Treaty referenced below;
- (2) **1851 FORT LARAMIE TREATY:**⁷ Only the **Teton and Yankton bands** were parties to the 1851 Fort Laramie Treaty that recognized their title to sixty million acres west of the Missouri River;
- (3) **1868 FORT LARAMIE TREATY:**⁸ Only the **Teton Bands, Yanktonai (Cuthead) bands, and Santee Sioux** (primarily those removed from Minnesota after the 1862 conflict) were parties to the 1868 Fort Laramie Treaty.

So, based on the last treaty, the 1868 Fort Laramie Treaty, the following current federally recognized Sioux tribes have treaty rights to the Black Hills (Great Sioux Reservation):

TETON SIOUX

- (1) Blackfeet (based on 1851 and 1868 treaties)
- (2) Brule (based on 1851 and 1868 treaties)
- (3) Hunkpapa (based on 1851 and 1868 treaties)
- (4) Miniconjou (based on 1851 and 1868 treaties)

² *Sac and Fox Tribe v. United States*, 383 F.2d 991, 998 (Ct. Cl. 1967) (Citing *Sac and Fox Tribe v. United States*, 315 F.2d 896, 903 (Ct. Cl. 1963), *cert denied* 375 U.S. 921 (1963)).

³ *Sioux Nation v. United States*, 23 Ind. Cl. Comm. 419, 423 (1970).

⁴ United States Indian Claims Commission Final Report (Aug. 13, 1946 – September 30, 1978, p. 129 (Citing *United States v. Seminole Indians*, 180 Ct. Cl. 375 (1968), *aff’d* 13 Ind. Cl. Comm. 326 (1964); *Fox Tribe v. United States*, 179 Ct. Cl. 8 (1967)).

⁵ It is also important to note that the Teton and Yanktonai Divisions (bands) also claim title to the fourteen million acres of non-treaty (aboriginal title) lands between the Missouri River and James River in North Dakota and South Dakota. See *Sioux Nation v. United States*, 23 Ind. Cl. Comm. 419 (1970).

⁶ 7 Stat. 252.

⁷ 11 Stat. 749.

⁸ 15 Stat. 635.

- (5) No Bows; (based on 1851 and 1868 treaties)
- (6) Oglala (based on 1851 and 1868 treaties)
- (7) Two Kettle (based on 1851 and 1868 treaties)

SANTEE SIOUX

- (8) Santee (based on 1868 Treaty)

YANKTON SIOUX

- (9) Yankton (based on 1851 treaty)

YANKTONAI SIOUX

- (10) Cuthead Yanktonai (based on 1868 Treaty)

IV. THE 1825 TREATY WITH THE OGLALA AND SIOUNE BANDS

The United States and the Oglala Band entered into a treaty of friendship and protection with the Sioune⁹ and Oglala bands on July 5, 1825, 7 Stat. 252. By Article 2 of the 1825 Treaty, the United States brought the Oglala Band and Sioune Band (Yanktonai Cuthead Band) and their members under its protection and the Oglala and Sioune Bands became protectorate sovereign bands of the Sioux Nation of the United States under the 1825 Treaty.¹⁰

IV. THE 1851 AND 1868 FORT LARAMIE TREATIES

A. The 1851 Fort Laramie Treaty

The United States, the seven bands of the Teton Division, and the Yankton Division of the Sioux Nation entered into a treaty on September 17, 1851, 11 Stat. 749,¹¹ at Fort Laramie. Article

⁹ The Sioune are Yanktonai Sioux. Yanktonai Sioux Chief Wah-e-ne-ta (the Rushing Man) signed the 1825 Treaty on behalf of the Yanktonai Sioux.

¹⁰ Article 1 of the 1825 Treaty provided that “[i]t is admitted by the Sioune and Ogallala bands of Sioux Indians, that they reside within the territorial limits of the United States, acknowledge their supremacy, and claim their protection. The said bands also admit the right of the United States to regulate all trade and intercourse with them.” Article 2 of the treaty further provided that “[t]he United States agree to receive the Sioune and Ogallala bands of Sioux into their friendship, and under their protection, and to extend to them, from time to time, such benefits and acts of kindness as may be convenient, and seem just and proper to the President of the United States.”

¹¹ The Yankton Sioux Division of the Sioux Nation was also a party to 1851 Fort Laramie Treaty. *Sioux Nation v. United States*, 24 Ind. Cl. Comm. 147 (1970). The Indian Claims Commission ruled

5 of the 1851 Treaty recognized¹² and defined the territory and reserved rights of the Sioux bands¹³ as follows:

commencing the mouth of the White Earth River, on the Missouri River; thence in a southwesterly direction to the forks of the Platte River; thence up the north fork of the Platte River to a point known as the Red Butte, or where the road leaves the river; thence along the range of mountains known as the Black Hills, to the head-waters of the Heart River; thence down Heart River to its mouth; and thence down the Missouri River to the place of beginning.

Article 5 of the 1851 Treaty further provided that:

It is, however, understood that, in making this recognition and acknowledgement, the aforesaid Indian nations do not hereby abandon or prejudice any rights or claims they may have to other lands; and further, that they do not surrender the privilege of hunting, fishing, or passing over any of the tract of country heretofore described. (emphasis supplied).

The 1851 Treaty recognized the seven Teton bands' aboriginal Indian title to the sixty million acres described in the treaty.

B. The Powder River War of 1866-1868 and the culmination of the war by the 1868 Fort Laramie Treaty.

Unconsented encroachments on 60 million acres, 1851 Treaty territory by the United States and its citizens resulted in the Powder River War of 1866-1868 between the United States and the Teton Sioux bands (and their allies, the Cheyenne and Arapahoe). Peace was concluded between the United States and the Teton bands by Fort Laramie Peace Treaty on April 29, 1868, 15 Stat. 635. The 1868 Treaty provided for a mutual demobilization without terms of surrender on either side.¹⁴

that the 1851 Treaty was a multi-lateral treaty by which the United States recognized the aboriginal territory of not only the seven Teton bands, but also the aboriginal territories of the other signatory tribes, including the Crow, Cheyenne, Arapahoe, Assiniboiné, Hidatsa (also known as the Gros-Ventre), Mandan and the Arikara tribes. The Commission ruled that article 5 of the 1851 Treaty recognized the Oglala band and other Teton bands' joint and several aboriginal Indian title to the entire sixty-million-acre area west of the Missouri River. *Sioux Nation v. United States*, 23 Ind. Cl. Comm. 419, 424 (1970).

¹² Recognition of aboriginal title in an Indian treaty brings the territory under the protection of the Fifth Amendment to the United States Constitution, *Tee-Hit-Ton Indians v. United States*, 348 U.S. 272 (1955).

¹³ *United States v. Winans*, 198 U.S. 371 (1905)

¹⁴ The Teton Sioux bands, and other signatory bands to the 1868 Fort Laramie Treaty, were never militarily "conquered" by the United States and since 1868 have lived at peace with the United

Article 2 of the 1868 Treaty established a designated territory (within the 1851 Treaty territory boundaries) for the seven Teton bands and other Sioux bands. This territory is commonly referred to as the “Great Sioux Reservation,” and is described in article 2 of the 1868 Treaty as follows:

Commencing on the east bank of the Missouri River where the forty-sixth parallel of north latitude crosses the same, thence along low-water mark down said east bank to a point opposite where the northern line of the State of Nebraska strikes the river, thence west across said river, and along the northern line of Nebraska to the one hundred and fourth degree of longitude west from Greenwich, thence north on said meridian to a point where the forty-sixth parallel of north latitude intercepts the same, thence due east along said parallel to the place of the beginning; and in addition thereto, all existing reservations on the east bank of the said river shall be, and the same is, set apart for the absolute and undisturbed use and occupation of the Indians herein named . . . and the United States now solemnly agrees that no persons except those herein designated and authorized so to do, and except such officers, agents and employees of the Government as may be authorized to enter upon Indian reservations in discharge of duties enjoined by law, shall ever be permitted to pass over, settle upon, or reside in the territory.¹⁵

Article 2 of the 1868 Treaty also contained the following language after the description of the boundaries of the Great Sioux Reservation:

. . . and *henceforth they will and do hereby relinquish all claims or right in and to any portion of the United States or Territories, except such as is embraced within the limits aforesaid, and except as hereafter provided.* (emphasis supplied).

The words “except as hereafter provided” in Article 2 referred to Articles 11 and 16 of the 1868 Treaty. Article 11 provided in pertinent part as follows:

. . . the tribes who are parties to this agreement hereby stipulate that they will relinquish all right to occupy permanently the territory outside their reservation as herein defined, but yet reserve the right to hunt on any land north of North Platte, and on the Republican Fork of the Smoke Hill River, so long as the buffalo may range thereon in such numbers as to justify the chase Art. 11. (emphasis supplied)

States under Article 1 of the Treaty, which provided that “[f]rom this day forward all war between the parties to this agreement shall forever cease. The government of the United States desires peace, and its honor is hereby pledged to keep it. The Indians desire peace, and they now pledge their honor to maintain it.”

¹⁵ It should be noted that Article 12 of the 1868 Treaty provided that no future cessions of territory **within the Great Sioux Reservation** would be of “any validity or force . . . unless executed and signed by at least three-fourths of all the adult male Indians, occupying or interested in the same . . .” Under article 12, the United States and Teton bands agreed to limit their sovereign powers to cede and to accept cessions of land for the protection and peace of both parties.

Article 16 of the provided in pertinent part as follows:

The United States hereby agrees and stipulates that the country north of the North Platte River and east of the summits of the Big Horn Mountains shall be held and considered to be unceded Indian territory, and also stipulates and agrees that no white person or persons shall be permitted to settle upon or occupy any port of the same, or without the consent of the Indians first had and obtained to pass through the same Art. 16.

As noted above, the Oglala Sioux Tribe has repudiated and rejected any cession, voluntary or otherwise, of the remaining 34 million acres of its 1851 Treaty territory located outside the boundaries of the Great Sioux Reservation established by Article 2 of the subsequent 1868 Treaty in Docket 74.

V. THE 1877 BLACK HILLS ACT

After the defeat of General George Crook at the Battle of the Rosebud and Lt. Col. George A. Custer at the Battle of the little Bighorn in Montana in 1876, who were legally hunting in the Bighorn Mountains and Yellow Stone River Country in Montana under Article 11¹⁶ of the 1868 Treaty and militarily attacked in violation of Article 1 of the Treaty, many Sioux bands moved back to the Great Sioux Reservation.

By the Act of February 28, 1877, 19 Stat. 254, Congress purported to ratify and confirm an agreement between commissioners on behalf of the United States and the Teton and other bands of the Sioux Nation (and the Northern Cheyenne and Arapaho tribes).¹⁷ The purported agreement provided for the cession of over 7.3 million acres of territory in the western part of the Great Sioux Reservation, that included the Black Hills. No such agreement existed in fact or in law. When the United States could not obtain the requisite three-fourths adult male signatures required by Article 12 of the 1868 Treaty, Congress unilaterally enacted the 1877 Agreement into law and the agreement became an Act of Congress that confiscated the Black Hills portion of the Great Sioux

¹⁶ Article 11 of the 1868 Treaty provided in part that the Sioux bands “reserved the right to hunt on any lands north of North Platte [River], on the Republican Fork of the Smokey Hill river, so long as the buffalo may range thereon in such numbers as to justify the chase.” Article XVI of the Treaty further provided that “[t]he United States hereby agrees and stipulates that the country north of the North Platte River and east of the summits of the Big Horn mountains shall be held and considered to be unceded Indian territory. . . .” The Sioux bands were thus recognized with having an expanded hunting right to hunt in the Bighorn Mountains and Yellow Stone River country in 1876.

¹⁷ In 1871, Congress quit entering into treaties with Indian tribes because the House of Representatives wanted to have a say in the treaty making process, which only required ratification by the Senate. 25 U.S.C. § 71. Thereafter, agreements with Indian tribes were called agreements and required approval of both houses of Congress.

Reservation without the consent of the Sioux bands that are signatory to the 1868 Treaty.¹⁸

Article 8 of the 1877 Black Hills Act is applicable to any type of mining activity in the Black Hills Portion of the Great Sioux Reservation, including In Situ uranium mining in the Dewy-Burdock area of the Black Hills, which provides in pertinent part that:

. . . Congress shall, by appropriate legislation, secure to them an orderly government; **they shall be subject to the laws of the United States, and each individual shall be protected in his rights of property, person and life.** (emphasis added).

The words “they shall be subject to the laws of the United States” was interpreted by the Supreme Court to mean subject to the trust responsibility laws of the United States.¹⁹ In this regard, it is important to note that federal courts have held that “[t]he existence of a trust duty between the United States and an Indian or *Indian tribe* can be inferred from the provisions of a statute, treaty or other agreement, reinforced by the undisputed existence of a general trust relationship between the United States and the Indian people,”²⁰ and that **all government agencies have “fiduciary” responsibilities to tribes, and must always act in the interests of the beneficiaries.**²¹ (emphasis added). “All government agencies” include the Bureau of Land Management (BLM), the Nuclear Regulatory Commission (NRC), and the Environmental Protection Agency (EPA).

VI. THE 1889 SIOUX ACT THAT ESTABLISHED THE PINE RIDGE INDIAN RESERVAION AND OTHER SIOUX RESERVATONS.

By the Act of March 2, 1889, 25 Stat. 888, Congress conditionally provided for the creation of six smaller reservations within the balance of the Great Sioux Reservation. These six smaller reservations are the Pine Ridge Indian Reservation, the Rosebud Indian Reservation, the Standing Rock Indian Reservation, the Cheyenne River Indian Reservation, the Lower Brule Indian Reservation and the Crow Creek Indian Reservation. The 1889 Act was expressly conditioned upon the acceptance of and consent to its provisions in the manner required by article 12 of the

¹⁸ The 1877 Act also provided in Article 1 that “the said Indians do hereby relinquish and cede to the United States all the territory lying outside the said reservation, as herein modified ad described, including all privileges of hunting and article 16 of said treaty is hereby abrogated.” This language not only violated Article 12 of the 1868 Treaty, but also Section 12 of the Trade and Intercourse Act of June 20, 1834, 4 Stat. 730 (codified at 25 U.S.C. § 177), which provided that “[n]o purchase, grant, lease, or other conveyance of lands, or of any title or claim thereto, from any Indian nation or tribe or Indians, shall be of any validity in law or equity, unless the same is made by treaty or convention entered into pursuant to the Constitution.”

¹⁹ *Ex Parte Crow Dog*, 109 U.S. 556, 568-69 (1883) (“They were nevertheless to be subject to the laws of the United States, not in the sense of citizens, but, as they had always been, as wards subject to a guardian . . .”).

²⁰ *Blue Legs v. U.S. Bureau of Indian Affairs*, 867 F.2d 1094, 1100 (8th Cir. 1989).

²¹ *Covelo Indian Community v. FERC*, 895 F.2d 581 (9th Cir. 1990).

1868 Fort Laramie Treaty and Section 28 of the Act, i.e., the signatures of three-fourths of the adult male members of the Sioux bands that were signatory to the 1868 Treaty.²²

VII. INDIAN CLAIMS COMMISSION AND COURT OF CLAIMS CASES

The original Sioux treaty land claims were filed as Docket 531 in the Court of Claims under a 1920 Special Jurisdictional Act.²³ The Black Hills Claim or the claims, Docket 531 (7), was dismissed by the court in 1942.²⁴

The Sioux land claims were refiled in the Indian Claims Commission in 1950 under the 1942 Indian Claims Commission Act in 1950 as Docket 74. Docket 74 was bifurcated into two claims by the Indian Claims Commission in 1960, Dockets 74-A and 74-B.

DOCKET 74-A: It involved claims for compensation based on a “cession” of 48 million acres of Sioux territory under Article 2 of the 2868 Fort Laramie Treaty, i.e., 34 million acres of 1851 treaty lands west of the Missouri River and 14 million acres of non-treaty lands east of the Missouri River²⁵ located outside of the exterior boundaries of the Great

²² In *Oglala Sioux Tribe v. United States Army Corps of Engineers*, *Oglala Sioux Tribe v. US Army Corps of Engineers*, 537 F. Supp. 2d 161 (D.D.C. 2008), the Oglala Sioux Tribe provided evidence to the United States District Court for the District of Columbia in a boundary dispute (and not a land claim) that the United States has never obtained the requisite three-fourths adult male signatures to lawfully implement the 1889 Act under Article 12 of the 1868 Treaty, and under Section 12 of the Act itself, and that the Act was void *ab initio* under Section 28 of the Act if it is proven that the requisite three fourths adult male signatures were not obtained by the Government and that: “upon failure of such proof . . . this act becomes of no effect and null and void.” The District Court never-the-less dismissed the action for lack of standing.

For purposes of the Dewey-Burdock In Situ Uranium Project, it is important to note that the Cheyenne River, whose head waters flow from eastern Wyoming into western South Dakota, abuts the Pine Ridge Indian Reservation that was established under hew 1889 Act, and that the riverbed where it abuts the reservation is within the exterior boundaries of the Pine Ridge Indian Reservation and is presently considered trust property held in the name of the United States in trust for the tribe. As trust property, the United States has a trust responsibility to protect the water and riverbed from any pollution caused by uranium mining, or otherwise, within the drainage area of the Cheyenne River and its tributaries.

²³ Act of June 3, 1920, 41 Stat 738.

²⁴ The Black Hills Claim (Docket C-531 [7]) was dismissed by the Court of Claims on the basis that the court was not authorized by the 1920 special jurisdictional act to question whether the compensation afforded the Sioux by Congress in 1877 was an adequate price for the Black Hills, and that the Sioux claim in this regard was moral claim not protected by the Just Compensation Clause of the Fifth Amendment. *Sioux Nation v. United States*, 97 Ct. Cl. 613 (1942).

²⁵ See *Sioux Nation v. United States*, 23 Ind. Cl. Comm. 419 (1970). “After finding that the Teton and Yanktonai divisions possessed aboriginal title to the 14-million-acre area, the Indian Claims Commission determined that “[b]y the Treaty of April 29, 1868, 15 Stat. 635, which was proclaimed

Sioux Reservation as it existed after the passage of the 1877 Act, i.e., the Great Sioux Reservation minus the Black Hills portion of the reservation after the Black Hills were confiscated in 1877).

DOCKET 74-B (later changes to Court of Claims Docket 178-78 when it was refiled in the Court of Claims under a special jurisdictional act in 1978): It involved claims based on an unconstitutional taking of **7.3 million** acres (the Black Hills)²⁶ portion of the Great Sioux Reservation in violation of the Just Compensation Clause of the Fifth Amendment to the United States Constitution.

These two territories are delineated on the Indian Claims Commission's map (at 38 Ind. Cl. "Comm. 469, 531 (1976)), and attached hereto as Exhibit "A."

After examining the history behind the Sioux claims based on a cession under the 1868 Treaty -- advanced by the Claims attorneys and not the Oglala Sioux Tribe -- the Indian Claims Commission found that: "The Indian Peace Commission presented the proposed treaty to the Sioux Bands in a series of councils held in the spring of 1868 . . . At these councils, after hearing an explanation of the terms of the treaties, the Sioux generally voiced these sentiments; 2--*they were unwilling to cede any of their lands . . .*" And that "it is clear that, based on the representations of the United States negotiators, the Indians cannot have regarded the 1868 Treaty as a treaty of cession. **Nowhere in the history leading up to the treaty negotiations themselves is there any indication that the United States was seeking a land cession or that the Sioux were unwilling to consent to one. On the contrary, the evidence is overwhelming that the Sioux would never have signed the treaty had they thought they were ceding any land to the United States.** *Sioux Tribe v. United States*, 42 Ind. Cl. Comm. 214 (1978).

The Indian Claims Commission then concluded that "as a matter of law that the goods and services promised by the United States under the 1868 treaty were not intended by the Sioux (or by the government negotiators) to be consideration for any Sioux Lands. The history of this case makes it clear that this treaty was an attempt by the United States to obtain peace on the best terms possible. *Ironically, this document, promising harmonious relations, effectuated a vast cession of land contrary to the understanding and intent of the Sioux.*"²⁷ *Id.* (emphasis supplied)

on February 24, 1869, the subject lands of the Tetons and Yanktonai were ceded to the United States..." *Id.* The boundary of the aboriginal title area is described at 23 Ind. Cl. Comm. 424-425.

²⁶ Court of Claims Docket 178-78 also involved the taking of three rights-of-way across the Great Sioux Reservation and placer (surface) gold stolen by trespassing miners prior to the 1877 when the Black Hills were considered part of the Great Sioux Reservation.

²⁷ Historical evidence introduced in Docket 74 showed that: (1) the Indians would fight to the death to retain the Power River Country, 42 Ind. Cl. Comm. at 241, (2) Two Lance, a Two Kettle, indicated that his people did not want to give up their land, 42 Ind. Cl. Comm. at 241, (3) One Horn stated that the Sioux would never cede their country, 42 Ind. Cl. Comm. At 248, (4) Sitting Bull announced that he had no intention of selling any land to the whites, 42 Ind. Cl. Comm. at 249, (5) General Sanborn added that the government understood "when you tell us that you don't want to receive any present, that you don't wish to be thought of as selling your land" and that "[w]e are not going to give you the goods in exchange for any land," 42 Ind. Cl. Comm. At

The Oglala Sioux Tribe does not agree to the “cession” of Sioux lands in Docket 74 and passed two resolutions to withdraw from Docket 74 so as not to be a party of the fraud by the Federal Government and claims attorneys being perpetuated on Tribe and its members. See Tribal Council Resolutions Nos. 83-160 and 84-47. In addition to being contrary to the rule of statutory construction that “Indian treaties are to be interpreted in the sense in which they would naturally be understood by the Indians and any ambiguity is to be resolved to their favor,” see *Choctaw Nation v. Oklahoma*, 397 US 620 (1970); *Winters v. United States*, 207 US (1908); and *United States v. Shoshone Tribe of Indians*, 304 US 111 (1938), the Tribe’s position in withdrawing from Docket 74 is well-stated in its petition for a writ of certiorari in *Cheyenne River Sioux Tribe v. United States*, 806 F.2d 1046 (Fed. Cir. 1986), cert. denied sub nom. *Oglala Sioux Tribe v. United States*, --- U.S. ----, 107 S. Ct. 3184, 96 L. Ed. 2d 673 (1987), cert. denied sub nom. *Oglala Sioux Tribe v. United States*, --- U.S. ----, 107 S. Ct. 3184, 96 L. Ed. 2d 673 (1987), and in Judge Newman’s subsequent dissenting opinion in the Oglala Sioux Tribe’s Motion for Relief from Judgement in *Oglala Sioux Tribe and Rosebud Sioux Tribe v. United States*, 862 F2d 275, (Fed. Cir. 1988). It is also worthy of notice that the Oglala Sioux Tribe has continuously rejected the Indian Claims Commission award in Docket 74 from 1978 to the present time. The Oglala Sioux Tribe has exhausted its federal judicial remedies in the United States Judicial System, and still claims title to the 34 million acres of 1851 Treaty lands outside the Great Sioux Reservation on the basis that the Sioux tribes never legally ceded these lands under the 1868 Treaty and ownership of these lands still be resolved legislatively through government-to-government obliteration with the U.S. Congress.

One cannot understand land claims litigation unless one knows the legal history of the tribes involved in the litigation. It is therefore important to understand that, since time immemorial, the seven Teton bands, along with certain other Sioux bands, jointly and severally, have exclusively used and occupied the following territories in the Missouri River Basin:

- (1) West of the Missouri River, approximately sixty million acres of land in what are now the States of North Dakota, South Dakota, Nebraska, Montana and Wyoming recognized in Article 5 of the 1851 Fort Laramie Treaty; and
- (2) East of the Missouri River, approximately fourteen million acres of non-treaty (aboriginal title) land in what are now the States of North Dakota and South Dakota recognized by the Indian Claims Commission.²⁸

These two territories are delineated on the Indian Claims Commission map cited at 38 Ind. Cl. “Comm. 469, 531 (1976), and attached hereto as Exhibit “A.”

VIII. OST AUTHORITY TO ENFORCE ITS TREATY AND STATUTORY RIGHTS TO PROTECT THE TRIBE AND ITS MEMBERS RIGHTS UNDER FEDEAL

251, and (6) after the terms concerning the extent of Sioux territory and the provisions keeping out white people were read to him Red Cloud finally signed the treaty, 42 Ind. Cl. Comm. At 252.

²⁸ *Sioux Nation v. United States*, 23 Ind. Cl. Comm. (1970).

The Oglala Band of the Teton Sioux is a sovereign band of Indians with attendant powers that reorganized the “Oglala Sioux Tribe of the Pine Ridge Indian Reservation” (“OST”) by adopting the benefits of the Indian Reorganization Act (“IRA”) of June 18, 1934, 25 U.S.C. § 5101 *et seq.*, and a Constitution and Bylaws under Section 16 of the Act, 25 U.S.C § 5123). Under Article III, Section 1 of the Tribal Constitution provides that the governing body of the Oglala Sioux Tribe is the “Oglala Sioux Tribal Council.”

The Oglala Sioux Tribe’s federally approved Tribal Constitution specifically empowers the Tribal Council to:

- (1) “To negotiate with the Federal, State, and local governments, on behalf of the tribe, and to advise the representatives of the Interior Department on all activities of the Department that may affect the Pine Ridge Indian Reservation” under Article IV, Section 1 (a);
- (2) To protect and preserve the property, wild life and natural resources – gases, oil, and other materials, etc. – of the tribe . . .” under Article IV, Section 1 (m); and
- (3) “To adopt laws protecting and promoting the health and general welfare of the Oglala Sioux Tribe and its membership” under Article IV, Section 1 (w), and

The Oglala Sioux Tribe presently enjoys all of the rights and privileges guaranteed under its existing treaties with the United States in accordance with 25 U.S.C. § 71 and Section 4 of the Act of June 15, 1935, 49 Stat. 378 (codified at 25 U.S.C. § 5128.

IX. EPA HAS A FIDUCIARY DUTY TO PROTECT THE OGLALA SIOUX TRIBE FROM THE HARMFUL EFFECTS OF URANIUM DEVELOPMENT WITHIN ITS TREATY TERRITORIES AND PROTECT THE PROPERTY, PERSONS AND LIVES OF OGLALA SIOUX TRIBAL MEMBERS UNDER ARTICLE 8 OF THE 1877 ACT.

As a federal agency of the United States Government, the EPA has a fiduciary duty to protect the Oglala Sioux Tribe and its members from any adverse impacts resulting from uranium mining in the Dewy-Burdock project area of the southern Black Hills. Adverse impacts include, but are not limited to, the following:

- (1) Failure to comply with tribal treaties and federal statutes, including the protection of tribal fisheries in the Cheyenne River from its headwaters in Wyoming to its confluence with the Missouri River, as provided in Article 5 of the 1851 Treaty and federal case law, and protection of the property, persons and lives of tribal members under Article 8 of the 1877 Black Hills Act against contamination of the environment in which tribal members reside. This also includes ensuring clean water for fish habitat in the river to protect the Tribe’s rights to fish in the river under Article 5 of the 1851 Treaty.²⁹

²⁹ There is also a corresponding 1851 Treaty right to maintain the Cheyenne River and its tributaries inhabitable for the Oglala Sioux Tribe’s fisheries in the river and its tributaries, i.e., water rights

- (2) Failure to protect the Tribe and its members from ground water contamination that affects the spiritual significance of sacred site and burial sites (both currently known and those yet to be discovered) by competent surveys, i.e., you can't make a holy place unholy by disturbing its natural conditions, including the ground water under these sites by polluting the waters with toxic uranium extraction chemicals and injection wells;
- (3) Failure to protect the Tribe and its members from surface water contamination, in that ground waters at the uranium site will eventually percolate into the Cheyenne River and its tributary streams and creeks. Not only are tribal fisheries going to be adversely impacted, but, pollution in the river will eventually flow onto the river and river bed of the Cheyenne River where it abuts the Pine Ridge Indian Reservation;³⁰ and affects agricultural on the reservation, and the health and welfare of tribal members residing on the reservation by contamination of ground water wells and the river itself from ;
- (4) The destruction of the Tribe's Winters Doctrine Water Rights and aboriginal water rights in the Cheyenne River and its tributary streams and creeks. Winters Doctrine

that impose a duty on EPA and other concerned federal agencies, to protect both the Tribe's water rights and fishing rights from contaminates from uranium mining (or otherwise) that will negatively impact and/or destroy the Tribes fishing rights in the river. See, e.g., *United States v. Adair*, 723 F.2d 1394, 1408-1415 (9th Cir. 1983) ("*Adair II*"), *cert. denied sub nom, Oregon v. United States*, 467 U.S. 1252, 104 S. Ct. 3536, 82 L. Ed. 2d 841 (1984). (off-reservation treaty right to fish implied reservation of water to support tribal fisheries); *Dep't of Ecology v. Yakima Reservation Irrigation Dist.*, 850 P.2d 1306, 1317 (Wash. 1993) (Washington Supreme Court recognized that tribes with treaty language . . . reflecting a reservation of aboriginal rights to fish also have water rights for instream flow habitat protection). Also see *United States v. Alpine Land & Reservoir Co.*, 788 F. Supp. 2d 1209 (D. Nev. 2011) ("the Tribe retains a *Winters* right . . . to water to maintain the fishery"), *citing Nevada v. United States*, 463 U.S. 110 (1983). Also see *Hopi Tribe v. U.S.*, 782 F.3d 662, 669 (Fed. Cir. 2015) (In some circumstances, [the Winters Doctrine] may also give the United States the power to enjoin others from practices that reduce the quality of water feeding the reservation); Judith V. Royster, *Water Quality And The Winters Doctrine*, 107 Water Resources Update 50 (1997), <http://opensiuc.lib.siu.edu/cgi/viewcontent.cgi?article=1291&context=jcwre> (A tribe may receive the quantity of water called for under its Winters rights, but the quality of the water may make it unusable for the purposes for which it was intended . . . * * * If the water provided at the reservation border is so degraded that it cannot be used for irrigation, then the water right is essentially meaningless).

³⁰ The Oglala Sioux Tribe's off-reservation and on-reservation Winters Doctrine and aboriginal ground and surface water rights in the Cheyenne River and its tributaries are trust property. This includes the ground waters in the Dewey-Burdock Project Area that feeds the Cheyenne River. See generally, Robert T. Anderson, *Indian Water Rights and the Federal Trust Responsibility*, 46 Nat. Resources J. 399 (2006) ("Indian reserved water rights are trust property with legal title held by the United States"); 55 Fed. Reg. 9223 (Mar. 12, 1990) ("Indian water rights are vested property rights for which the United States has a trust responsibility, with the United States holding legal title to such water in trust for the benefit of the Indians").

water rights are vested, Fifth Amendment property rights held in trust by the Federal Government;

- (5) Failure to comply with NEPA, the National Historic Preservation Act of October 15, 1966, P.L. 89-665, 80 Stat. 915, *as amended*, 16 U.S.C. § 470 *et seq.* (“NHPA”), and the Native American Graves Protection and Repatriation Act of November 16, 1990 (25 U.S.C. §§ 3001 *et seq.*) (“NAGPRA”), and other environmental statutes and cultural resources statutes.;
- (6) Failure to conduct complete, competent cultural surveys as required by federal law to protect cultural resources, spiritual sites, and rock features, and human remains, ³¹ n both federal and private lands³² in the project area; and
- (7) Failure to engage in meaningful government-to-government consultations as required by Executive Order 175 and Section 106 of the NHPA.

X. CONCLUSION

The Oglala Sioux Tribe and other 1851 Treaty and 1868 Treaty signatory tribes have never had government-to-government consultations with EPA for the Dewey-Burdock In Situ Uranium Project under Executive Order No. 13175 as implement by President Obama’s November 5, 2009 memorandum, or under Oglala Sioux Tribal Council Ordinance No. 11-10, under applicable federal environmental laws, including Section 106 of the NHPA, and under the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), adopted by the General Assembly on Thursday, 13 September 2007, and supported by the December 6, 2010 declaration of President Obama. The following articles of UNDRIP regarding consultations with the Oglala Sioux Tribe are applicable to the Dewey-Burdock Project:

³¹ The Oglala Sioux Tribe claims ownership (along with other 1851 Treaty signatory Sioux tribes) of all Native American burial sites and human remains, and an ownership interest in all cultural items, associated funerary objects, unassociated funerary objects, sacred objects, cultural patrimony, including stone features, i.e., stone rings, stone effigies, stone alignments, rock cairns located on federal lands under NAGPRA, and a right of access to sacred sites located on federally held lands within the Dewey-Burdock Project Area under the American Indian Religious Freedom Act (“AIRFA”), 42 U.S.C. § 1996.

³² The Federal Government has a fiduciary duty to protect the Sioux tribes’ under the legal principles recognized in *Charrier v. Bell*, 496 So. 2d 601 (La. App. 1 Cir. 1986) *cert. denied*, 498 So. 2d 753 (La. 1986) (Tunica-Biloxi Tribe retained ownership of cultural items discovered on privately held lands) and *Black Hills Inst. of Geological Research v. South Dakota Sch. of Mines*, 12 F.3d 737, 742-744 (8th Cir. 1993) (Black Hills III) (Because the [dinosaur] fossil was trust property that was removed from the Indian trust land without the knowledge or consent of the United States, it remained the property of the United States. Likewise, the tribe’s cultural resources located on private lands are still trust property held in trust for the tribes by the United States, were not conveyed to the present non-Indian occupants under the Homestead Act or otherwise; the United States and its agencies therefore have a fiduciary duty to protect these cultural resources on private lands to the same extent that it had a duty to a dinosaur fossil removed from trust land in the *Black Hills Inst.*, *supra*.

Article 19: States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free, prior and informed consent before adopting and implementing . . . *administrative* measures that may affect them.

Article 32: States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources.

Accordingly, the Oglala Sioux Tribe requests that the EPA engage in government-to-government consultations under the above-referenced legal authority to address all the concerns of the Tribe as articulated above.

ORDINANCE OF THE OGLALA SIOUX TRIBAL COUNCIL
OF THE OGLALA SIOUX TRIBE
(An Unincorporated Tribe)

ORDINANCE OF THE OGLALA SIOUX TRIBAL COUNCIL ESTABLISHING PROCEDURES FOR GOVERNMENT-TO-GOVERNMENT CONSULTATION BETWEEN THE OGLALA SIOUX TRIBE AND THE UNITED STATES GOVERNMENT, AND OTHER GOVERNMENTS.

WHEREAS, the Government-to-Government relationship between the Oglala Sioux Tribe was established in the United States Constitution, Article 6 (Supremacy Clause); the Treaty of July 2, 1825, United States-Oglala Band of Sioux Nation, 7 Stat. 252; Rev. Stat. § 2116, 25 U.S.C. § 177 (codifying section 12 of the Trade and Intercourse Act of June 30, 1834, ch. 161, 4 Stat. 730); the Treaty of September 17, 1851, United States-Teton Division of Sioux Nation, *et al.*, 11 Stat. 749; the Treaty of April 29, 1868, United States-Sioux Nation, 15 Stat. 635; Rev. Stat. § 2079, 25 U.S.C. § 71 (codifying the Act of March 3, 1871, ch. 120, § 1, 16 Stat. 566), the Indian Reorganization Act of June 18, 1934, ch. 476, 48 Stat. 984, 25 U.S.C. § 461 *et seq.*, the Indian Self-Determination and Education Assistance Act of January 4, 1975, P.L. 93-638, 88 Stat. 2203, 25 U.S.C. § 450, *et seq.*, and other Congressional enactments, and

WHEREAS, the 1851 Treaty recognized title in the Oglala Band to 60 million acres of territory currently in the States of North Dakota, South Dakota, Nebraska, Montana and Wyoming for the Oglala Sioux Tribe and other Sioux tribes, and

WHEREAS, a permanent homeland was established within the 1851 Treaty territory for the "absolute and undisturbed use and occupation" of the Oglala Sioux Band and other Sioux bands, which homeland has been referred to as the "Great Sioux Reservation" and comprises substantially all of present day South Dakota west of the east bank of the Missouri River, and

WHEREAS, the Indian Claims Commission also found that the Oglala Band and other Sioux bands held aboriginal (non-treaty) title to 14 million acres east of the Missouri River in the States of North Dakota and South Dakota, and

WHEREAS, uncontested encroachments on the 1851 Treaty territory by the United States and its citizens resulted in the Powder River War of 1866-1868 between the United States and the Oglala band and other bands of Sioux Indians. as a result of which, peace was concluded between the United States and the Oglala Band and other Sioux bands by treaty on April 29, 1868, 15 Stat. 635 ("1868 Fort Laramie Treaty," which treaty was duly ratified by the United States on February 16, 1869 and proclaimed by the President on February 24, 1869, and

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WHEREAS, the 1868 Treaty provided for a mutual demobilization of the United States and Oglala Band and other Sioux bands without terms of surrender on either side, and as a result thereof, the Oglala Band and other Sioux bands were never militarily conquered by the United States, and the Oglala Band has abided by the 1868 Treaty and resided on its reservation in accordance of the terms of the treaty since 1868, except for incidences in Montana in 1876 where the Oglala Band and other Sioux bands were legally exercising its 1868 Treaty, Article 11, hunting rights and yet had to defend themselves from attack by the United States Cavalry in violation of Articles 1 and 11 of the 1868 Treaty, and

WHEREAS, subsequent to ratification of the 1868 Treaty, no aboriginal or treaty territory of the Oglala Band was ever acquired by the United States in accordance with 25 U.S.C. § 177 or Article 12 of the 1868 Treaty, and all acquisitions of Oglala Band's territory was either confiscated by the United States or acquired with the requisite consent of the Band, and

WHEREAS, the "Oglala Band" reorganized in 1936 as the "Oglala Sioux Tribe of the Pine Ridge Indian Reservation" under Section 16 of the 1934 Indian Reorganization Act of June 18, 1934, ch. 576, 48 Stat. 987, 25 U.S.C. § 476, by adopting a constitution and bylaws approved by the Secretary of the Interior, and presently enjoys all of the rights and privileges guaranteed under its existing treaties with the United States in accordance with 25 U.S.C. § 478b

WHEREAS, as a result of its unique government-to-government relationship with the United States, and because the Oglala Band (now Oglala Sioux Tribe) is one of the few militarily unconquered Sioux tribes in the United States and all of its territory now in the possession of the United States was acquired without its consent, the Oglala Sioux Tribe still possesses very strong aboriginal rights within all the territory that comprised its aboriginal homeland, and as a result thereof, the Tribe has both a domestic and international rights to government-to-government consultations with the United States on the formulation of federal policies, or on all federal actions or undertakings that adversely affect its aboriginal and treaty territories, and

WHEREAS, the Executive Branch of the united States Government has recognized the right of government-to-government consultations with Indian Tribes in:

- a. President Clinton's Memorandum of April 29, 1994, which, among other things, directed agencies to:

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- (i) "ensure that the department or agency operates within a government-to-government relationship with Federally-recognized Tribal government,"
 - (ii) "consult, to the greatest extent practicable ad to the extent permitted by law with Tribal governments prior to taking actions that affect Federally recognized tribes, to be open and candid so that all interested parties may evaluate for themselves the potential impact of relevant proposals," and
 - (iii) "assess the impacts of Federal government plans, projects, programs, and activities on tribal trust resources to assure that Tribal government rights and concerns are considered during the development of such plans, projects, and activities."
- b. President Clinton's Executive Order No. 13084 of May 19, 1998, which directed federal agencies to respect tribal self-government and sovereignty, tribal rights, and tribal responsibilities whenever they develop policies "significantly affecting Indian tribal governments,"
- c. President Clinton's Executive Order No. 13175 of November 6, 2000, which directed all federal agencies to establish consultation and collaboration with tribal officials in the development of federal policies that have tribal implications, and
- d. President Barak Obama Memorandum of November 5, 2009, to the heads of the Executive Department and federal agencies to submit plans of actions that the agencies will take to implement the policies and directives of President Clinton's Executive Order 13175,

and

WHEREAS, Congress has also mandated government-to-government consultation with Indian tribes, which have been implemented in statutes, orders, regulations, rules, policies, manuals, protocols and guidance, most of which are described in a document issued by the White House- Indian Affairs Executive Working Group (WH-IAEWG), dated January, 2009, and entitled "List of Federal Tribal Consultation Statutes, Orders, Regulations, rules, Policies, Manuals, protocols and guidance," and

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WHEREAS, the Oglala Sioux Tribe has never enacted legislation (ordinances) establishing procedures for government-to-government consultation between the Tribe and the United States, and believes that such procedures are necessary to establish a clear process for documenting the nature and results of consultations between the Tribe and the United States and its agencies, now

THEREFORE BE IT ORDAINED, that the following sections relating to government-to-government consultations are hereby adopted for the Oglala Sioux Tribe.

Section 1. Title. This ordinance shall be known and referred to as the Oglala Sioux Tribe Consultation and Coordination Ordinance of 2001.

Section 2. Definitions. The following words and phrases used in this Election Code shall have the following meanings:

"Consultation" and/or "government-to-government" consultation shall mean the formal process of cooperation, negotiation, and mutual decision making between the Oglala Sioux Tribe and the United States Government, and other governments. It is the process through which sovereign governments develop a common understanding of technical and legal issues and use this understanding to formulate mutually agreeable decisions.

Section 3. Scope. This ordinance is intended to extend to:

- a. All of the aboriginal homeland of the Oglala Sioux Tribe, including, the 60 million acre territory Sioux territory described in Article 5 of the 1851 Ft. Laramie Treaty; the territory and the expanded hunting rights territory described in Articles 2, 11 and 16 of the 1868 Ft. Laramie Treaty;
- b. All of the aboriginal title (non-treaty) Sioux territory comprising 14 million acres located east of the Missouri River in the present states of North Dakota and South Dakota; and
- c. All undertakings and actions that adversely affect the Oglala Sioux Tribe's aboriginal, treaty or statutorily recognized rights and interests within its aboriginal and treaty recognized territories.

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Section 4. Purpose. The primary purpose and intent of this ordinance is to:

- a. Establish a clear process for documenting the nature and results of government-to-government consultations between the Oglala Sioux Tribe and Federal Government and its agencies;
- b. Provide a consistent, orderly process to government-to-government consultation to make and ensure that government-to-government consultations are meaningful and effective, and
- c. Be applicable, to the fullest extent possible, for documenting the nature and results of government-to-government consultations between the Oglala Sioux Tribe and other Indian tribes, inter-tribal organizations and state governments and agencies.

Section 5. Authority. This ordinance is adopted pursuant to the Oglala Sioux Tribe's inherent sovereignty and Article IV, Section 1 (a) of the Amended Constitution of the Oglala Sioux Tribe, which empowers the Tribal Council "(a) To negotiate with the Federal, State, and local governments, on behalf of the tribe, and to advise and consult with representatives of the Interior Department on all activities of the Department that may affect the Pine Ridge Indian Reservation."

Section 6. Principles and guidelines. All government-to-government consultations between the Oglala Sioux Tribe and the Federal Government, and State or other tribal governments, shall be conducted with the Oglala Sioux Tribe under the following principles and guidelines:

- a. The Oglala Sioux Tribe is a sovereign government with attendant powers;
- b. All treaties between the Oglala Sioux Tribe and the United States must be honored and enforced to the fullest extent possible;
- c. The Oglala Sioux Tribe has never been militarily conquered by the United States, and has existed in a peaceful relationship with the United States since 1868, pursuant to Article I of the 1868 Ft. Laramie Treaty; and

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- d. The Oglala Sioux Tribe and its territories are not possessions of the United States.

Section 7. Procedures. All consultation between the Oglala Sioux Tribe and the Federal Government, and State or other tribal governments, must:

**WHEN CONSULTATION IS REQUESTED BY
THE FEDERAL GOVERNMENT OR OTHER GOVERNMENTS**

- a. Occur through a formal meeting with the Oglala Sioux Tribal Council. Neither the Executive Committee nor any Executive Committee member or staff member of the Tribe shall be authorized to engage in government-to-government consultations with any government or governmental agency;
- b. Accomplish the goals and objectives described in Section 8.
- c. Be initiated by serving a formal written request for government-to-government consultation with the Secretary of the Oglala Sioux Tribe. The request for consultation should describe the impending, proposed project or activity that may or may not affect the Oglala Sioux Tribe's interests in its aboriginal or treaty territory and/or rights or interests therein. This include the Tribes aboriginal and treaty territory both within and outside the exterior boundaries of the Pine Ridge Indian Reservation;
- d. It shall be the duty of the Tribal Secretary to immediately notify all members of the Executive Committee and Tribal Council of each request for consultation;
- e. Upon receipt of a request for consultation, the Tribal President, or council members under established procedures, shall call a special council meeting for the purpose of responding to the request for consultation. The Tribal Council shall:
- (i) Request by resolution a policy-level meeting, initiating government-to-government consultations;

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- (ii) Authorize the Tribe's technical staff (and when appropriate the Tribe's attorneys) to meet with the responding government's technical staff to discern and define the issues that are subject to the request for consultation including how the proposed governmental undertaking or activity affects the tribe's aboriginal, treaty, statutory or other interests;
- (iii) Schedule a special council meeting in which the Tribe's technical staff (and when appropriate the Tribe's attorneys) can fully brief the Tribal council on the issues that are subject to consultation, with recommendations and opinions;
- (iv) Schedule a follow-up special council meeting in which the Tribe through the Tribal council shall engage in formal government-to-government consultation based on the recommendations and opinions of its staff (and attorneys); and
- (v) Pass a resolution fully articulating the Tribe's formal decision, which decision shall be consistent with the provisions of this ordinance.

WHEN CONSULTATION IS REQUESTED BY THE OGLALA SIOUX TRIBE

- a. Be initiated by passing a tribal council resolution requesting government -to-government consultation, which resolution shall be executed and sent by the Tribal President to appropriate official of the Federal Government or tribal or state government with which consultation is desired;
- b. Follow the procedure described in Subsections 7.e. (i) through (v) above; and
- c. Accomplish the same objectives described in Section 8.

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Section 8. Objectives. All government-to-government consultations should ensure the following results:

- a. Tribal officers and officials proceed in a dignified, orderly manner, keeping in mind that the Oglala Sioux Tribe is engaging in the consultations as a sovereign government that maintains government-to-government relations with the United States Government and other governments. Tribal officials engaging in consultation should dress in appropriate attire during the consultation proceedings, and conduct themselves in a professional, dignified, and diplomatic manner;
- b. Tribal officers and officials fully understand the issues to be discussed prior to engaging in and consultation proceeding; this includes an understanding of tribal history, federal treaties and federal statutes, regulations and rules, that will be discussed at each consultation;
- c. Ensure that the Tribe's interest are fully protected, including interests in all tracts of land located within the Tribe's aboriginal and treaty territories, and interests therein, as well as tribal cultural resources, human remains, and any other tribal patrimony;
- d. Ensure compliance with federal treaties, statutes, regulations and rules and tribal policies (e.g., policy that the Black Hills Are Not For Sale and tribal land claims must include restoration of federally held lands to the Tribe);

Section 9. Documentation. Following any governmental-to-government consultation between the Oglala Sioux Tribe and the Federal government, or other governments, the Tribal Council shall:

- a. Achieve a bi-lateral decision between the Tribe and the United States, or other government;
- b. Adopt a resolution documenting the nature and results of the consultation and bilateral decision;
- c. Direct the Tribal Secretary to file a copy of the resolution and all backup documentation with the Tribal Records Department.

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Section 10. Representations. Neither the Federal Government nor any agency thereof, nor any other government, shall legitimately represent to any other government or governmental entity, nor to any third party, that they have consulted with the Oglala Sioux Tribe unless they fully comply with the terms and conditions of this ordinance.

Section 11. Effective Date. This ordinance shall become effective immediately.

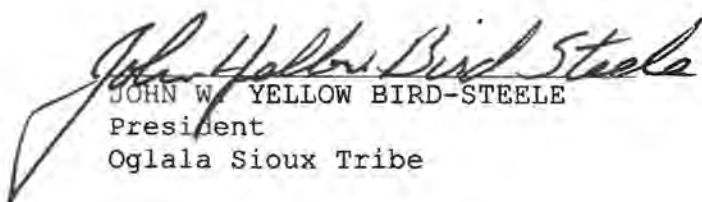
Section 12. Repeal of inconsistent ordinances. All previously enacted ordinances are hereby repealed to the extent that they are inconsistent with this ordinance.

C-E-R-T-I-F-I-C-A-T-I-O-N

I, as undersigned Secretary of the Oglala Sioux Tribal Council of the Oglala Sioux Tribe, hereby certify that this Ordinance was adopted by a vote of: 13 For; 1 Against; 0 Abstain; and 0 Not Voting, during a SPECIAL SESSION held on the 7th day of JUNE, 2011.


RHONDA J. TWO EAGLE
Secretary
Oglala Sioux Tribe

A-T-T-E-S-T:


JOHN W. YELLOW BIRD-STEELE
President
Oglala Sioux Tribe

RESOLUTION NO. 18-88RESOLUTION OF THE OGLALA SIOUX TRIBAL COUNCIL
OF THE OGLALA SIOUX TRIBE
(An Unincorporated Tribe)

RESOLUTION OF THE OGLALA SIOUX TRIBE REQUESTING THAT THE UNITED STATES PLACE A MORATORIUM ON ALL PROPOSED ACTIVITY IN CONNECTION WITH THE PROPOSED DEWEY-BURDOCK IN SITU RECOVERY URANIUM PROJECT UNTIL THE UNITED STATES COMPLETES ALL REQUIRED FEDERAL LAWS, INCLUDING THE NATIONAL ENVIRONMENTAL PROTECTION ACT AND THE NATIONAL HISTORIC PRESERVATION ACT, AND UNTIL THE UNITED STATES ENGAGES IN MEANINGFUL GOVERNMENT-TO-GOVERNMENT CONSULTATION WITH ALL SIXTEEN (16) TRIBES OF THE GREAT SIOUX NATION AND OTHER AFFECTED INDIAN TRIBES, NOT JUST THE OGLALA SIOUX TRIBE, AND ALLOWS ALL AFFECTED INDIAN TRIBES TO THE OPPORTUNITY, ACCESS, TIME, AND RESOURCES TO COMPLETE THOROUGH, ACCURATE ARCHAEOLOGICAL, CULTURAL, AND HISTORIC PRESERVATION SURVEYS PRIOR TO COMPLETION OF THE SECTION 106 PROCESS UNDER THE NATIONAL HISTORIC PRESERVATION ACT, TO ENSURE PROPER PROTECTION OF THE BLACK HILLS AND SACRED LANDS IN AND AROUND THE BLACK HILLS, ALL OF WHICH ARE WITHIN THE TREATY PROTECTED TERRITORY OF THE GREAT SIOUX NATION UNDER THE FORT LARAMIE TREATIES OF 1851 AND 1868.

WHEREAS, the Oglala Sioux Tribe organized under Section 16 of the Indian Reorganization Act of 1934 on December 14, 1935 (25 U.S.C. § 5123) by adopting a federally approved Constitution and By-laws, and under Article III of the Tribal Constitution, the Tribal Council is the governing body of the Oglala Sioux Tribe, and

WHEREAS, under Article IV, Section 1(a), of the Tribal Constitution, the Tribal Council is vested with the power to negotiate with the United States on behalf of the Tribe and its members, and

WHEREAS, the proposed Dewey-Burdock In Situ Recovery Uranium Project is within the treaty protected territory of the Great Sioux Nation under Fort Laramie Treaties of 1851 and 1868, and

WHEREAS, the Tribal Council enacts this Resolution to request that the United States place a moratorium on all proposed activity in connection with the proposed Dewey-Burdock In Situ Recovery Uranium Project until the United States complies with all federal laws, including the National Environmental Protection Act and the National Historic Preservation Act, and until the United States engages in meaningful government-to-government consultation with all sixteen (16) Tribes of the Great Sioux Nation to ensure proper protection of the Black Hills and sacred lands in and around the Black Hills, all of which are within the treaty protected territory of the Great Sioux Nation under the Fort Laramie Treaties of 1851 and 1868, and

WHEREAS, existing archaeological, cultural, and historic preservation surveys are inadequate; inadequate time and resources have been allotted to complete such surveys on the proposed project area, which is in excess of 10,500 acres; additional time and resources are

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needed to continue the process and to protect and prevent desecration of our sacred lands and resources; and all affected Tribal Nations must have the opportunity, access, time, and resources to participate in and complete thorough and accurate archaeological, cultural, and historic preservation surveys prior to completion of the Section 106 process under the National Historic Preservation Act, and

WHEREAS, all sixteen (16) Tribes of the Great Sioux Nation, and all other affected Indian Tribes, must be afforded an opportunity to engage in meaningful government-to-government consultation with the United States before the project proceeds any further; now

THEREFORE BE IT RESOLVED, that the Oglala Sioux Tribal Council of the Oglala Sioux Tribe does hereby requests that the United States place a moratorium on all proposed activity in connection with the proposed Dewey-Burdock In Situ Recovery Uranium Project until the United States complies with all federal laws, including the National Environmental Protection Act and the National Historic Preservation Act, and

BE IT FURTHER RESOLVED, that the Oglala Sioux Tribal Council hereby requests that the United States place a moratorium on all proposed activity in connection with the proposed Dewey-Burdock In Situ Recovery Uranium Project until the United States engages in meaningful government-to-government consultation with all sixteen (16) Tribes of the Great Sioux Nation, and other affected Indian Tribes, to ensure proper protection of the Black Hills and sacred lands in and around the Black Hills, all of which are within the treaty protected territory of the Great Sioux Nation under the Fort Laramie Treaties of 1851 and 1868, and

BE IT FURTHER RESOLVED, that the Oglala Sioux Tribal Council hereby requests that the United States and the Nuclear Regulatory Commission allow all affected Tribal Nations the opportunity, access, time, and resources to participate in and complete thorough and accurate archaeological, cultural, and historic preservation surveys prior to completion of the Section 106 Process under the National Historic Preservation Act, and

BE IT FURTHER RESOLVED, that the Oglala Sioux Tribal Council hereby requests that the United States make all pertinent information relating to the proposed Dewey-Burdock In Situ Recovery Uranium Project available and known to the public because it is a matter of extraordinary public importance and our sacred lands and resources are under attack.

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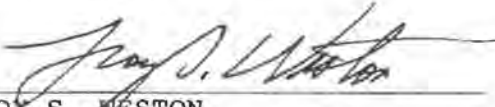
C-E-R-T-I-F-I-C-A-T-I-O-N

I, as the undersigned Secretary of the Oglala Sioux Tribal Council, of the Oglala Sioux Tribe hereby certify that this Resolution was adopted by a vote of: 14 For; 0 Against; 0 Abstain; and 0 Not Voting; during a REGULAR SESSION held on the 27TH day of JUNE, 2018.



DONNA M. SALOMON
Secretary
Oglala Sioux Tribe

A-T-T-E-S-T:



TROY S. WESTON
President
Oglala Sioux Tribe

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RESOLUTION OF THE OGLALA SIOUX TRIBAL COUNCIL
OF THE OGLALA SIOUX TRIBE
(An Unincorporated Tribe)

RESOLUTION OF THE OGLALA SIOUX TRIBAL COUNCIL OF THE OGLALA SIOUX TRIBE REQUESTING THE NUCLEAR REGULATORY COMMISSION TO REQUIRE POWERTEC (USA) TO INCREASE THE AMOUNT OF FUNDS NEEDED TO COMPLETE AN ADEQUATE CULTURAL RESOURCES SURVEY OF THE DEWEY-BURDOCK IN SITU URANIUM MINING PROJECT IN THE SOUTHERN BLACK HILLS.

WHEREAS, the Oglala Sioux Tribe organized under Section 16 of the Indian Reorganization Act of 1934 on December 14, 1935 (25 U.S.C. § 5123) by adopting a federally approved Constitution and By-laws, and under Article III of the Tribal Constitution, the Tribal Council is the governing body of the Oglala Sioux Tribe, and

WHEREAS, under Article IV, Section 1(a), of the Tribal Constitution, the Tribal Council is vested with the power to negotiate with the United States on behalf of the Tribe and its members, and

WHEREAS, under Article IV, Section 1(w), of the Tribal Constitution, the Tribal Council is vested with the power to adopt laws protecting and promoting the health and general welfare of the Oglala Sioux Tribe and its members, and

WHEREAS, the Black Hills are within the aboriginal and treaty guaranteed homeland of the Oglala Sioux Tribe, and other Sioux tribes, and is also an acknowledged Sacred territory of the Sioux tribes, see Treaty of 1851, 11 Stat. 749 (Sept. 17, 1851), and the Treaty of 1868, 15 Stat. 635 (Apr. 29, 1868), and

WHEREAS, the Black Hills were confiscated by the United States in the Act of February 28, 1877 (19 Stat. 254) in violation of Article 12 of the 1868 Treaty, and provided in Article 8 that the Sioux tribes would be subject to the laws of the United States and "each individual Sioux Indian would be protected in his rights of property, person and life", and

WHEREAS, the Supreme Court interpreted the "subject to the laws of the United States," in the 1877 Act as being "subject to the laws of the United States, not in the sense of citizens, but, as they had always been, as wards subject to a guardian, which acknowledged a trust responsibility between the United States and the Oglala Sioux Tribe, see *Ex Parte Crow Dog*, 109 U.S. 556-568-69 (1883), and

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WHEREAS, protection of the persons and lives of each tribal member includes a federal trust obligation to protect the ground waters in the southern Black Hills from contamination within the Cheyenne River watershed that includes all the ground waters in the Southern Black Hills, which ground waters will ultimately flow into the Cheyenne River including that part of the Cheyenne River that constitutes the river bed of the river that abuts and is located within the exterior boundaries of the Pine Ridge Reservation, and

WHEREAS, In Situ uranium mining in the southern Black Hills will contaminate the ground waters and Cheyenne River and will adversely affect the persons and lives of tribal members residing on the reservation and surrounding communities, and the United States and its agencies must fulfill its trust responsibility to the Oglala Sioux Tribe and prevent such contamination from happening, and

WHEREAS, in addition to protect the person and lives of individual tribal members of the Oglala Sioux Tribe, the Tribe also has many cultural resources in the southern Black Hills that are the property of the Tribe, and human remains of ancestors that must be protected in the area referred to as the "Dewey-Burdock" area under NEPA, NHPA, NAGPRA, ARPA, and other applicable federal laws including Article 8 of the 1877 Act, and

WHEREAS, the Nuclear Regulatory Commission (NRC) has approved an Economic Impact Statement (EIS) and has issued a Record of Decision (ROD) for the Dewey Burdock In Situ Uranium Mining Project for Powertec (USA) to engage in extensive In-Situ uranium mining in the Dewey-Burdock area of the southern Black Hills in South Dakota, but the cultural resources survey completed for the EIS is inadequate and must now be completed in consultation with the Oglala Sioux Tribe as required by federal law and regulations, and

WHEREAS, Powertec has approved a budget of \$10,000 (ten thousand dollars) to complete the cultural resources survey which is woefully inadequate to comply with federal laws and regulations, and tribal laws, and

WHEREAS, the Oglala Sioux Tribe Natural Resources Department and Tribal Historic Preservation Office has come up with a budget of \$2,178,665.69 (two million, one hundred seventy-eight thousand, six hundred sixty-five dollars and sixty-nine cents) to adequately complete the cultural sources survey on the Dewey-Burdock 10,500-plus acres involved in Powertec In Situ uranium mining project; now

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THEREFORE BE IT RESOLVED, that the Oglala Sioux Tribal Council of the Oglala Sioux Tribe does hereby requests the Nuclear Regulatory Commission to require Powertec (USA) to provide the \$2,178,665.69, determined by the Oglala Sioux Tribal Natural Resources Department and Historic Preservation Office, to adequately complete the cultural resources survey for the Dewey-Burdock 10,500-plus acres for the cultural resources survey and that such a survey be completed prior to any further activity in the affected area, and

BE IT FURTHER RESOLVED, that the Oglala Sioux Tribal Council adopts this Resolution to ensure full compliance will all applicable laws and does so without waiving its opposition to any uranium mining that is not conducted in full compliance will all applicable laws and treaties, including the Fort Laramie Treaties of 1851 and 1868, and

BE IT FURTHER RESOLVED, that the Oglala Sioux Tribe is opposed to any uranium mining and without waiving its opposition requests compliance with all laws including this.

C-E-R-T-I-F-I-C-A-T-I-O-N

I, as the undersigned Secretary of the Oglala Sioux Tribal Council, of the Oglala Sioux Tribe hereby certify that this Resolution was adopted by a vote of: 14 For; 0 Against; 0 Abstain; and 0 Not Voting; during a REGULAR SESSION held on the 27TH day of JUNE, 2018.




DONNA M. SALOMON

Secretary

Oglala Sioux Tribe

A-T-T-E-S-T:



TROY S. WESTON

President

Oglala Sioux Tribe

Dewey-Burdock 10,500 acres tribal cultural survey				
Activity	# Units	Unit	Cost	Totals
Record Search with SD State Historical Society	1	Each	\$130.00	\$130.00
Fieldwork Authorization	0	Hours	\$50.00	\$0.00
Record Search Time & Mapping	1	Days	\$400.00	\$400.00
Field Work Preparation	5	days	\$400.00	\$2,000.00
Field Inventory 10 meter intervals	400	Days	\$500.00	\$200,000.00
Site Recording & Evaluation Estimated 200 sites	200	Days	\$500.00	\$100,000.00
Field Mileage	20000	Miles	\$0.535	\$10,700.00
Lodging & Per Diem	400	Nights	\$195.00	\$78,000.00
Report preparation	200	Days	\$400.00	\$80,000.00
Tribal Elder + Support personnel Costs, Fees/Gifts			\$0.00	\$500,000.00
Oral History Research & Interviews	365	Days	\$400.00	\$146,000.00
Oral History Report Preparation	180	Days	\$400.00	\$72,000.00
Oral History Mileage	18000	Miles	\$0.535	\$9,630.00
Oral History Per Diem	90	Nights	\$195.00	\$17,550.00
Materials and Supplies, Equipment			\$0.00	\$100,000.00
Project Management	365	Days	\$500.00	\$182,500.00
Sub Total				\$1,498,910.00
Indirect Costs/Tribal Overhead	45.35			\$679,755.69
Total				\$2,178,665.69

RESOLUTION NO. 18-89XB

RESOLUTION OF THE EXECUTIVE COMMITTEE
OF THE OGLALA SIOUX TRIBE
(An Unincorporated Tribe)

RESOLUTION OF THE EXECUTIVE COMMITTEE OF THE OGLALA SIOUX TRIBE REQUESTING THE NUCLEAR REGULATORY COMMISSION TO REQUIRE POWERTEC (USA) TO INCREASE THE AMOUNT OF FUNDS NEEDED TO COMPLETE AN ADEQUATE CULTURAL RESOURCES SURVEY OF THE DEWEY-BURDOCK IN SITU URANAUMIN MINING PROJECT IN THE SOUTHERN BLACK HILLS.

WHEREAS, the Black Hills are within the aboriginal and treaty guaranteed homeland of the Oglala Sioux Tribe, and other Sioux tribes, and is also an acknowledged Sacred territory of the Sioux tribes, and

WHEREAS, the Black Hills was confiscated by the United States in the Act of February 28, 1877 (19 Stat. 254) in violation of Article 12 of the 1868 Treaty, and provided in Article 8 that the Sioux tribes would be subject to the laws of the United States and "each individual Sioux Indian would be protected in his rights of property, person and life," and

WHEREAS, the Supreme Court interpreted the "subject to the laws of the United States," in the 1877 Act as being "subject to the laws of the United States, not in the sense of citizens, but, as they had always been, as wards subject to a guardian. . . .," which acknowledged a trust responsibility between the United States and the Oglala Sioux Tribe, see *Ex Parte Crow Dog*, 109 U.S. 556-568-69 (1883), and

WHEREAS, protection of the persons and lives of each tribal member includes a federal trust obligation to protect the ground waters in the southern Black Hills from contamination within the Cheyenne River water shed that includes all the ground waters in the Southern Black Hills, which ground waters will ultimately flow into the Cheyenne River including that part of the Cheyenne River that constitutes the river bed of the river that abuts and is located within the exterior boundaries of the Pine Ridge Reservation, and

WHEREAS, In Situ uranium mining in the southern Black Hills will contaminate the ground waters and Cheyenne River and will adversely affect the persons and lives of tribal members residing on the reservation and surrounding communities, and the United States and its agencies must fulfill its trust responsibility to the Oglala Sioux Tribe and prevent such contamination from happening, and

WHEREAS, in addition to protect the person and lives of individual tribal members of the Oglala Sioux Tribe, the Tribe also has many cultural resources in the southern Black Hills that are the property of

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the Tribe, and human remains of ancestors that must be protected in the area referred to as the "Dewey-Burdock" area under NEPA, NHPA, NAGPRA, ARPA, and other applicable federal laws including Article 8 of the 1877 Act, and

WHEREAS, the Nuclear Regulatory Commission (NRC) has approved an Economic Impact Statement (EIS) and has issued a Record of Decision (ROD) for the Dewey Burdock In Situ Uranium Mining Project for Powertec (USA) to engage in extensive In-Situ uranium mining in the Dewey-Burdock area of the southern Black Hills in South Dakota, but the cultural resources survey completed for the EIS is inadequate and must now be completed in consultation with the Oglala Sioux Tribe as required by federal law and regulations, and

WHEREAS, Powertec has approved a budget of \$10,000 (ten thousand dollars) to complete the cultural resources survey which is woefully inadequate to comply with federal laws and regulations, and tribal laws, and

WHEREAS, the Oglala Sioux Tribe Natural Resources Department and Tribal Historic Preservation Office has come up with a budget of \$2,178,665.69 (two million, one hundred seventy eight thousand, six hundred sixty five dollars and sixty nine cents) to adequately complete the cultural sources survey on the Dewey-Burdock 10,500 acres involved in Powertec In Situ uranium mining project, and

WHEREAS, Article IV, Section 1 (a) of the Tribal Constitution empowers the Tribal Council to "[t]o negotiate with the Federal, State, and local governments, on behalf of the tribe, and to advise the representatives of the Interior Department on all activities of the Department that may affect the Pine Ridge Indian Reservation" under Article IV, Section 1 (a), and Article IV, Section 1 (w) of the Tribal Constitution empowers the Tribal Council "[t]o adopt laws protecting and promoting the health and general welfare of the Oglala Sioux Tribe and its membership" under Article IV, Section 1 (w), and

WHEREAS, Article XIII, Section 6 of the Tribal Constitution also empowers the Tribal Executive Committee "to act on behalf of the Tribal Council when the Tribal Council is not in session" and to "be in charge of all routine matters that arise during such recess . . . and such other matters as may be delegated to it by the Tribal Council and shall adopt resolutions that are not inconsistent with resolutions or ordinances adopted by the Tribal Council,"

WHEREAS, the Tribal Council has delegated authority to the Tribal Executive Committee to act on its behalf and pass the instant resolution pursuant to Article XIII, Section 6 of the Tribal Constitution; now

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THEREFORE BE IT RESOLVED that the Executive Committee of the Oglala Sioux Tribe requests the Nuclear Regulatory Commission to require Powertec (USA) to provide the \$2,178,665.69 determined by the Oglala Sioux Tribal Natural Resources Department and Historic Preservation Office to adequately complete the cultural resources survey for the Dewey-Burdock 10,500 acres for the cultural resources survey which will allow Powertec to engage in In-Situ uranium mining in the Southern Black Hills, and

BE IT FURTHER RESOLVED, that this Resolution is passed based upon emergency status and contingent upon receiving a budget.

C-E-R-T-I-F-I-C-A-T-I-O-N

I, as undersigned Secretary of the Oglala Sioux Tribe hereby certify that this Resolution was adopted by the vote of: 3 For; 0 Against; 0 Abstain; and 0 Not Voting; during a REGULAR SESSION held on this 14TH day of JUNE, 2018.



DONNA M. SALOMON
Secretary
Oglala Sioux Tribe

A-T-T-E-S-T:



TROY S. WESTON
President
Oglala Sioux Tribe



Dewey-Burdock 10,500 acres tribal cultural survey				
Activity	# Units	Unit	Cost	Totals
Record Search with SD State Historical Society	1	Each	\$130.00	\$130.00
Fieldwork Authorization	0	Hours	\$50.00	\$0.00
Record Search Time & Mapping	1	Days	\$400.00	\$400.00
Field Work Preparation	5	days	\$400.00	\$2,000.00
Field Inventory 10 meter intervals	400	Days	\$500.00	\$200,000.00
Site Recording & Evaluation Estimated 200 sites	200	Days	\$500.00	\$100,000.00
Field Mileage	20000	Miles	\$0.535	\$10,700.00
Lodging & Per Diem	400	Nights	\$195.00	\$78,000.00
Report preparation	200	Days	\$400.00	\$80,000.00
Tribal Elder + Support personnel Costs, Fees/Gifts			\$0.00	\$500,000.00
Oral History Research & Interviews	365	Days	\$400.00	\$146,000.00
Oral History Report Preparation	180	Days	\$400.00	\$72,000.00
Oral History Mileage	18000	Miles	\$0.535	\$9,630.00
Oral History Per Diem	90	Nights	\$195.00	\$17,550.00
Materials and Supplies, Equipment			\$0.00	\$100,000.00
Project Management	365	Days	\$500.00	\$182,500.00
Sub Total				\$1,498,910.00
Indirect Costs/Tribal Overhead	45.35			\$679,755.69
Total				\$2,178,665.69

December 2, 2018

Valois Robinson
USA EPA Region 8
Mail Code: 8WD-SDU
1595 Wynkoop St.
Denver, Colorado 80202-1129

Re: Comments on EPA Water Permits for Dewey-Burdock

The thoughts provided in these comments will stress the continued need and request for a hard look cultural survey. These comments will also offer reasons the people of the Oglala Sioux Tribe hold the lands and resources sacred.

It is vital the Oglala Sioux Tribe is granted the opportunity to conduct a Traditional Cultural Survey of the Dewey-Burdock uranium mine project and take another look at the previous findings of the archeological survey in place.

The approval of the 1992 amendments of the National Historic Preservation act established Section 101 (d) (6) (A) & (B) that allow the Indian Tribes to identify historic properties of religious and cultural significance. The *Standards for developing environmental documents to comply with Section 106*, Indian Tribes must be consulted on the effects of the undertakings on historical properties. The Federal agency who is taking the lead in the endeavor won't be able to make a

knowledgeable decision if the Oglala Sioux Tribe is not allowed to make a class III hard look survey and identify cultural and historic properties that are important to what the tribe holds sacred.

In 36 CFR 800.8 Coordination with the National Environmental Policy Act, requires the Federal lead agency to take a hard look when considering potential adverse effects. In the section of 800.8 (c) (1) *Standards for developing environmental documents to comply with Section 106, sub-(iii) states , Consult regarding the effects of the undertaking on historical properties with the SHPO/THPO, Indian tribes, that might attach religious and cultural significance to historic properties, other consulting parties, and the Council, where appropriate, during the NEPA scoping, environmental analysis, and the preparation of NEPA documents.*

The National Environmental Policy Act obligates every federal agency to prepare an adequate environmental impact statement before taking any major action, which includes issuing water permits for a uranium license. The statute does not permit an agency to act first and comply later. The Oglala need to show that any construction at the site would cause permanent damage to resources. Without an acceptable survey of the site the ability to show these potential effects would be practically impossible.

On July 20, 2018 the United States Court of Appeals, For the District of Columbia Circuit decided in the matter of The Oglala Sioux Tribe v. U.S. Nuclear Regulatory Commission and United States of America , Powertech (USA), Inc. Intervenor, at the Dewey-Burdock uranium mine that the EIS did not satisfy NEPA because it failed to adequately address the environmental effects of the project on Native American cultural, religious, and historical resources.

The decision goes on to state, “the EIS in this proceeding does not contain an analysis of the impacts of the project on the cultural, historical, and religious sites of the Oglala Sioux Tribe and the majority of other consulting Native American tribes. Because the cultural, historical, and religious sites of the Oglala Sioux Tribe have not been adequately cataloged, the EIS does not include mitigation measures sufficient to protect this Native American tribes cultural, historical, and religious sites.

The Oglala Sioux Tribe maintains they were not afforded the opportunity to discuss the effects the Dewey-Burdock project has had on the cultural and religious properties that are considered significant. The archeologist(s) who conduct the surveys for the companies of drilling and mining projects do not have the knowledge of the connection the Lakota have to the water, land, air, or the cultural environment. The archeologist(s) are not able to identify what is important to the Lakota people, they cannot identify our stone features, cultural sites, and sacred

landscapes that are attached to water. The knowledge of these and the ceremonies were and are passed from one generation to the next through oral interpretations. There are no individuals in modern science or technology who have the ability to describe or interpret this knowledge. The archeologist who are doing the surveys for the Dewey-Burdock expansion and other mining projects fall into this category of the uninformed.

To be able to identify and catalogue potential items of cultural, historical, and religious significance to the Oglala Sioux Tribe, a thorough survey needs to be conducted by person who are knowledgeable in aspects of what is important to the Tribe. The survey needs to be conducted by members of the Oglala Sioux Tribe with a methodology developed for these purposes.

A handwritten signature in blue ink, appearing to read "Thomas Brings".

Thomas Brings
Tribal Historic Preservation Officer
Cultural Affairs and Historic Preservation Office
Oglala Sioux Tribe

December 6, 2019

Valois Shea
U.S. Environmental Protection Agency, Region 8
Mail Code 8WP-SUI
1595 Wynkoop Street
Denver, CO. 80202-1129
By e-mail to Shea.valois@epa.gov

Re: EPA-R08-OW-2019-0512-0017

Dear Ms. Shea:

This letter provides comments from the Oglala Sioux Tribe (OST) on the EPA's revised draft Underground Injection Control (UIC) permits and the aquifer exemption for the proposed Dewey-Burdock uranium project by Powertech/Azarga (Permittee). We oppose the EPA's proposed issuance of these UIC permits and an aquifer exemption for many reasons as explained in this letter.

Despite the EPA's revisions of these draft documents concerning the draft UIC permits and the draft aquifer exemption since 2017, there are still a number of problems with them as well as the process used by the EPA. The items we have identified as key issues include but are not limited to those itemized below.

ISSUE OF ECONOMIC VIABILITY

One of the key questions raised by the public during the hearings was: "Is this proposed ISL uranium mining operation even economically viable?" Unfortunately, it is not answered in the EPA documents. At least 15 ISL mines in the US are either officially in "standby" mode or are currently not producing. Mining occurred here extensively in the 1950s to the 1970s. Is there enough uranium left to mine in the project area? So before the project goes any further, the Permittee should be required to prove that there is actually the amount of ore present that it claims. They should be required to provide this information under close supervision by a knowledgeable regulator selected by the EPA. And it should occur before any final permit is issued. If the Permittee refuses to answer this question, it should be inferred that they are not committed to the project as designed, that they know there is less uranium present than claimed, and/or that they expect the expenses of this activity actually makes the project unprofitable.

ISSUE OF CONFINEMENT IN THE CLASS III WELL AREAS

Perhaps the most important technical problem with the EPA documents has to do with the confinement of mining fluids in the Class III UIC well areas. This goes to the heart of the safety of the project, and to the heart of the future of the region. Real doubts exist whether the mining fluids can be contained at the proposed mine site. As Dr. Hannan LaGarry's direct observation of Permittee's records shows, there are around 7,500 old boreholes on the site, not the lower numbers put forward by the EPA or the Permittee. It is highly unlikely that *all* old boreholes can be found and properly plugged.

In addition, research by Boggs and Jenkins (“Analysis of Aquifer Tests Conducted at the Proposed Burdock Uranium Mine Site: Burdock, South Dakota,” 1980) indicated leakage across the Fuson shale between the Lakota and Fall River formations in the Burdock area; this is one of the TVA papers. The Class III Fact Sheet notes the connection between the Chilson and Fall River formations in the Dewey area, which was from the other TVA test done in the early 1980s. This found the Chilson member of the Lakota formation to be “exceptionally permeable,” as quoted by Dr. Perry Rahn (2014. “Permeability of the Inyan Kara Group in the Black Hills Area and its relevance to a proposed in-situ leach uranium mine” in the *Proceedings of the South Dakota Academy of Science*). Dr. Rahn is Professor Emeritus at the South Dakota School of Mines and the acknowledged expert in matters related to hydrology in the southern Black Hills.

The EPA also notes that Permittee’s pump test in the Dewey area was not only done differently, but the TVA test was done at a pumping rate of 16 times higher than the Permittee’s tests. This would be the way such tests would be conducted if the purpose was to show that no connections exist between formations in the Dewey area. Therefore, a more comparable update of the Dewey study is needed.

One critical issue in the revised draft Class III UIC permit is the assumption that the Fuson Shale of the Lakota Formation serves as the confining zone between the Fall River Formation injection interval and the underlying Chilson Sandstone of the Lakota Formation. On p. 23 of the Class III Fact Sheet, it states that: “There may be points where the Fusion confining zone has been compromised by improperly plugged exploration drill holes or wells that penetrate the Fusion confining zone. Evidence that suggests at least one breach in the Fusion confining zone is included in the reports on the pump tests conducted by the Tennessee Valley Authority (TVA) and the Permittee in the Chilson aquifer in the Burdock area.” The draft permit then goes on to specify that the Permittee will conduct wellfield delineation drilling during the initial stages of the pump testing phase to “provide more detailed information about the thickness and continuity of the Fusion confining zone” However, since breaches are already known to exist, the EPA should require corrective action be done BEFORE issuing the Class III area permit, not AFTER.

The revised draft Class III UIC permit also continues to rely heavily on belief that the Morrison Formation is an adequate lower confining layer. However, it should seriously be re-considered because “The Morrison Formation is intersected by 26 exploration drillholes throughout the Dewey-Burdock Project Area.” (Found on p. 23 of the Class III Fact Sheet). Again, just like the Fusion case as noted above, the EPA should require the Permittee to verify that breaches do not exist before issuing the permit. We also do not agree with EPA’s concurrence with the Permittee’s assertion that the Unkpapa USDW underlying the Morrison Formation does not need to be monitored during the injection activities. In addition, the graphics supplied in the documents showing the Morrison Formation are not to scale and appear quite thick (e.g. Fig 6, p. 25), so it seems to be a purposeful way to mislead the public.

Research by Wicks, Dean, and Kulander [“Regional tectonics and fracture patterns in the Fall River Formation (Lower Cretaceous) around the Black Hills foreland uplift, western South Dakota and northeastern Wyoming,” 2000] indicated that the Fall River formation is “pervasively fractured” along the western edge of the Black Hills. The opinions of Dr. Robert Moran and Dr. Hannan LaGarry, which were previously submitted to NRC, also indicate that fractures, faults, breccia pipes, and other geological characteristics of the project area, have not been adequately researched. The Second Draft Class III Fact Sheet (p. 32) says that there are 64 drinking water, irrigation, and livestock wells in or within 1.2 miles of the mine boundary. To families on the ground, the situation is a high-stakes of their long-term health. It is critical that the geology of the area be fully understood – preferably before the draft permits were issued – but certainly before any further steps are taken.

Research by Tank (1958. "Clay Mineralogy of Morrison Formation, Black Hills area, Wyoming and South Dakota," *Bulletin of the American Association of Petroleum Geologists*"), which may be the only focused research on the Morrison formation in the Dewey-Burdock area, indicates that the formation's thickness varies widely and that there is a "marked difference" between the formation's composition in Edgemont and seven miles north of Edgemont.

Given the other information that is available and the importance of this particular issue, it is irresponsible for the EPA to conclude that mining fluids will be contained since this conclusion seems to be based mainly on the Permittee's documents, limited scientific information, and weak analysis. The EPA should obtain accurate and substantial third-party and peer-reviewed information and must analyze it thoroughly before granting these UIC permits and aquifer exemptions.

It says on the Page 123 of the Class III Fact Sheet:" The previous Class III draft Area Permit required the Permittee to conduct post-restoration monitoring to demonstrate that no ISR contaminants would cross the aquifer exemption boundary. This updated Class III draft Area Permit now requires the Permittee to develop a reactive transport geochemical model to evaluate the potential for ISR contaminant to cross the downgradient aquifer exemption boundary. To improve the predictive capabilities of the geochemical model, the Class III draft Area Permit requires the Permittee to first develop a Conceptual Site Model (CSM) and conduct targeted monitoring to calibrate the model as discussed later in this section." Unfortunately, when comparing EPA documents from 2017 to 2019, this is a major step in the wrong direction. EPA's proposal to eliminate down-gradient compliance boundary wells and post-restoration monitoring, and to replace them with a conceptual model is plainly wrong. Replacing physical monitoring with model-based extrapolation is a bad idea because models are not able to accurately depict the real world, especially in a complex hydrogeological environment like this area of the Black Hills. Both down-gradient compliance boundary wells and post-restoration monitoring should be kept as requirements of this project.

RELIANCE ON OTHER PERMITS

A glaring problem with EPA's documents on the proposed project is that large portions of the documents that were used to support the EPA's revised draft permits are still based on other permits that do not exist or that were prepared inadequately. For example, the EPA's documents defer repeatedly to the NRC's Supplemental Environmental Impact Statement (SEIS) for the Dewey-Burdock project. This document simply echoed the Permittee's submissions in many important respects, rather than the NRC taking a critical look at the issues. The EPA documents also refer repeatedly to the requirements of a state NPDES permit that has not even been applied for. And they refer frequently to a state Large Scale Mine Permit and a state Groundwater Discharge Permit (GDP) that are far from actually being issued.

To rely on non-existent regulatory instruments and what are essentially the Permittee's documents for large portions of the permitting documents indicates both problems with the regulatory process and a lack of analysis of the proposed mine, deep disposal wells, and aquifer exemption. These non-existent "permits" are relied upon for major aspects of the proposed mine and associated facilities. For example, the GDP and NPDES permits are relied upon for statements that the land waste disposal option will be safe and that there will be no contamination. This runs counter to the real world situation regarding this issue, which indicates a build-up of highly-toxic selenium at similar sites. Another problem is that EPA has apparently signed off on the Permittee's proposal to grow crops on these land disposal sites without any analysis of the safety of this practice for wildlife, domesticated animals, or humans

Similarly, the EPA relies upon an “NPDES permit” that has not even been applied for to discuss the Emergency Preparedness Program and Environmental Management Plan that are the basis of its discussion of impacts from spills and leaks, worker safety, and other topics. The agency concludes “Because the project site will be reclaimed and released for unrestricted use,” there won’t be impacts to land use. It’s a long way from a non-existent “permit” to full reclamation twenty years in the future. This use of speculative information should not be allowed as part of the application, cumulative effects, draft permit, or aquifer exemption documents.

CORRECTIVE ACTION

The purpose of the monitoring wells is to identify and assess impacts of ongoing uranium recovery operations and detect fluid movement out of the approved injection interval, should such an event occur. The problem is that the proposed corrective action required in the Class III permit is totally inadequate. Part II of the permit, section D.4.d. states that: “if wellfield pump test results indicate a possible breach in a confining unit that cannot be located for corrective action, or corrective action does not completely repair the confining zone breach, then the monitoring well system shall be designed to verify that wellfield injection interval fluids will remain within the approved injection interval per 40 CFR § 144.55(b)(4).” This is the worst kind of circular logic. Furthermore, to require the Permittee to develop “operational controls” as a method of achieving the corrective action is pure non-sense. Part III on Corrective Action only deals with problems that may occur when breaches are detected during pre-operational wellfield delineation and pump testing. There is absolutely nothing in Part III on Corrective Action that states what the Permittee should do during the subsequent operational period should a problem occur in which contaminants are detected in one of the monitoring wells (either vertically in one of the confining zones or horizontally outside the authorized wellfield area). In this case, the first thing that should be required is that the Permittee must shut down the entire system and the site restoration process should begin immediately while the problem is investigated. Why aren’t these simple basic requirements included in the Corrective Action section? Because any potential breach in containment would be so impactful, it must be addressed immediately.

Another issue that should be addressed is that one set of monitoring wells is insufficient. In the nuclear industry, redundancy is always built into systems so they are practically fail-safe. The same thing is needed by this permit. Therefore, another ring of monitoring wells should be required to be installed outside the first ring (in the horizontal direction at least) in order to provide a second line of defense. So if and when an exceedance is detected in the first ring of monitoring wells, then it will be possible to have sufficient time to evaluate the proper course of action needed to address the situation.

ISSUE OF SUBSURFACE RESTORATION

According to the Fact Sheet for the Class III wells, after the uranium recovery process has been completed in a wellfield, the groundwater restoration process begins for that wellfield. The contaminated groundwater is pumped from the wellfield and treated using reverse osmosis (RO). (See concern about RO treatment in subsequent section.) The restoration *bleed* and the reject water from the reverse osmosis treatment are injected into the Class V deep injection wells as described in the Fact Sheet for the Class V Draft Area Permit under Section 7.8 *Approved Injectate and Injectate Permit Limits*.

However, a critical issue with these permits that is not addressed by the EPA is whether the subsurface can ever be restored after the ISL mining operation shuts down. Otten and Hall of the U. S. Geological

Survey are among those who have observed that “To date, no remediation of an ISR operation in the United States has successfully returned the aquifer to baseline conditions” (“In-situ recovery uranium mining in the United States: Overview of production and remediation issues” at http://www-pub.iaea.org/mtcd/meetings/PDFplus/2009/cn175/URAM2009/Session%204/08_56_Otton_USA.pdf). Bill Von Till of the NRC issued similar sentiments when he said in August 2010 “to date, restoration to background water quality for all constituents has proven to be not practically achievable at licensed NRC IS[L] sites” (credited in another source to EIS for Moore Ranch ISR project, WY., p. B-36). This is important because when companies cannot restore water to baseline conditions or to the standards set by the NRC, the NRC typically just raises the amount of contamination allowed. At some point, the restoration water “fits” those raised standards, and the mine’s water is declared “restored.” This is unacceptable for the NRC, and it is equally unacceptable for the EPA to establish Alternate Concentration Limits (ACLs) in this fashion. It is important that standards are set at the true “baseline” (the original condition of the project area’s water prior to uranium drilling or mining), and that the EPA retains its baseline permit limits through the restoration process.

Given these experiences in the current real world of ISL mining during in the United States and the presumptions of companies who propose this type of mining, it is imperative that regulatory agencies approach these permits with abundant caution. If no U.S. ISL mine has ever returned the water to baseline and if restoration to background has proven to be not achievable, what makes the EPA believe that this unprecedented task will be accomplished at Dewey-Burdock site? This question must be addressed explicitly and analyzed thoroughly as a result of a full NEPA process, if the EPA decides to push forward rather than deny these UIC permits and the aquifer exemption.

PROCESS ISSUES

A key process issue is that EPA has seemingly gone through all sorts of contortions in its Class V Fact Sheet in an attempt to define what is clearly a Class I well as a Class V well. The disposal would clearly take place above a USDW, in the Madison formation, which is a large aquifer of broad use in the Black Hills. It is used by, among others, Edgemont and Rapid City. The EPA justifies its labeling of Class I wells as Class V wells by treating them as Class I wells for construction and monitoring purposes and by requiring the Permittee to treat the injectate until it is “at or below radioactive waste standards” (Class V Draft Area Permit Fact Sheet, p. 8). Many people in the area expressed their fear in the public hearings that this is insufficient because they believe the risk of our water becoming irreversibly contaminated is just too great.

The other glaring process issue is that the EPA has rushed the process, creating draft permits and exemption without going through the proper rule-making process. This is the first time that the EPA has issued draft permits for Class III wells for an ISL uranium mine and it seemed to be in a hurry to do so. There have been extensive private and behind-the-scenes discussions of the process with the Permittee and the uranium industry, resulting in these procedures, guidance, and draft documents. The draft permit and draft aquifer exemption documents often mimic others, including documents from the Permittee, rather than creating a thoughtful analysis of the situation. (See Document Issues). However, there has been no public process on the de facto regulations created and used to craft the draft permits and draft exemption – no public notice, no public hearings, no analysis of public input. This violates the Administrative Procedure Act (APA), as well as the spirit of American government. If allowed to stand, the entire process would fail to fully consider the project, provide adequate public input, leave western South Dakota with contaminated water, set a bad precedent for future proposed projects, and violate the APA.

WASTEWATER TREATMENT ISSUES

One critical issue not adequately addressed by these permits is that no analysis or discussion of whether it is even possible to treat the quantity of water being used by this project to the required standards. If it is not and if the process is not closely monitored, then water will be permanently contaminated. There is no analysis or discussion of whether it is possible to treat the water quickly enough to keep up with the injection rate proposed by this project.

There is also no analysis or discussion of the reverse osmosis (RO) facilities, their location(s) in the project area, or the impacts they would bring. Included in the Class V Fact Sheet is the assumption that at least 30% of the water put through the RO process typically becomes waste water. However, RO units really use approximately three times as much water as they treat (ref. https://www.epa.gov/sites/production/files/2015-11/documents/2005_11_17_faq_fs_healthseries_filtration.pdf). So an estimate of wastewater generation is more like 300%, or an order of magnitude higher than stated in the draft permit. And this wastewater is a brine that will be radioactive and full of heavy metals requiring further treatment before being disposed of as 11e waste. Even if the RO treatment is feasible, there is also the question of whether RO treatment of all this water can be done economically given the other project costs and the current price of uranium at about \$25.00/lb. A responsible agency would include a full discussion of the RO process and its impacts on the environment, waste treatment, bonding requirements, and the feasibility of the project. It would also provide numerous examples of places in which this operation has proceeded successfully at the flow rates and with the contaminants proposed by the Permittee.

In addition, membranes from the RO process typically last only two to five years, even with adequate pre-treatment and routine maintenance. (https://www.epa.gov/sites/production/files/2015-08/documents/reference_guide_to_treatment_technologies_for_miw.pdf) What happens to these membranes when they are no longer usable and how must they be disposed of?

At the end of the day, we contend that, if the RO process and the actual costs of full aquifer restoration were considered, this project would not be feasible economically, technically, or environmentally. The history of the uranium industry includes abandonment of almost 200 mines and prospects in the southern Black Hills and over 3,000 in the Upper Missouri River basin, plus thousands more in the Southwest. Given this history, the Permittee should be forced to provide an economic analysis using current uranium prices that shows that this project is feasible before they are given any UIC permits or an aquifer exemption. They should also provide a copy of a contract with a buyer for the uranium that would be produced at the mine. Even at a modern ISL mine, the Smith Ranch-Highlands mine in Wyoming, aquifer restoration took place for 10 years, and the water quality was about the same as when mining ended, according to a Violation issued by the Wyoming Department of Environmental Quality. Part of the reason appeared to be that the company was allowed to stop remediation because of costs. This situation should not be allowed to happen again. Strict and regular on-site regulatory enforcement must be an important part of the EPA's permitting and exemption process.

COMPLETION OF KEY TESTS ARE LEFT UNTIL AFTER PERMITS ARE ISSUED

The EPA also wrongly leaves the completion of key tests until after permits are issued, including the following:

- wellfield delineation drilling,
- establishment of current water baselines,
- identification of faults,

- tests of the integrity of the confining zones,
- identification of leakage in the Fuson confining zone,
- how to deal with a 10" diameter leaking TVA well,
- information on unsaturated groundwater flow (this should be done in real life testing, not using a model that can be easily manipulated),
- collecting drill cores to determine the characteristics of down-gradient aquifers' geochemistry,
- measurement of confining zone thickness,
- all of the work leading up to and including the Injection Authorization Data Package Reports (Class III Fact Sheet, pp. 70-71),
- radiological impacts analysis (independent of the Permittee's analysis),
- demonstration of the effectiveness of vertical and horizontal monitoring systems,
- identifying and creating a contract for disposal for 11e wastes and solid wastes,
- the establishment of down-gradient compliance boundary wells (these should not be moved in case of an excursion, but should be maintained at their original locations), and
- pump tests.

These key tests need to be completed BEFORE any permits are issued.

FINANCIAL ASSURANCE

Based on the history of the uranium industry, it is our position that uranium mining cannot be done safely. So having adequate financial assurances in place is absolutely imperative.

P. 129 of the Class III Fact Sheet and p. 58 of the Class V Fact Sheet says that demonstration of financial responsibility by the Permittee should be done through a surety bond "or other adequate assurance." However, the only assurance that should be accepted is an adequate surety bond. The value of the Permittee's company, if there is any, should not be used to demonstrate financial responsibility. In addition, the definition of an "adequate" surety bond is critical. As noted above, in western South Dakota and elsewhere, it is common history that uranium and other mining companies have been unable to fund full restoration after mining. They often go bankrupt and leave the cleanup burden on taxpayers – if restoration is even technically feasible.

Another key issue is that the amount of financial assurance required of the Permittee by these two UIC permits is too low by a wide margin. To be based *only* on the plugging and abandonment costs (in the case of potentially thousands of Class III wells [\$583,620 for only the first year of operations] and in the case of the two Class V wells [\$371,160]) for a total of only \$954,780 is absolutely ludicrous! The actual amount of liability represented by this operation will be many times this figure.

For example, in the case of in situ leach uranium mining, the Wyoming Department of Environmental Quality (DEQ) raised the bonds at the Highland and Smith Ranch ISL mines from \$38,416,500 to \$80,000,000, after it discovered that restoration attempts were not having any effect. In its March 10, 2008, Notice of Violation, the DEQ indicated that the real cost of restoration would be "on the order of \$150 million." The EPA should heed the Wyoming experience and insure that bonds for all activities that are associated with this technology are adequate, especially since full restoration has never happened at any ISL in the US. Based on this information, it is our recommendation that EPA stipulate that the Permittee be required to post a surety bond for this project of at least \$100,000,000 so as not to be on the hook for a significant portion of the remedial action that will be required in the future.

This is especially important because the Permittee has already admitted that its restoration is likely to be incomplete. In a 2014 "Restoration Action Plan" submitted to the NRC, the Permittee said that

“elevated concentrations above the restoration criteria may remain in the production zone following restoration,” which the Permittee called “hot spots.” The Permittee suggests that, after further study, the “hot spots” could be ignored and the “well field be declared restored.” This is unacceptable, and the EPA should explicitly prohibit this practice.

We also do not want a repeat of what happened at Wasta, SD, about 50 miles east of Rapid City. There, a drill bit and 150’ section of equipment broke off when a driller was looking for oil. Groundwater can be exposed, creating a possible link between the Minnelusa and Inyan Kara formations, and plugging the resulting hole may be impossible. The State’s bond was wildly inadequate (*Rapid City Journal*, January 23, 2017 and March 17, 2017). We are not willing to take the risk that something similar might happen at the proposed Dewey-Burdock site which could actually be much more catastrophic.

OTHER ISSUES

There are many other issues with the EPA documents and statements with which we simply disagree. For example, on pages 14-16 of the Class III Fact Sheet, it talks about ten “wellfields” in the Burdock area and four “wellfields” in the Dewey area. But nowhere has EPA set a limit of how many injection and production wells the Permittee may construct. However, EPA should certainly set a limit and that limit should be a conservative number of wells.

One major permit revision that we had hoped would be made based on previous comments is a stronger statement by EPA forbidding any further action by Powertech until the company has identified and plugged the 7500+ old boreholes on the Dewey-Burdock site. Unfortunately it was not made, but it’s absolutely critical because without this requirement, the project is clearly an accident waiting to happen.

The various types of ponds allowed by these permits should not be built where there are old drillholes. Best practices should be followed for all ponds to avoid leakage either through the bottom or through flooding. This includes at least the following: thick, high-quality double liners, clay liners, leak detection systems, procedures for frequent checking of leak detection systems, and the maintenance of substantial empty space in the ponds to accommodate flood events.

It is also not wise to build ponds in the 500-year floodplain, especially given the increase in flooding incidents in the area, and this should not be allowed. Similarly, the design of sediment control structures should protect from events larger than a 5-year, 24-hour precipitation event – especially because the mine and the ponds will exist for up to twenty years. This will ultimately result in spills from these ponds. It also goes against EPA’s statement that surface water impacts “should be minimal.” Impacts will not be minimal if a flood washes out sediment structures or over-tops a pond containing hazardous materials even once.

In addition, the EPA should not rely on the NRC’s analysis, recommendations, or regulations. The processes by the two agencies should be independent, so that the benefits of the expertise and different regulatory focuses of both agencies would be utilized for the proposed operations, as well as the aquifer exemption and other issues.

All boreholes and old uranium mines in the project area should be plugged and reclaimed before any further mining is allowed. Not only does this protect the water, soil, and air of the area, but it also protects workers who would be exposed to the old, open mines. Abandoned open pit uranium mines spread contamination through the water, sediment, and air, as shown by research done by Dr. James Stone of the South Dakota School of Mines and Technology and others.ⁱⁱ The old mines must be

reclaimed, and the soil, air, and water must be tested to insure that it is safe before allowing any new uranium mining to go forward.

As noted on p. 23 of the Class V Fact sheet, properly calculating the injection zone critical pressure rise is crucial to be able to safely operate the deep disposal wells. It was good that EPA did not agree with some of Powertech's assumptions and recalculated the critical pressure values in the Madison Formation in the revised permits. However, it is apparent that certain assumptions can vary the critical pressure rise results widely. For this reason, more oversight by EPA is needed rather than simply letting Powertech "recalculate the critical pressure rises for each injection zone based on the site-specific information collected during the construction of each well" (p. 25). EPA must also hold firm that if the resulting injection rates are even near the critical pressure, the permit would not be granted. It is vital to protect the Madison aquifer, and the nature of the upper portion of that aquifer is particularly concerning due to the presence of rapid water movement.

P. 42 says: "The Area Permit does not authorize injection into an USDW. As discussed in Section 5.3.2, Powertech must demonstrate that the Minnelusa injection zone is not an UDSW [sic]". As far as we are concerned, this permit should not be issued at all UNTIL after Powertech has done the work necessary to prove that the Minnelusa injection zone is not an USDW.

Next, deep disposal well integrity should be tested at least once per year, not as infrequently as every 5 years, as EPA required (Class V Fact Sheet p. 53). And injectate should be monitored and analyzed regularly, as the characteristics of wellfields will differ, and the functioning of the RO system may also vary in effectiveness. Records should be maintained until at least five years after the end of the project, in case problems develop over time, not for as little as three years, as specified (p. 56).

As mentioned above, modeling is a weak alternative to on-the-ground testing. The EPA should certainly not rely exclusively on models for any decision or requirement in the case of such a complex, controversial project – especially models developed by or for the Permittee. There should be independent analysis of any information currently left to modeling. As the EPA notes in the Cumulative Effects Analysis, "there is inherent uncertainty in the results" (p. 108) when modeling is involved.

The length of time that the proposed Dewey-Burdock project would be active should be clarified. This goes directly to the potential impacts of the project. The estimate in the State Mining Permit Application is seven to 20 years of uranium recovery, maybe more, with the Central Processing Plant likely to operate longer. The Class III draft permit is for the "operating life of the facility." So with 14 wellfields, each operating for two years, this could be as long as 28 years, if the Permittee ran them consecutively. There is also the potential for the Permittee to expand the project to include its contiguous claims to either the east or west of the current project area. There's a difference between regulating a project that lasts seven years and regulating a project that lasts over 20 years. The draft permits and Cumulative Effects Analysis should discuss the full range of potential impacts and scenarios.

A number of statements in both Fact Sheets make it apparent that the EPA is acting subjectively in many cases rather than factually – basically where ever it says "expected." Given the critical nature of this project, many of these statements should, instead, be made factual. For example, statements such as: "The overlying confining zone for the Lower Chilson is expected to provide adequate confinement..." (p. 67 of the Class III Fact Sheet) and "The uranium ore is located in the Lower Chilson sand unit, which is expected to be locally hydraulically confined in the area of Burdock Wellfield 6." (p.68) do not instill confidence in the process. Other examples include: "The proposed injection zone for injection wells DW No. 2 and DW No. 4 is the Deadwood Formation, which is expected to lie beneath all

USDWs in the area.” (p. 8 of the Class V Fact Sheet). Such statements should be scientifically proven, not “expected” into existence.

We support the conclusion of EPA’s statutory analysis that the Dewey-Burdock mine is subject to the Clean Air Act and subpart W. If the project goes forward, we request that public education sessions and public comment periods be held as part of the subpart W regulatory process.

The citizens of the area that would be most impacted by this project spoke loudly and clearly at the hearings in April and May of 2017, as well as the hearings in Hot Springs on October 4, 2019, that they were opposed to this project. The will of the people is what counts to most in a democracy. So the EPA should act consistently with the voices of the vast majority of the people at these hearings, rather than approving a project that is poorly considered, ill-advised, full of gaps, and dangerous to the health, the economy, the cultural resources, and the environment of the Black Hills. And if these drilling activities are actually allowed to proceed, there should be a provision that makes all resulting information public.

None of this information will be subject to public review or comment, and key information would become available only after permits have been granted. This turns the regulatory process on its head. All testing should be done, subject to both professional and public reviews, before any of the draft permits or the aquifer exemption are issued.

As part of this process, note that current conditions do not provide an adequate or accurate “baseline.” All baseline measurements (ground and surface water, air, soil, sediment, etc.) should be defined as the original condition of the project area, before drilling and mining.

Moving to the nature of the ISL uranium industry, the Fact Sheets and Cumulative Effects documents do not discuss the uranium industry’s record in relation to problems with the ISL process at other sites. This minimizes the many problems that the ISL industry has experienced and, thus, the potential problems from the Dewey-Burdock project. This makes the portions of the draft permit dealing with excursions and leaks inadequate, as well as sections about mitigation and reclamation. For example, the Crow Butte ISL mine near Crawford, NE., has had 85 license violations and reportable incidents. These range from excursions to leaks and spills to wells failing integrity tests. One leak at this site was not found or dealt with for over two years, which makes a mockery of the EPA’s great faith in gauges, sensors, alarms, and other hardware to identify leaks and related system problems.

If EPA staff looks over the information about ISL mines and regulation at <http://www.wise-uranium.org/umopusa.html> (WISE Uranium, “Issues at Operating Uranium Mines and Mills – USA,” last updated April 19, 2017), it quickly becomes clear that excursions are “normal,” as the former CEO of the Permittee said in a public forum in Colorado, and that leaks of both pipelines and ponds are common. This indicates that both surface and ground water are at risk.

This source also documents the movement of mining fluid beyond the mine boundary at the Kingsville Dome ISL mine in Texas (Rice. 2013. “Excursions of Mining Solution at the Kingsville Dome In-Situ Leach Uranium Mine.” *Austin Geological Society Bulletin*) and the Highland Uranium Project in Wyoming. A summary of this type of information can also be found at Daniel Simmons-Ritchie, “Troubled history” in the *Rapid City Journal*. September 23, 2013. A history of these issues in the northern Plains region can be found in “Uranium Activities’ Impacts on Lakota Territory,” in the *Indigenous Policy Journal* (by L. Jarding. 2011).

As for other companies, there are 11 uranium companies that have expressed an interest in the Black Hills, and one – Peninsula Minerals – recently started an ISL mine on the northwestern edge of the Hills

in Wyoming. If the Dewey-Burdock project is not abandoned and if the Permittee acquires all the needed permits (at least 10 at last count, including the Clean Air Act permit), then this would be the first ISL mine in South Dakota. If the Permittee is allowed to move forward – especially on such flimsy permitting documents – a precedent would be set. We do not want to open South Dakota to a stampede of ISL uranium mining companies, for all the reasons discussed in this document. However, for the EPA's documents to be complete, the existing mine(s) in the Black Hills and the potential for a much larger number of ISL uranium mines must be fully considered.

In addition, the Permittee has claims to the east of the current project boundary, and it has contiguous claims just across the border in Wyoming. This is very clearly a topic that should be considered under any discussion of cumulative effects. According to our research, the Permittee has approximately 744 federal claims in Wyoming, with the majority being across the border from the Dewey-Burdock project area.

Another important omission is that the draft permits beg the question of who is going to do on-the-ground regulation of the proposed mine and deep disposal wells. In 2011, the State of South Dakota suspended its ability to regulate in situ leach uranium mining, so it has no authority to do that regulation at this time. The NRC has two inspectors based in Texas, who visit ISL mines once or twice a year. There is no indication that their regulation can be complete or happen often enough to catch problems. This is tremendously important. The draft permits include some very critical actions, such as testing the Minnelusa Aquifer to determine its water quality before deciding whether the Permittee can proceed with deep disposal wells. This is a high-stakes test that would impact the future of the southwestern Black Hills. First, the water quality test should have been done under EPA's direct supervision before a draft permit was issued. If water in the Minnelusa aquifer turns out to be appropriate for drinking water, the time and expense of creating the application and the Class V draft permit would have been avoided – as would have the stress on people in the area who use and rely on the aquifer.

The testing of the water in the Minnelusa aquifer should be done under EPA's direct supervision, rather than allowing the Permittee to do a test in the areas of its choice using equipment it supervises, sending the sample to the lab of its choice, and expecting the people who use the Minnelusa Aquifer in the southern Black Hills to believe the results.

Similarly, the following must be done under the direct supervision of a knowledgeable regulator:

- pre-mining water quality testing in the proposed mining area,
- testing designed to determine the likelihood of down-gradient excursions,
- information underlying decisions about what holes and wells should be plugged,
- mitigation of air quality impacts,
- pump tests,
- well construction,
- reports on and handling of vehicle accidents involving hazardous or radioactive contaminants,
- groundwater level measurements,
- injection fluid characteristics,
- post-restoration monitoring,
- determination of the corrective response that must be taken when an excursion happens (this is currently left to the regulated company),
- well plugging and abandonment,
- analysis of radiological issues,
- disposal of hazardous wastes,
- regulation of a variety of soil issues (Section 7.0 of Draft Cumulative Effects Analysis),

impacts that this water use could have on the environment and economy of the southwestern Black Hills. The southern Black Hills is a semi-arid area that will need all its ground water in the future. This need will grow with climate change and with the ongoing depletion of the High Plains (Ogallala) aquifer a bit to the south.

Another major problem is the admission in section 4.7.1 on p. 52 that injectate from the Class V wells will mingle with Madison aquifer water and come to the surface at Cascade Springs, about 20 miles away. While the EPA says this will happen “on the scale of 10,000 years” in its CEA, remember that calculations of water movement underground at the site vary widely. The information presented in the documents indicates that EPA apparently believes that water movement is many times slower than independent estimates. Also, there are other wells into the Minnelusa and Madison aquifers to the south and east, over the 20-mile span between the project site and Cascade Springs. This admission should result in the EPA denying the Class V UIC permit.

There is also a question about the rate of pumping of water during the mining operations. In Section 5.2.1 of the Draft Cumulative Effects Analysis, the text says that the “header piping [would be] designed to accommodate injection and production flow rates of 2,000 gpm...” (p. 56). On the next page, the document says that each header house will service up to 20 production wells and 80 injection wells. The schedule for the project indicates that as many as five wellfields will be active at one time. As each wellfield is likely to have more than 100 wells, so these numbers add up to more than the 8,500 gpm that the Permittee is asking to use. This amount of water is huge and its cumulative effects need to be carefully researched and analyzed before issuing any permits on the proposed project.

Much of the mitigation sections appears to be vague, incomplete, or based on stock language picked from other documents, such as the discussion of soil impacts mitigation in the CEA (pp. 78-79). The mitigation sections of EPA documents should offer a complete and detailed analysis of the required mitigation that is site specific at the Dewey-Burdock location. To top it off, the EPA makes use of the Draft Cumulative Effects Analysis difficult, as the document has neither a Table of Contents nor an Index. In the future – and before further action is taken on the proposed mine, Class V wells, and aquifer exemption -- we hope that the EPA will rectify this and the other omissions.

In addition, many key aspects of this CEA rely upon non-existent “permits.” Examples are almost too numerous to count, but suffice it to say that unless these non-existent “permits” are actually issued, information based on them should be omitted from the EPA’s documents. This draft CEA as written by the EPA is neither realistic nor complete and should therefore be re-done.

The statement that “radon-222 itself has very little radiological impact on human health or the environment” (p. 85) runs counter to what is common knowledge. It certainly runs counter to EPA’s own website on the topic: <https://www.epa.gov/radon/health-risk-radon>. The UIC Program needs to go back to the drawing board and do a comprehensive, science-based analysis of this issue.

Along the same line, in its discussion of the Central Processing Plant, the CEA says that “ventilation systems will exhaust outside the building” and that there will be “open doorways” on processing buildings (p. 86). It should be specified that, for the safety of workers, the open doorways are nowhere near the exhausts and that employees should be fully informed of this situation.

The treatment of radiological wastes from the drying cycle at the Central Processing Plant is not specified. On p. 86, the CEA says: “The off-gases generated during the drying cycle will be filtered through a baghouse...” and it also mentions a “sock filter” (p. 87). However, the document does not give any information on where or how the wastes collected in the baghouse or sock filters would be

disposed. It is assumed that these wastes will be radioactive, so will probably be 11e wastes. But readers (and the Permittee) should not have to guess about such things. This situation should be the subject of comprehensive analysis, and the entire waste cycle should be specified clearly. There is also no discussion of potential accidents during processing (which have occurred historically at other sites) or the remediation or mitigation that might be needed as a result.

The sections on ground water use in the draft CEA overly rely on the opinion of one person, the former South Dakota State Engineer. Other people should also be consulted. Another problem that has been common in the mine area and that is omitted from the EPA's discussion is wildfires. There have been at least three large wildfires in the area in the last five years. The Crow Butte ISL mine – only about 65 miles from Dewey-Burdock -- was evacuated in 2012 due to a wildfire. The impacts on water, air, and land could be enormous, if a building containing nuclear materials, wellfields, or storage ponds were impacted by a wildfire. The discussion of cumulative effects must include a thorough discussion of how this type of problem would be dealt with to protect the land, air, and water.

NATIONAL ENVIRONMENTAL POLICY ACT ISSUES

A major issue in this case to which we have strong objections has been due to the failure of the EPA to adhere to the National Environmental Policy Act (NEPA) process. While the NRC has attempted to follow that process for the possession of nuclear materials, its actions have not adequately covered a variety of issues that are under the EPA's purview, particularly water issues. The EPA needs to complete its own NEPA process.

The Permittee's project has also changed in many important respects between the time the NRC began considering it and the time the EPA began considering it. Examples include:

- NRC original documents consider the use of 4,000 gallons of water per minute (GPM) for the mining and reclamation process. The current revised draft permit indicates that the expected use of water to be 8,500 GPM, almost twice as much! This is equivalent to withdrawing over 12 million gallons per day, a huge amount to be taken from the area's limited water resources.
- This project was originally described as involving 1,500 injection, recovery, and monitoring wells. EPA's current draft permits indicates that this number is more than 4,000 wells, which is nearly three times more wells than originally given.
- The projected bleed rates have varied over time, from 0.5% of the water used to 17% of the water used currently. In addition, the reverse osmosis process makes at least 30% of the water put through the RO process into waste, and this is not fully considered in the EPA documents. This seriously weakens all the assumptions and calculations on water use in the Class III draft permit and in the Draft Cumulative Effects Analysis.
- Documents prepared by Petrotek for the Permittee set subsurface water movement rates at 6 to 7 feet per year (without offering peer-reviewed sources). NRC documents set the transmissivity rate in the Fall River formation at 255 ft. per day and in the Lakota formation at 150 ft. per day. Dr. Perry Rahn's 2014 article, mentioned above, concluded that the average ground water velocity for the Lakota and Fall River formations in the Dewey-Burdock area was 66.1 ft. per year. But, he said, groundwater velocity in the Inyan Kara Aquifers at the Dewey-Burdock site might be as much as 5,480 feet per year – over a mile. He considered this number "very high," and it "might indicate fast groundwater movement through very permeable units or through fractures." The draft permits omit this critical information that could have very real impacts on wells that are downgradient of the proposed mine site. This issue is critically important, and further independent studies should be done before any permits are issued.

- The Permittee talked about the possibility of doing open pit mining at the NRC hearings, and this possibility is not raised in the EPA documents.

These changes in the parameters of the proposed project go to the heart of the information that informs the process in this case. The NRC and the EPA have had different projects submitted to them. The processes are not functional equivalents, and consideration of both projects would not be redundant – it would be sensible. The EPA should begin a thorough NEPA process to assess the project as it is currently proposed.

As part of any new or continued process, the EPA should consider more than one alternative action. Although there are places where more than one alternative is considered for a minor action, the major actions only offer one alternative – giving the Permittee a Class III Area UIC permit, a Class V Area UIC permit, and an aquifer exemption.

The EPA must also do a thorough tribal consultation. The existing documents indicate that this process has barely begun, and yet the draft permits have been issued. This makes a mockery of the consultation process, which should be completed well before draft permits are issued, so that the resulting information can be analyzed. The EPA must halt all further action until mutually-satisfactory, government-to-government consultation is completed. All cultural and historical properties must be identified by Lakota experts, who should be paid if they so desire, and given complete protection.

ENDANGERED SPECIES ACT ISSUES

At the end of the Class V Fact Sheet and the Draft Cumulative Effects Analysis, the EPA states that the Endangered Species Act will be complied with, but gives no information on how it intends to do this. When will this be done? What species will be considered? Who will do the analysis (surely not the Permittee)? This should already have been completed before draft permits were issued.

The EPA mentions the presence of a short-horned lizard, which is rare and protected in South Dakota, in the proposed project area. After stating that the species is “important in some tribal cultures,” it offers the solution “Once construction activities begin at the site, the EPA expects that the [sic] any short-horned lizards that were in the area will seek less disturbed locations.” This is pure conjecture, without any back-up information on the size or habits of the lizards. Are they territorial, or is it species-appropriate for them to move? Are they large enough to move fast enough to out-run a bulldozer or pick-up truck? Or are they, in reality, unprotected?

This and similar information must be provided and backed by scientific research at the Dewey-Burdock site for this and other species. Animals should not simply be expected to move out of a site that’s over 10,000 acres in a systematic and comprehensive process. And the EPA then expects them to just move back in after mining is complete – as if the same animals will be alive and remember their former homes after as many as 20 years. This is beyond unacceptable in the direction of ludicrous – and is certainly unacceptable.

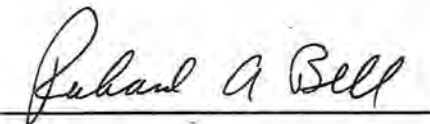
Species other than animals are not considered in this discussion. Plants cannot simply move off the site. Some of them are important to tribal practices and customs, such as medicinal plants and timsila (prairie turnips). Full scientific information should be gathered, and full analysis must be done, for non-animal species. Species that are important to the long-term residents of the area -- the Lakota, Cheyenne, and other native nations – require special protection. There is already information on protection of some species in project documents that could serve as a base for part of this analysis. However, a full and independent analysis is also needed.

In conclusion, we believe that this uranium should be left in the ground because when uranium is mined, it becomes harmful to both the people and the planet. The Oglala Sioux Tribe respectfully requests that the EPA halt the permitting processes for the proposed Dewey-Burdock project by denying both Class III and Class V UIC well permits and the aquifer exemption.

Sincerely,



Mr. Reno L. Red Cloud Sr.
Oglala Sioux Tribe Water Resources Department / Administrator
P.O. Box 320
Pine Ridge, SD. 57770



Mr. Richard A. Bell, PE, President,
Sustainable Environmental Energy Engineering, LLC
Consultant for the Oglala Sioux Tribe

Notes & References:

ⁱ Note that if these drilling activities are actually allowed to proceed, there should be a provision that makes the resulting information public.

ⁱⁱ Onyeukwu, Kyrian. 2007. *Assessment of Wind- and Soil-Related Hazards Associates with Abandoned Uranium Mines in the North Cave Hills, Harding County, South Dakota*. Master's Thesis, S.D. School of Mines and Technology; Stone, James, and Larry Stetler. 2008. Environmental Impacts from the North Cave Hills Abandoned Uranium Mines, South Dakota. *Uranium, Mining and Hydrogeology*; Tuombe, Emmanuel. 2008. *Surface water and sediment investigation concerning abandoned uranium mines in the South Cave Hills, North Cave Hills, and Flint Buttes region, Harding County, South Dakota*. Master's Thesis, S.D. School of Mines and Technology; Albertus-Benham, Hannah. 2009. *Surface water and sediment investigation concerning abandoned uranium mines within the Slim Buttes region, Harding County, South Dakota*. Master's Thesis, S.D. School of Mines and Technology; Stone, James, Larry Stetler, and Albrecht Schwalm. 2007. *Final Report: North Cave Hills Abandoned Uranium Mines Impact Investigation*. Prepared for U.S. Department of Agriculture: Forest Service-Region I, Missoula, MT. at https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3834131.pdf; Sharma, Rohit, and James Stone. 2013. Chemical composition of bottom sediments within black hills region reservoirs of South Dakota and Wyoming. *Environmental Earth Sciences*.

**Dr. Hannan E. LaGarry
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Valois Shea (shea.valois@epa.gov)

U.S. EPA Region 8
Mail Code: 8WP-SUI
1595 Wynkoop Street
Denver CO 80202-1129

Re: SUPPLEMENTAL WRITTEN TESTIMONY on the potential adverse effects of changes to the proposed UIC draft permits for the Powertech/Dewey-Burdock project.

Dear Valois,

The undersigned, Dr. Hannan E. LaGarry, an individual, residing at 526 Chapin Street in Chadron NE 69337, hereby provide the following SUPPLEMENTAL WRITTEN TESTIMONY to the above-referenced draft permits and documents related to Powertech/Dewey-Burdock. These written comments are provided in addition to the written testimony provided at the original hearing in Hot Springs SD in May 2017, and additional written testimony from July 2017.

INTRODUCTION

I have served as an expert witness for the Consolidated Intervenor and the Oglala Sioux Tribe since 2008, and have provided numerous expert written expert testimonies for both the Crow Butte Resources (CAMECO) and Dewey-Burdock (POWERTECH/AZARGA) ISL uranium license interventions. In my initial testimony I provided the data we recovered from our examination of Powertech's belatedly disclosed borehole data purchased from the Tennessee Valley Authority (TVA). Within this data we observed that the drillers of the TVA boreholes documented uncased holes, improperly plugged holes, artesian water, breccia pipes and caves, and faults. In my expert opinion, secondary porosities in the Dewey-Burdock area are such that loss of containment and the escape of pressurized fluids from underground waste injection are almost a certainty should either mining or injection be allowed. In this document, I will briefly outline my concerns with respect to the proposed changes to the 2017 draft permit.

PROFESSIONAL BACKGROUND

I have 25 years of experience studying the rocks and fossils of northwestern Nebraska. From 1988- 1991 I collected fossils from northern Sioux County for my dissertation work. From 1991-1996 I led field parties from the University of Nebraska State Museum while mapping the

fossils and geology of the Oglala National Grassland in Sioux and Dawes Counties. From 1996-2006 I led a team of geologists from the Nebraska Geological Survey that mapped in detail the surficial geology of most of northwestern Nebraska (a total of 80 1:24,000 quadrangles). This mapping included the entire Pine Ridge area and the area between Crawford, Nebraska and Pine Ridge, South Dakota. These maps, including digital versions (ArcInfo) and supporting field notes, are available from the University of Nebraska-Lincoln School of Natural Resources. As a direct consequence of this mapping, I have published peer-reviewed articles on the Chadron Formation (Terry & LaGarry 1998), the Brule Formation (LaGarry 1998), the mapping of surficial deposits (Wysocki & others 2000, 2005), and local faults (Fielding & others 2007). In future, we also intend to revise and reclassify the remaining rocks and surficial sediments of northwestern Nebraska and adjacent South Dakota.

In addition to my ongoing geological work in Nebraska, I have been working with students and faculty to study the geology, groundwater, surface water, and heavy metal contaminants of southwestern South Dakota and the Pine Ridge Reservation. For the past 6 years our research has been funded by the National Science Foundation's Tribal Colleges and Universities Program and Experimental Program for Stimulating Competitive Research, and the USDA National Institute for Food and Agriculture Tribal College Equity Program. We have formed and maintained partnerships with Chadron State College, the South Dakota Geological Survey, the South Dakota School of Mines and Technology, South Dakota State University, the University of Illinois Urbana-Champaign, the University of Illinois Center for Advanced Materials Purification of Water Systems, the Department of Health Physics at the University of Michigan School of Nuclear Engineering, the University of Washington Native American Research Center for Health, and the Technological University of Darmstadt, Germany. I have authored or coauthored reports detailing the preliminary results of studies describing toxic heavy metal contamination of drinking water (Salvatore & others 2010, Botzum & others 2011), characteristics of local aquifers (Gaddie & LaGarry 2010, LaGarry & others 2012), potential uranium contamination risk to communities on the Pine Ridge Reservation (LaGarry & Yellow Thunder 2012), and the transmission of uranium-contaminated water along regional faults (Bhattacharyya & others 2012), among others.

THE CHANGES FROM 2017 TO 2019

The EPA's proposed changes to the 2017 are paraphrased as follows:

1. The injection wells can be 600' closer to the mine
2. Looser regulation of size and scope of aquifer exemptions
3. Removal of down-gradient monitoring requirements

4. Open-hole completion for well construction
5. Removal of post-restoration monitoring requirements
6. Optional Madison well compensation for wells lost to contamination
7. Ending testing requirements for Class V injection adjacent aquifers
8. Requiring disclosure of private wells impacted by aquifer exemption
9. Limiting injection to Powertech generated waste
10. No reporting of seismic events <4.0 MMI
11. Original request for 8 wells reduced to 4, with 2 being fast tracked

Injection wells can be 600' closer to the mine

In two earlier opinions, including the one I submitted at the May 2017 hearings in Hot Springs, I described the “swiss-cheese” nature of the wellfield at Dewey-Burdock and its long-term lack of containment. This assessment was supported by the ASLB in that they imposed licensing requirements that Powertech exhume and properly close large numbers of potentially open holes. I fail to see the logic or benefit to moving a pressurized injection site closer to a demonstrably unconfined wellfield. It is as if you want to increase the likelihood of a pressurized leak.

Looser regulation of size and scope of aquifer exemptions

Without clearly demarcated limits of exactly where and how much of an aquifer is exempted, the pattern of behavior long established by ISL mines is to automatically default to ACLs, or as seems to be the case here, no limits at all. This is permission to pollute and avoid accountability.

Removal of down-gradient monitoring requirements

During the hearings there was much discussion about whether or not groundwater within the Minnelusa Aquifer flowed west, east, or not at all. Based on groundwater flow mapping by the United States Geological Survey (Driscoll and others 2002), water in the vicinity of the Dewey-Burdock site flows S/SE along the southern edge of the Black Hills, and once into greater Fall River County, groundwater flow is due east. This report makes no mention of a groundwater divide or other circumstance that would indicate isolation of groundwater within the Dewey-Burdock vicinity.

The flow from north of Dewey-Burdock to the SW has been measured at 591 feet/day, but flow south of the site has been measured at 7,393 feet/day. Once eastward flow is established, it has been measured at 4,349 feet/day to the east at the SD-WY state line, then 1,463 feet/day to the east in northern Fall River County and 732 feet/day to the east in central and southern Fall River County. On average, flow from Dewey-Burdock towards Edgemont, Hot Springs, Buffalo Gap, Oelrichs, and the western border of the Pine Ridge Reservation is about 3,484 feet/day. The Pine Ridge Reservation (Oglala Lakota County) is 46 miles from the Dewey-Burdock site, which means contaminated water from Dewey-Burdock could travel to the Pine Ridge Reservation in 70 days.

Edgemont would be affected in weeks, and Hot Springs would be reached in as little as 35 days.

Removal of monitoring means that contaminant plumes will reach and be consumed by nearby community members with no advance warning. People will be directly impacted, and removal of the few available means of getting advance warning is a violation of the public trust by the EPA.

Open-hole completion for well construction

Mines being allowed to leave holes open deliberately weakens injection aquifer containment. These holes will join over 4,000 other potentially problematic wells in the Dewey-Burdock wellfield, along with numerous faults, fractures, and breccia pipes. In 30 as a geologist I have never seen a more poorly considered location for ongoing mining or injection. Open holes at the mine should automatically disqualify nearby injection and vice versa.

Removal of post-restoration monitoring requirements

When the UIC wells are full and subsequently abandoned they become pressurized repositories of chemicals. Should they leak, and they inevitably do, the downgradient public will remain uninformed of toxic contaminants headed towards their wells and will likely drink the stuff to eventually find out about it. Like the removal of Minnelusa monitoring, this is a betrayal of the public trust by the EPA.

Optional Madison well compensation for wells lost to contamination

The promise to replace lost Minnelusa wells with a newer, better one in the Madison Aquifer to then make it optional (a cash-strapped Powertech will certainly not pay for it) was an underhanded ploy to win support for polluting the Minnelusa aquifer.

Ending testing requirements for Class V injection adjacent aquifers

In earlier comments I've called out changes that undermine containment. This completes the undermining of containment by removing the testing that would identify that it has occurred.

Requiring disclosure of private wells impacted by aquifer exemption

This presumes that each and every aquifer user is aware of these changes and has the means to comply. This cannot be assumed to be the case! There's lots of people using this aquifer that may or may not want to identify themselves for many reasons. Local landowners face threats and intimidation from pro-mining neighbors, and many are reasonably worried about their own exposure.

Limiting injection to Powertech generated waste

On its surface, this seems like a good thing. However, if Powertech is financially unable to conduct mining, and therefore aren't generating waste, why do they need injection wells in the first place? It seems to me that they could sell dump space to other operators in the vicinity and generate cash with which to continue mining. And with these new proposed weakening of the regulations and no direct oversight, EPA is virtually ensuring abuse will take place.

What's going to happen if Powertech takes some of that acid mine fluid from Wyoming and injects it in South Dakota? That acid will destroy what containment there is and ruin ALL of the aquifers. Not concerned because it hasn't happened yet? These are intended to be preventative measures so that these things never happen, because once they do there is no recovery. This is the situation being created here.

No reporting of seismic events <4.0 MMI

As I have mentioned previously in other expert opinions on this subject in this area, I've described seismic events along the the Whiteclay Fault (3.1 MMI) that opened previously closed cracks in the bedrock that essentially swallowed up Chadron's surface water supplies (the creek now drains into these cracks) despite being 40 miles from the epicenter. This mistake by the EPA will end up proving all of my opinions on the secondary porosity to be true. I will take no joy in it.

Original request for 8 wells reduced to 4, with 2 being fast tracked

Most ISL sites only need 1 injection well. Why does an operator, with no cash to mine and is not producing waste, need 4 injection wells with 2 of them fast tracked? This also lends credence to the idea that this is a way for Powertech to get some income by allowing others to inject into these unregulated and unmonitored wells. The entire application for permits seems frivolous, capricious, and arbitrary, UNLESS these are for another, hidden purpose.

CONCLUDING REMARKS

If these changes are intended to help a financially weak Powertech cut costs and be able to afford to mine on a smaller budget, they are misguided. Powertech is known to skirt regulations when they can and it suits them (I'm referring to the nondisclosure of thousands of sketchy boreholes in 2015), and these changes are a tacit invitation to do so again.

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SIGNATURE

The information contained herein is true and correct to the best of my knowledge at the time of this writing on 6 December, 2019.

A handwritten signature in black ink, reading "Hannan LaGarry". The signature is written in a cursive style with large, flowing loops and a prominent initial 'H'.

Dr. Hannan E. LaGarry
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