UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
POWERTECH (USA) INC.,	)	Docket No. 40-9075-MLA
	)	ASLBP No. 10-898-02-MLA-BD01
(Dewey-Burdock In Situ Uranium Recovery Facility)	)	
	)	

STATEMENT OF CONTENTIONS OF THE OGLALA SIOUX TRIBE FOLLOWING ISSUANCE OF FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT

I. INTRODUCTION

Pursuant to 10 C.F.R. § 2.309, and this Board's Scheduling Order dated March 4, 2013, Intervenor Oglala Sioux Tribe (Tribe) sets forth the following statement on contentions in this proceeding regarding the Final Supplemental Environmental Impact Statement (FSEIS) for Powertech (USA) Inc.'s proposed Dewey-Burdock Project in-situ leach (ISL) uranium mine. The Tribe's standing was confirmed in this Board's Order of August 5, 2010, which was not appealed. As such, pursuant to 10 C.F.R. § 2.309(c)(4), the Tribe is not required to address issues related to standing in this filing.

The Oglala Sioux Tribe is a federally-recognized Indian Tribe, located on the Pine Ridge Reservation. The Oglala Sioux Tribe is a body politic comprised of approximately 41,000 citizens, with territory of over 4,700 square miles in the southwestern portion of South Dakota. The Oglala Sioux Tribe is the freely and democratically-elected government of the Oglala Sioux people, with a governing body duly recognized by the Secretary of Interior. The Oglala Sioux Tribe is the successor in interest to the Oglala Band of the Teton Division of the Sioux Nation, and is a protectorate nation of the Unites States of America. The Oglala Band reorganized in

1936 as the "Oglala Sioux Tribe of the Pine Ridge Indian Reservation" under section 16 of the Indian Reorganization Act of June 18, 1934, ch. 576, 48 Stat. 987, 25 U.S.C. § 476, and enjoys all of the rights and privileges guaranteed under its existing treaties with the United States in accordance with 25 U.S.C. § 478b. The Tribe's address is P.O. Box 2070, Pine Ridge, South Dakota 57770-2070.

As discussed at length in the Tribe's Petition for Hearing filed on April 6, 2010, and supported by declarations of Tribal government officials, the Tribe opted to enter these proceedings because the project may pose serious threats to the Tribe's cultural, historic, economic, and conservation interests. As detailed herein and in the Tribe's Statement of New Contentions on the Draft Supplemental Environmental Impact Statement (DSEIS), NRC staff has failed to meet the requirements of the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4231, *et seq.*, the National Historic Preservation Act (NHPA), 16 U.S.C. § 470, *et seq.*, and implementing regulations, including NRC regulations in 40 C.F.R. Part 51. These failures remain troubling given that the majority of the same issues were identified both in the Tribe's initial statement of contentions premised on Powertech's Environmental Report, Technical Report, and Supplemental Report that comprised the application as well as the Tribe's statement of contentions on the DSEIS. Although Powertech has had more than four years since the date of the application to collect the necessary data and information, it appears that very little, if any, additional primary data or information has been collected by Powertech. Similarly, NRC Staff has not required, independently collected, or confirmed the data and information necessary to resolve the serious environmental and cultural issues identified by the Tribe starting with its April 6, 2010 filing and identified in the January 25, 2013 DSEIS contentions submission.

As discussed herein, the Final SEIS has failed to address substantial concerns regarding impacts to the Tribe's cultural and historic resources, and the lack of information necessary to determine the hydrogeology and geochemistry of the site. In fact, the NRC Staff's decision to separate the National Historic Preservation Act section 106 consultation from the NEPA process has exacerbated the problems, and effectively relegated cultural and historic resource protection to an afterthought. Instead, NRC Staff has swept these stubborn issues under the rug by relegating them to an internal NRC post-licensing decisionmaking process. The result is that any meaningful review of the impacts associated with cultural and historic resources and any mitigation associated with these impacts has been inappropriately and illegally excluded from the NEPA process. Ongoing hydrologic and geologic inadequacies include the lack of a defensible baseline ground water characterization, the lack of a thorough review of the natural and manmade interconnections between aquifers in the area that may allow for cross-contamination with the aquifer slated for chemical mining, and the lack of the required analysis of proposed mitigation measures.

The attached Second Supplemental Declaration of Dr. Robert E. Moran incorporates by reference and attaches his prior Supplemental Declaration, and further details the lack of scientifically-defensible analysis in the FSEIS regarding potential impacts to ground water associated with the proposed Project. See Second Supplemental Declaration of Dr. Robert E. Moran, attached as Exhibit 1. Dr. Moran's Second Supplemental Declaration supports many of the contentions raised and admitted to this proceeding. As discussed below, these contentions as admitted should be considered both contentions of omission and contentions of inadequacy and revolve around the failure of the FSEIS to portray the required analyses and review regarding necessary components of the project.

II. DISCUSSION OF ADMITTED CONTENTIONS, CONTENTIONS OF OMISSION AND INADEQUACY, AND MIGRATION TENET

As required by 10 C.F.R. § 2.309, the Tribe sets forth below the specific contentions that it seeks to have litigated in this proceeding. Each contention presents issues with respect to the sufficiency of the FSEIS under the National Environmental Policy Act ("NEPA"), National Historic Preservation Act ("NHPA"), and applicable regulations, including those of NRC, the federal Advisory Council on Historic Preservation ("ACHP"), and the Council on Environmental Quality ("CEQ"). At minimum, each contention set forth below implicates and asserts violations of 10 C.F.R. §§ 51.10, 51.70, and 51.71, which require NRC compliance with all provisions of NEPA as well as the NHPA, and any other applicable federal, state, and local requirements.

As stated by the Board in its February 20, 2014 Memorandum, the Board considers the "migration tenet" to apply to contentions in this case. Memorandum at 4-5. As a result, where information in the FSEIS is sufficiently similar to the information in the DSEIS, the Tribe need not file a new or amended contention. Rather, the previously admitted contention will simply be viewed as applying to the FSEIS, "so long the FSEIS analysis or discussion is essentially in para materia with the DSEIS analysis or discussion that is the focus of the contention." Id at 5. The Tribe contends that the FSEIS discussion of each of the already-admitted contentions is in para materia with the analysis from the DSEIS. However, in an abundance of caution and because FSEIS claims arguably did not ripen until the FSEIS was released, this pleading addresses each admitted contention in turn, with reference and discussion to any new analysis or discussion in the FSEIS, to the extent it exists. The Tribe notes that is compelled to address each admitted contention again in large part due to the aggressive opposition asserted by NRC Staff and Powertech throughout this proceeding and with respect to each and every contention heretofore

filed in this case. Indeed, Powertech even saw fit to challenge any standing of the Tribe to participate. Thus, while the Tribe hereby affirmatively asserts that each admitted contention is already slated for hearing and immune from dismissal at this stage, the following discussion bolsters those claims.

Lastly, the Tribe affirmatively asserts that each admitted contention already consists of a contention of adequacy or a combined contention of adequacy and omission. This is borne out by the verbiage used to describe the contentions as set forth in the Board's July 22, 2013 Order (LBP-13-09) at 95-96, where the Board uses the word "adequate" in the context of admission of Contentions 2, 3, 4, 6. Based on the discussions provided in both the Tribe's prior contention pleadings on the application and the DSEIS, along with the discussion presented herein, the Tribe asserts that inadequacy is also alleged with respect to the subject matter contained in Contentions 1A, 1B, 9, 14A, and 14B. Thus regardless of how the Tribe's DSEIS contention pleading referred to some of these contentions as contentions of omission, the discussions contained therein and in the original contention pleading on the application materials clearly demonstrate that these contentions are also contentions of omission and inadequacy.

Contention 1A: **Failure to Meet Applicable Legal Requirements Regarding Protection of Historical and Cultural Resources.**

Read together, the Board's August 5, 2010 Order (LBP-10-06) and July 22, 2013 Order (LBP-13-09) admitted Contention 1 in two parts based on (1A) the failure to meet the requirements of NEPA, the NHPA, and 40 C.F.R. §§ 51.10, 51.70 and 51.71, along with the NRC, ACHP, and CEQ regulations because the application and SEIS lacked an adequate description of either the affected environment or the impacts of the project on archaeological, historical, and traditional cultural resources, and (1B) the failure to involve or consult with all

interested tribes as required by federal law. The Board recognized in LBP-13-09 that these contentions "question the adequacy of the protection of historic and cultural resources" and "the adequacy of the consultation process with interested tribes." LBP-13-09 at 15. These contentions of inadequacy carry over to the FSEIS, despite the NRC Staff's attempts to include additional cultural and historical resource impacts discussion in the FSEIS.

Regarding cultural and historic resources, the FSEIS carries forward serious problems from the application and DSEIS stage. As stated previously, despite having years to do so, neither Powertech nor NRC Staff has conducted an adequate and competent cultural resources survey within the project area, as required by NEPA. This is even despite express promises from NRC Staff to do so. As stated in the NRC Staff Answer to Contentions on the Draft Supplemental Environmental Impact Statement:

> As the Staff explained when it issued the DSEIS, however, it is working to facilitate a field survey of the Dewey-Burdock site in order to obtain additional information on historic properties. When the survey is complete, the Staff will supplement its analysis in the DSEIS and circulate the new analysis for public comment.

NRC Staff Answer at 13. Thus, the only Class III level archaeological survey conducted in this case is the original survey by the students at Augustana College, which was critiqued in prior pleadings and expert reports related to this contention at the application stage and DSEIS stage.

The FSEIS discusses the NRC Staff's unsuccessful attempt to secure a scientifically-valid independent cultural survey of the project area, but shows that instead of having such a survey completed, NRC Staff abandoned that approach and did not pursue it any further. FSEIS at 1-23 to 24. NRC Staff and the applicant will no doubt point to the concerns of various Tribes, including the Oglala Sioux Tribe with regard to the proposed survey as the basis for abandoning that approach. See FSEIS at 1-24. However, the Tribe's request for a competent survey does

not excuse NRC Staff's failure to have a proper survey conducted in a timely manner at the earliest stages of the NEPA process or at all. The Tribe's objections centered on the methodology sought to be employed, not on the survey itself.

Rather than put together a competent survey that included proper scientific expertise, proper methodology, and the participation of the Tribal representatives, NRC Staff instead simply invited Tribes to visit the site for themselves, making no provision for methodologies or scope. Several Tribes, including the Oglala Sioux Tribe, rejected the terms of the NRC Staff directed survey as improper and insufficient. FSEIS at 1-25. Instead of resolving these issues, NRC Staff simply charged forward, collecting information from the small selection of Tribes that did participate in the exercise and deemed it sufficient.

During this time period, NRC Staff also opted to "separate" the NHPA 106 process from the NEPA process. FSEIS at 1-26. The result of this separation is that the NHPA 106 process is still ongoing, despite the finalization of the FSEIS – relegating any analysis, mitigation, or project alternatives that result from that consultation as an afterthought to the NEPA process. Further, regardless of how NRC Staff attempts to discharge its duties under NHPA and NEPA, the fact remains that the FSEIS lacks the required competent, adequate, and scientifically-valid cultural resources inventory – despite having committed to the Tribe and this Board to provide the survey and analysis for public comment and review in a NEPA document prior to finalizing the FSEIS. As a result, the NRC Staff's cultural and historic resources impact analysis violates NEPA.

This contention is supported by the Declaration of Wilmer Mesteth, Oglala Sioux Tribe Tribal Historic Preservation Officer (Attached as Exhibit 7 to the Tribe's April 6, 2010 Petition to Intervene), record documents referenced in the FEIS as described and in Appendix A to the

FSEIS, recent letters to the NRC Staff from Oglala Sioux President Bryan Brewer and Standing Rock Sioux Tribe Tribal Historic Preservation Officer (attached hereto as Exhibit 2), as well as omissions in the DSEIS.

As described in the contention submittal on the DSEIS, NEPA and its implementing regulations from both NRC and CEQ require an analysis beyond that contained in the FSEIS. Specifically, 10 C.F.R. § 51.71(d) and NEPA require each FSEIS to include an analysis of all environmental impacts of a proposed action, including cultural impacts. 10 C.F.R. § 51.70(a) places an affirmative duty on NRC Staff to conduct all NEPA analysis in conjunction with other surveys or studies required under federal law. This includes necessary surveys required under NEPA and the NHPA. In this case, the FSEIS demonstrates that a significant number of archaeological, historical, and traditional cultural resources on site have not been evaluated because the agency never completed an independent cultural resource inventory as it committed to in the DSEIS (DSEIS at xxxix); therefore, the potential impacts to these resources have not been adequately addressed.

The FSEIS concedes that the required analysis has not been completed, despite the issuance of a final NEPA document. FSEIS at 1-26. This includes the failure to have any finalized Programmatic Agreement (PA) which by its own terms is designed to set forth the process for identifying impacts, future processes for identifying sites while construction and operations occur, and mitigation measures to be implemented. The lack of this necessary information in the FSEIS demonstrates the violation of NEPA and implementing regulations.

As a result of this confirmed lack of adequate survey, the FSEIS determines that the impacts from the proposed action will range from "small to large." This broad range may be appropriate for a generic analysis, but demonstrates the lack of information inherent in the site-

specific NEPA analysis. In any case, any pre-ordained and categorical conclusions, without the benefit of necessary information and a competent analysis demonstrate a lack of scientific integrity of the FSEIS cultural and historic resource impact analysis, and form the basis for a contention as to whether or not the FSEIS conforms with NRC regulations, the NHPA, and NEPA, and the implementing regulations for these laws.

Contention 1B: Failure to Involve or Consult All Interested Tribes as Required by Federal Law.

Among the applicable requirements to NRC's licensing process are those under the National Historic Preservation Act ("NHPA") and related Executive Orders. Under these authorities, the NRC is required to fully involve Native American Tribes in all aspects of decision-making affecting Tribal interests such as those directly impacted by the project. These mandates require NRC to consult with Tribes as early as possible in the decisionmaking process.

Here, despite having the applicant's materials since 2009, and the Tribe's contentions regarding lack of adequate surveys since April 6, 2010, the NRC has not meaningfully engaged in the required consultation process. These problems were described in email and letter correspondence between affected Tribes and the NRC Staff (see communications regarding NEPA and NHPA compliance attached to OST Statement of Contentions on the DSEIS as Exhibit 3) and detailed in the Tribe's DSEIS contentions pleading. See List of Contentions of the Oglala Sioux Tribe Based on the Draft Supplemental Environmental Impact Statement at 6, 9-10. More recently OST President Bryan Brewer and the Standing Rock Sioux Tribal Historic Preservation Officer have described at length the problems they have encountered with a lack of adequate consultation and lack of meaningful review of cultural resources in the NEPA process.

See Exhibit 2 attached hereto. These detailed concerns have not been addressed and support both Contention 1A and 1B in this proceeding.

As these letters make abundantly clear, these problems are a significant issue and reveal that NRC Staff is not carrying out its agency responsibilities in a manner that recognizes and respects the government-to-government relationship. Indeed, as stated in the FSEIS, the 106 consultation process is ongoing. FSEIS at 1-26. This includes the failure to have any finalized Programmatic Agreement (PA) which is designed to set forth the process for identifying impacts, future processes for identifying sites while construction and operations occur, and mitigation measures to be implemented. Yet, remarkably, the FSEIS has already been finalized, a proposed action selected, all but finalizing the issuance of a completed license to the applicant. The failure to engage the Tribe on NHPA issues in a meaningful way, including failing to do so at the earliest possible time and within the NEPA process violates the NHPA and NEPA.

The federal courts have addressed the strict mandates of the National Historic Preservation Act:

> 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 CFR § 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 and describe them in the [NEPA document].") These requirements are impossible to fulfill when the consultation process is still ongoing, including discussion of impacts and proper mitigation, when the NEPA process is completed.

NRC Staff interpretations of these requirements are not entitled to deference. The Advisory Council on Historic Preservation ("ACHP"), the independent federal agency created by Congress to implement and enforce the NHPA, has exclusive authority to determine 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 *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," such as this Project, 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. *See* 36 CFR § 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).

Apart from requiring that an affected tribe be involved in the identification and evaluation of historic properties, the NHPA requires that "[t]he agency official **shall ensure that the section 106 process is initiated early in the undertaking's planning**, so that a broad range of alternatives may be considered during the planning process for the undertaking." 36 CFR § 800.1(c) (emphasis added). This requirement exists so that the agency does not put itself in the exact position NRC Staff has here – finalization of the NEPA process prior to gaining all relevant information necessary to assess impacts and design effective mitigation. The ACHP has published guidance specifically on this point, reiterating in multiple places that consultation must begin at the earliest possible time in an agency's consideration of an undertaking, even framing such early engagement with the Tribe as an issue of respect for tribal sovereignty. ACHP, Consultation with Indian Tribes in the Section 106 Review Process: A Handbook (November 2008), at 3, 7, 12, and 29.

Regarding respect for tribal sovereignty, the NHPA requires that consultation with Indian tribes "recognize the government-to-government relationship between the Federal Government

and Indian tribes." 36 CFR § 800.2(c)(2)(ii)(C). See also Presidential Executive Memorandum entitled "Government-to-Government Relations with Native American Tribal Governments" (April 29, 1994), 59 Fed. Reg. 22951, and Presidential Executive Order 13007, "Indian Sacred Sites" (May 24, 1996), 61 Fed. Reg. 26771. The federal courts echo this principle in mandating all federal agencies to fully implement the federal government's trust responsibility. See *Nance v. EPA*, 645 F.2d 701, 711 (9th Cir. 1981) ("any Federal Government action is subject to the United States' fiduciary responsibilities toward the Indian tribes").

Here, the application was initially submitted to the NRC in February of 2009, more than five years ago. Yet, the FSEIS was pushed to completion even though no adequate cultural survey of the site has yet been conducted with the requisite level of Tribal participation. The result is to effectively exclude the Tribe from the NEPA/NHPA process until after the critical NEPA document is finalized. This scheme contravenes the requirements of the NHPA and NEPA, and NRC and NHPA regulations, and harms the Tribe's ability to participate in the identification of historic/cultural properties and hampers its ability to effectively participate at the later stage when the specific impacts from a particular project are analyzed. See, e.g., 36 C.F.R. §§ 800.4 ("Identification of historic properties") and 800.5 ("Assessment of adverse effects").

Given these requirement of the NHPA, NEPA, and applicable regulations, the harms to the Tribe began accruing immediately upon NRC consideration of the Application in a manner that segregated the Tribe's interdisciplinary, culturally-based consultation on the project from what NRC Staff considers technical and environmental concerns. These harms are exacerbated by the NRC Staff's decision to issue the FSEIS despite the incompletion of NHPA section 106 consultation and the lack of meaningful involvement the survey of the affected areas. The only

meaningful relief available in a case as egregious as this is to reissue a draft SEIS for public review and comment once the requisite reviews are completed, so that the analysis, alternatives, and mitigation measures in the NEPA document and public comments on the new draft SEIS, can take these reviews into account.

In sum, this contention seeks to reintegrate the interdisciplinary study requirements of NEPA to ensure that the purposes of NEPA, the NHPA, and the government-to-government relationship are honored by NRC Staff, and included in a new, comprehensive SDEIS issued for review and comment for the Tribe, Tribal members, the public, and other interested persons.

Contention 2: Failure to Include Necessary Information for Adequate Determination of Baseline Ground Water Quality

The FSEIS violates 10 C.F.R. Part 40, Appendix A, Criterion 7, 10 C.F.R. §§ 51.10, 51.70 and 51.71, and the National Environmental Policy Act, and implementing regulations – each requiring a description of the affected environment and impacts to the environment – in that it fails to provide an adequate baseline groundwater characterization or demonstrate that ground water samples were collected in a scientifically defensible manner, using proper sample methodologies.

With regard to this contention, there appears to be no significant or additional baseline water quality information in the FSEIS and this contention migrates from the DSEIS. Indeed, in response to comments from the Tribe on the DSEIS specifically detailing the problems with lack of adequate baseline water quality data, NRC Staff confirms that the applicant collected data from 2007 to 2009 and that "the NRC staff used this information when drafting the affected environmental section of the SEIS as well as analyzing impacts of the proposed action." FSEIS at E-32.

Exacerbating these problems previously alleged in detail by the Tribe as the basis for this contention, NRC Staff states that:

> the applicant will be required to conduct additional sampling if a license is granted to establish Commission-approved background groundwater quality before beginning operations in each proposed wellfield in accordance with 10 CFR Part 40, Appendix A, Criterion 5B(5). However, this does not mean that the NRC staff lacks sufficient baseline groundwater quality information to assess the environmental impacts of the proposed action.
>
> **No change was made to the SEIS beyond the information provided in this response.**

FSEIS at E-32(emphasis added). This establishes that not only has NRC Staff not required or used the collection of any additional baseline data for its characterization of baseline water quality, it will require additional data in order to establish a credible baseline for use in the regulatory process. Simply put, while the FSEIS contains data from 2007-2009, the "real" background water quality will be established a future date, outside of the NEPA process, and outside of the public's review.

In an abundance of caution, the Second Supplemental Declaration of Dr. Robert E. Moran (attached as Exhibit 1)(hereinafter "Moran Second Suppl. Decl.") provides additional support for migrating the admitted contention as applicable to the FSEIS. Moran Second Suppl. Decl. at ¶¶ 3, 26, 38This declaration supplements, but does not materially differ from the previously submitted Supplemental Declaration of Dr. Moran and the Declaration of Dr. Richard Abitz detailing the requisite standards for scientific validity in a baseline analysis. *See e.g.* Moran Suppl. Decl. at ¶58 ("The DSEIS, like the Powertech Application, fails to define pre-operational baseline water quality and quantity—both in the ore zones and peripheral zones, both vertically and horizontally."); ¶¶ 47-74, 75, 82-84, 92-94, 95.

10 C.F.R. §§ 51.10, 51.70 and 51.71, and the National Environmental Policy Act, and implementing regulations, require a description of the affected environment containing sufficient data to aid the Commission in its conduct of an independent analysis. Further, applicable regulations require the applicant to provide "**complete** baseline data on a milling site and its environs." 10 C.F.R. Part 40, Appendix A, criterion 7(emphasis added). These authorities and scientific bases for the Tribe's contention were discussed at length in the Tribe's original contention pleading and its DSEIS contention pleading, including the improper reliance on the outdated NRC Regulatory Guide 4.14 (1980), and those discussions are expressly incorporated herein by reference.

The FSEIS carries forward the NRC Staff's failure to adequately describe the affected aquifers at the site and on adjacent lands and fails to provide the required quantitative description of the chemical and radiological characteristics of these waters necessary to assess the impacts of the operation, including potential changes in water quality caused by the operations.

Contention 3: Failure to Include An Adequate Hydrogeological Analysis To Assess Potential Impacts to Groundwater

The FSEIS fails to provide sufficient information regarding the hydrologic and geological setting of the area to meet the requirements of 10 C.F.R. § 40.31(f); 10 C.F.R. § 51.45; 10 C.F.R. § 51.60; 10 C.F.R. §§ 51.10, 51.70 and 51.71, 10 C.F.R. Part 40, Appendix A, Criteria 4(e) and 5G(2), and the National Environmental Policy Act, and implementing regulations. As a result, the FSEIS similarly fails to provide sufficient information to establish potential effects of the project on the adjacent surface and ground-water resources, as required. In its ruling on the DSEIS contentions, the Board held that "to the extent the intervenors have concerns with the adequacy of the hydrogeologic analysis necessary to show adequate confinement and potential

impacts to groundwater, this is already an issue set for hearing." July 22, 2013 Order (LPB-13-09) at 24. This is contention is both one of omission and inadequacy.

As with Contention 2, the FSEIS does not identify new data associated with the proposal that could defeat the migration tenet with respect to this contention. Indeed, in the FSEIS response to comments on issues related to confinement and fluid migration, NRC Staff repeatedly state that "no change was made to the SEIS" based on those comments. See e.g., FSEIS at E-30 to 31, E-150. The result is that the bases for this contention as set forth in the DSEIS remains fully applicable to the FSEIS.

As with the DSEIS, where the FSEIS contains any changes, it notes only that a proposed license condition was added to further clarify that the applicant will be required to submit adequate hydrogeologic data, but only after the NEPA process is completed, after a license is issued, and with no chance for any public review. See .e.g., FSEIS at E-51 ("The commenter is correct in stating that wellfield hydrogeologic data packages will not be made available for public review. However, by license condition, all wellfield data packages must be submitted to NRC for review prior to operating each wellfield (NRC, 2013b). . . . Text was revised in SEIS Section 2.1.1.1.2.3.4 to clarify NRC license conditions with respect to review and approval of wellfield data packages at the proposed Dewey-Burdock ISR Project."). This was the gravamen of the DSEIS contention on this point – the lack (and deferral of collection and review to a later date) of necessary data and analysis to ensure a credible and NEPA and NRC regulation-compliant review of impacts to groundwater.

Given the material similarity and lack of additional data, the Supplemental Declaration of Dr. Robert E. Moran (attached as Exhibit 2 to the Tribe's DSEIS contention pleading) and the extensive discussion of the issue contained in the Tribe's application and DSEIS contention

pleadings on this contention continue to provide adequate support for this contention. See e.g., Moran Suppl. Decl. at ¶33.("The DSEIS fails to provide detailed, site-specific information / data on the hydrogeologic characteristics of the relevant D-B water-bearing and other bounding geologic units, including the mineralized zones."), see also e.g., ¶¶33-36, 39-48, 49, 54-56, 82-84, 8; OST List of Contentions on DSEIS at 15-18 (including substantial discussion of NEPA statutory, regulatory, and case law); OST Statement of Contentions on Application at 21-25.

The only possible exception to the lack of new information related to this contention is a 2012 report referenced in the FSEIS from Petrotek regarding modeling of the hydrogeology. The FSEIS appears to rely heavily on this report throughout its discussion of confinement issues, as well as geology and water usage impacts. See FSEIS 3-17 to 18; 4-57, 4-59, 4-61 to 62, 4-64, 4-68, 4-71, 4-73, 4-75, 5-25. Disturbingly, this report appears to have been submitted to NRC Staff in February of 2012, months before the DSEIS was published. Yet, despite this fact, the DSEIS makes no reference, citation, nor any discussion of the document.

Dr. Moran's Second Supplemental Declaration discusses this Petrotek modeling report and sets forth his opinion as to why it is not sufficient to resolve the issues associated with the Tribe's Contention 3. See Moran Second Suppl. Decl. at ¶¶ 51-56. As such, to the extent any argument can be made that the Petrotek report affects the migration of this contention, Dr. Moran's analysis suffices to explain why the report does not resolve the issues raised in the Tribe's Contention 3. Further, to the extent the Petrotek modeling report may be considered significant new information, there has been no opportunity for the Tribe, the public, or other agencies to comment on this report within the NEPA process.

Based on this demonstration (including the information incorporated by reference), the FSEIS continues to fail to provide an adequate geology and hydrogeology analysis and as a

result fails to adequately analyze the impacts associated with the proposed mine, particularly on groundwater resources.

Contention 4: Failure to Adequately Analyze Ground Water Quantity Impacts

The FSEIS violates the National Environmental Policy Act in its failure to provide an adequate analysis of the ground water quantity impacts of the project. Further, the FSEIS presents conflicting information on ground water consumption such that the water consumption impacts of the project cannot be accurately evaluated. These failings violate 10 C.F.R. §§ 51.10, 51.70 and 51.71, and the National Environmental Policy Act, and implementing regulations.

As with the prior admitted contentions, this contention migrates forward from the contentions admitted on the application materials and the DSEIS. The Board's ruling on this contention in its July 22, 2013 Order (LBP-13-09) confirmed that "the Oglala Sioux Tribe's concerns with the adequacy of the analysis of groundwater quantity impacts is already an issue set for hearing." Order at 27. As such, the Supplemental Declaration of Dr. Robert E. Moran (attached as Exhibit 2 to the Tribe's List of Contentions on the DSEIS) continues to provide adequate support for this contention. See e.g., Moran Suppl. Decl. at ¶21 ("the DSEIS provides imprecise, conflicting information on the volumes of water to be used throughout the various sections of the DSEIS"); ¶¶ 20-32, 37-38, 50-51, 86-91,101. Additionally, the discussions of the basis for this contention presented in the Tribe's contention pleadings on the application and on the DSEIS are incorporated herein. Petition to Intervene and Request for Hearing at 25-28; List of Contentions on DSEIS at 18-20.

The FSEIS does include one additional piece of information that was not present in the DSEIS claiming to be a "water balance" for the project. The lack of a "water balance" formed a part of the basis for the Tribe's Contention 4 based on the application materials and the DSEIS.

However, as discussed in Dr. Moran's Second Supplemental Declaration, the "water balance" contained in the FSEIS does not provide sufficient information to adequately analyze the groundwater quantity impacts.

Specifically, Dr. Moran opines that:

> In order to evaluate the adequacy of mine water-related data and water management practices, it is standard practice for EISs and similar mine environmental reports to include a detailed water balance. Such a balance includes measured data for all water inputs and outputs related to all mine operations and all sources of water that might influence these operations. Essentially any detailed ground water textbook describes the workings of such water balances (e.g. Freeze & Cherry, 1979) and ICMM (2012) and Golder Assoc. (2011) represent two industry-sponsored studies that describe how water balances should be applied at mine operations.

Moran Second Suppl. Decl. at ¶ 31. Dr. Moran further provides his analysis with regard to the additional information provided in the FSEIS:

> On page 2-36 the SEIS (see Fig. 2.1-14) contains what the authors claim is a water balance, but it clearly is not. In fact, it is actually labeled as "Typical Project-Wide Flow Rates**".** This is not a water balance for the D-B site or D-B operations. It lacks basic components of a water balance, including detailed, measured data for volumes of water entering the system and losses (e.g. volumes of ground water available in the various aquifers, evaporation from land-application facilities, volumes under-going UIC injection, etc.), and *fails to calculate an actual balance.*

Moran Second Suppl. Decl. at ¶ 32 (emphasis in original). Dr. Moran concludes that "the NRC has not cured the deficiency by including a flow rate figure, which lacks the basic components of a water balance." Id. at ¶ 33.

As such, despite the inclusion of the additional information in the FSEIS, the Tribe's DSEIS contention with respect to the lack of adequate analysis of ground water quantity impacts conforms with the migration tenant and encompasses deficiencies in the FSEIS.

Contention 6: Failure to Adequately Describe or Analyze Proposed Mitigation Measures

The FSEIS violates 10 C.F.R. §§ 51.10, 51.70 and 51.71, and the National Environmental Policy Act and implementing regulations by failing to include the required discussion of mitigation measures. This contention migrates from the DSEIS stage, as there is no substantial additional discussion of mitigation measures or their effectiveness in the FSEIS. As such, the Supplemental Declaration of Dr. Robert Moran provides ongoing support for this contention. See e.g., Moran Suppl. Decl. at ¶ 114 ("the mitigation consists only of proposals to make plans to restore groundwater in the future. There is no detail as to the effectiveness of these proposed mitigation measures, nor any analysis of whether any such plans have succeeded in the past."); ¶¶ 92-94, 102-103, 104-113, 116-119. The Tribe's discussion of the relevant statutory, regulatory, case law pertaining to mitigation, along with examples of the difficulties in achieving mitigation of expected impacts (particularly with groundwater impacts) are expressly incorporated herein. See List of Contentions of the Oglala Sioux Tribe based on the DSEIS at 23-27.

NRC regulations at 10 C.F.R. §§ 51.10, 51.70, and 51.71 require all SEIS documents to include all analyses required under NEPA, and that compliance with NEPA "be supported by evidence that the necessary environmental analysis have been made." With respect to mitigation, NEPA requires the agencies to: (1) "include appropriate mitigation measures not already included in the proposed action or alternatives," 40 C.F.R. § 1502.14(f); and (2) "include discussions of: . . . Means to mitigate adverse environmental impacts (if not already covered under 1502.14(f))." 40 C.F.R. § 1502.16(h). NEPA regulations define "mitigation" as a way to avoid, minimize, rectify, or compensate for the impact of a potentially harmful action. 40 C.F.R.

§§ 1508.20(a)-(e). "[O]mission of a reasonably complete discussion of possible mitigation measures would undermine the 'action-forcing' function of NEPA. Without such a discussion, neither the agency nor other interested groups and individuals can properly evaluate the severity of the adverse effects." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 353 (1989).

Specifically in the mining context, federal courts hold that NEPA also requires that the agency fully review whether the mitigation will be effective. See *South Fork Band Council v. Dept. of Interior*, 588 F.3d 718, 728 (9th Cir. 2009). "The [agency's] broad generalizations and vague references to mitigation measures … do not constitute the detail as to mitigation measures that would be undertaken, and their effectiveness, that the [agency] is required to provide." *Neighbors of Cuddy Mountain v. U.S. Forest Service*, 137 F.3d 1372, 1380-81 (9th Cir. 1998). The DSEIS's reliance on a future, as yet-unsubmitted, mitigation to prevent/mitigate adverse impacts to these resources also violates NRC duties under NEPA and the National Historic Preservation Act [NHPA]. The NHPA, NEPA, and implementing regulations, require full review of these impacts as part of the public review process – something which has not occurred here.

Indeed, with regard to the cultural resources impacts, the FSEIS concedes that consultation is not even complete, and the Programmatic Agreement, which is supposed to describe mitigation measures has not been finalized, and is subject to considerable controversy and objection by the Tribes. See FSEIS at 3-94 ("At this time, consultation on the evaluation and effects determination of historic properties is ongoing with all consulting parties, including interested tribes. The outcome of this consultation effort will be included in the programmatic agreement."); "Mitigation measures identified in the licensee's management plan or site specific Memorandum of Agreement (MOA) or Programmatic Agreement (PA) could reduce an adverse impact to a historic or cultural resource by reducing the adverse effect on a historic property.

(NRC, 2009a)." FSEIS at 4-157. See also, FSEIS at 1-16, 1-22, 5-47, 5-48, E-190, E-197(all expressly relying on as-of-yet uncompleted PA, with as-of-yet undersigned and unreviewed future plans to mitigate impacts). Compare, letters from OST President Brewer and Standing Rock Sioux Tribe (attached hereto as exhibit 2).

Because the FSEIS relies on mitigation for an array impacts, NEPA requires such mitigation must be specifically spelled-out, at least in reasonable detail, and the effectiveness of the proposed mitigation must be analyzed. Here, as with the DSEIS and apart from the cultural resources discussion above, NRC Staff expressly and repeatedly relies on mitigation in gauging the level of impacts and in justifying its recommendation to issue the proposed license. FSEIS at xxxii. Unfortunately, like the DSEIS, the proposed mitigation consists largely, if not exclusively, of a list of plans to be developed later, outside the NEPA process. FSEIS at 6-1 through 6-19. Much like the failure to analyze baseline data, the FSEIS fails to provide the any of the required detailed analysis of proposed mitigation measures, and makes no attempt to evaluate the effectiveness of the proposed mitigation.

Instead of providing a reasonably complete NEPA discussion of mitigation and providing an interdisciplinary analysis of the effectiveness of those mitigation measures, the FSEIS repeatedly refers to various commitments by the applicant to mitigate impacts by submitting plans in the future as a result of license conditions imposed by NRC Staff. These future plans encompass mitigation for a broad scope of impacts, including such basic elements as requiring the applicant to conduct hydrogeological characterization and aquifer pumping tests in each wellfield to examine the hydraulic integrity of the Fuson Shale, which separates the Chilson and Fall River aquifers; a commitment from the applicant to locating unknown boreholes or wells identified through aquifer pump testing, and committing to plugging and abandoning historical

wells and exploration holes, holes drilled by the applicant and any wells that fail mechanical integrity tests. FSEIS at 135. However, no discussion or analysis is provided to explain how an applicant might go about identifying abandoned holes or analyzing the effectiveness of long-after-the-fact plugging and abandonment, nor is any discussion given to what methodology or effectiveness criteria accompanies the pump tests or monitoring well systems. Similar gaps in the analysis exist in the failure in the FSEIS to assess its plan to review groundwater restoration only for a period of 12 months. FSEIS at 2-40. There is no support of basis for this time period, nor any discussion of the basis or effectiveness of such a time period. See Moran Suppl. Decl. at ¶ 115. Further, no alternative time periods were analyzed.

Other proposed groundwater impact mitigation that lacks reasonably complete NEPA review and analysis as to effectiveness include a proposed, but unevaluated, monitoring well network for the Fall River aquifer in the Burdock area for those wellfields in which the Chilson aquifer is in the production zone in order to "address uncertainties in confining properties of the Fuson Shale" because leakage may occur through the Fuson Shale and "draw-down induced migration of radiological contaminants from abandoned open pit mines in the Burdock area." FSEIS at E-135 to 136. Despite having none of this information or plans developed, the FSEIS nevertheless concludes that the risks of this type of contamination is "expected to be small" and therefore NRC Staff actually revised this risk level down from the draft. FSEIS at E-136. Such unsubstantiated conclusions based on unsubmitted, unreviewed, and even undeveloped mitigation plans is not allowable under NEPA.

The same problems exist where the FSEIS lacks sufficient detail and simply requires plans to be submitted in the future to address air impacts (FSEIS at E-163 to 164), land disposal of radioactive waste (FSEIS at E-56), and wildlife protections (FSEIS at E-158 to 159)

(conceding that the applicant is still in the process of "actively working on an avian monitoring and mitigation plan."). For the most part, these mitigation measures are simply plans to make plans at some point in the future – outside of the NEPA process and shielded from public review or comment. Such assurances, without any details as to the mitigation to be proposed and without evaluation of how effective these restorations efforts are expected to be, do not satisfy NEPA.

As detailed in the Tribe's DSEIS contention pleading, historic evidence demonstrates that ISL uranium mines have a very poor record of restoring ground water aquifers – in fact, none have ever actually restored an aquifer used to conduct ISL uranium mining. See List of Contentions of Oglala Sioux Tribe based on DSEIS at 25-26 (referencing J.K. Otton, S. Hall, "In-situ recovery uranium mining in the United States: Overview of production and remediation issues," U.S. Geological Survey, 2009 (IAEA-CN-175/87), Hall, S. "Groundwater Restoration at Uranium In-Situ Recovery Mines, South Texas Coastal Plain," USGS Open File Report 2009-1143 (2009), Darling, B., "Report on Findings Related to the Restoration of In-Situ Uranium Mines in South Texas," Southwest Groundwater Consulting, LLC (2008).

In summary, an evaluation of the effectiveness of any proposed mitigation measure is required by NEPA. As discussed, this lack of analysis of proposed mitigation measures is expansive, and not limited to ground water mitigation. The current mitigation measure discussion consists of a multi-page chart which simply lists a series of proposed mitigation measure, with no elaboration or other analysis of how the operator expects to accomplish these items, or the expected effectiveness/limitations of each measure, as required by NEPA. The references to mitigation in Chapter 4 of the FSEIS and in the Response to Comments Appendix E do nothing to rehabilitate this failure, as those sections also merely reference mitigation plans

to be proposed in the future. To comply with NEPA, each mitigation measure must be detailed with specific description, supporting data, and analysis of process and effectiveness within the context of a NEPA document. As detailed in the legal citations provided here and in the DSEIS contention pleading, NEPA requires the NRC to conduct this necessary work as part of the NEPA process and not at some future time after any opportunity for public involvement has passed.

Contention 9: Failure to Consider Connected Actions

The applicant's proposal to conduct ISL operations and conduct associated waste disposal activities is being considered by multiple federal agencies. As enunciated by the Board in admitting this contention, "NRC allegedly inappropriately defers to the EPA and South Dakota in determining that environmental impacts of the proposed project will be small." July 22, 2013 Order (LBP-13-09) at 51. This improper deference continues in the FSEIS, no significant new information is provided, and thus this contention is subject to the migration tenet. As detailed in the Tribe's DSEIS contention pleading, these failings and inadequacies violate 10 C.F.R. §§ 51.10, 51.70 and 51.71, and the National Environmental Policy Act and implementing regulations.

The applicant has filed applications with the Environmental Protection Agency ("EPA") for both a Class III injection well and a Class V injection well. However, the FSEIS fails to conduct any NEPA analysis of the proposal for these injection wells. Both the Class III and Class V injection wells are "connected actions" and even though EPA is the permitting agency, the injection well proposals must be analyzed in the same NEPA analysis as the full Powertech proposal. To the extent NRC Staff or Powertech may argue that the injection well plans could somehow avoid analysis as "connected actions," these injection well activities must still be fully

analyzed in the "cumulative impacts" analysis, or even just as part of the NRC's "hard look" review – and are expressly incorporated into the contentions presented herein with respect to those issues.

Like the DSEIS, the FSEIS repeatedly relies upon EPA analyses to require appropriate mitigation measures to lessen impacts, and uses those permitting processes to simply defer analysis of impacts to EPA. For instance, in making its determination that impacts from the use of Class V underground waste injection wells is "small", the FSEIS, like the DSEIS defers to the fact that "EPA will evaluate the suitability of the formations proposed for Class V well injection. Class V injection disposal will be allowed only when the applicant demonstrates liquid waste can be isolated safely in a deep aquifer." FSEIS at 4-34. See also FSEIS at 4-45 ("EPA will evaluate the suitability of the formations proposed for Class V well injection."), 4-69, 5-27, 5-33 to 34 (all relying without analysis on EPA's UIC Class V permitting). NRC similarly continues to defer to a future EPA analysis related to the UIC Class III well permitting process and Subpart W radon controls, and to the South Dakota state processes. FSEIS at 6-6 (relying on EPA review of Class III permit as mitigation); E-71 (To ensure compliance with 40 CFR Part 61, Subpart W, the applicant may need to acquire an approval from EPA prior to commencing operations in any wellfield. NRC does not have a similar requirement for ISR facilities. However, if NRC were to grant Powertech a license based on the satisfactory compliance of NRC's regulatory requirements, Powertech is still responsible for obtaining other federal, state, and local permits or approvals, as necessary before commencing operations."); 4-42 ("The NPDES permit sets limits on the amount of pollutants entering ephemeral drainages that may be in hydraulic communication with alluvial aquifers at the site. The NPDES permit will also specify mitigation measures and BMPs to prevent and clean up spills. The applicant has not yet submitted an

application for an NPDES permit to SDDENR."); 4-71 (same); 1-26 ("SDDENR would coordinate with SDGFP to mitigate the potential effects of surface impoundments on wildlife; mitigation measures discussed included the use of netting and fencing to protect wildlife and implementing protocols to assess the effects of wastewater constituents on wildlife.").

In this way, the FSEIS simply defers analysis of the potential impacts to EPA permits under the Safe Drinking Water Act (SDWA) and Subpart W and to South Dakota permitting processes. Critically, however, neither EPA UIC or Subpart W permits nor any South Dakota state permits are subject to NEPA. See, e.g., 40 C.F.R. § 124.9(b)(6)(explicitly excusing EPA UIC permitting processes from NEPA review).

The NRC is prohibited from such blind reliance on other agencies to conduct its analysis of the baseline, potential impacts, and proposed mitigation associated with a uranium mine proposal. See 10 C.F.R. § 51.71 ("The environmental impact of the proposed action will be considered in the analysis with respect to matters covered by environmental quality standards and requirements irrespective of whether a certification or license from the appropriate authority has been obtained."). The FSEIS cannot rely on EPA and South Dakota permitting processes to excuse NRC's responsibilities to fully review the environmental impacts. *South Fork Band Council v. BLM*, 588 F.3d 718, 726 (9th Cir. 2009)("A non-NEPA document -- let alone one prepared and adopted by a state government -- cannot satisfy a federal agency's obligations under NEPA.").

Lastly on this point, the FSEIS continues to rely on Powertech's intent to dispose of its liquid chemical waste via a Class V underground injection control permit. However, the disposal of waste, and particularly radioactive waste, below the lower-most aquifer that serves as an Underground Source of Drinking Water (USDW), as proposed here, is not a Class V activity.

Rather, such disposal is a Class I underground disposal well. Compare, 40 C.F.R. § 144.80(a) (Class I – deep injection) with 40 C.F.R. § 144.80(e)(Class V – shallow injection). Further demonstrating this fact is the State of South Dakota's Department of Environment and Natural Resources, which classifies any well that proposes to be used for injection of either hazardous or non-hazardous liquid waste, or municipal waste, as a Class I UIC well. See, Chart located on the State of South Dakota's website: http://denr.sd.gov/des/gw/UIC/UIC_Chart.aspx. Importantly, the State of South Dakota specifically and unambiguously precludes operation or construction of any Class I UIC wells within its borders. Indeed, the applicable regulatory provision is even broader, stating in its entirety: "Class I and IV disposal wells prohibited. No injection through a well **which can be defined as** Class I or IV is allowed." S.D. Admin. R. § 74:55:02:02 (emphasis added). This is a significant issue, which the FSEIS addresses in response to comments, but only by again deferring to EPA analysis and without review of the effectiveness of mitigation or impacts associated. See FSEIS at E-71 to 72; E-231.

Overall, the FSEIS is required to review the proposed activities and the potential impacts associated with the other federal and state permits associated with the project, including any proposal to inject waste underground through an Underground Injection Control permit – and has inadequately or failed entirely to do so.

Contention 14 and FSEIS Contention 1: Failure to Adequately Review Impacts on Wildlife and Fails to Comply with Migratory Bird Treaty Act, and Bald and Golden Eagle.

The FSEIS violates 10 C.F.R. §§ 51.10, 51.70, 51.71, the National Environmental Policy Act and implementing regulation failing to conduct the required "hard look" analysis of impacts of the proposed mine on species of birds and bats receiving special protection by the Bald and Golden Eagle Protection Act ("Eagle Protection Act") (16 U.S.C. 668-668c) and Migratory Bird

Treaty Act ("MBTA"), 16 U.S.C. § 703-711. This contention also addresses the NRC staff's failure to consult with the U.S. Fish & Wildlife Service ("U.S. FWS") on MBTA and Eagle Protection Act listed species and their habitat during the NEPA process. Id.

Correspondence between NRC staff and U.S. FWS staff on September 9, 2013 confirms that NRC did not conduct the required consultation under the MBTA and Eagle Protection Act species. A-157 (U.S. FWS email confirming that satisfaction of ESA consultation requirements does not satisfy MBTA and Eagle Protection Act requirements). This issue was raised in previously, and ripened again with the issuance of the FSEIS that did not include U.S. FWS consultation. As stated by the Board in its July 22, 2013 Order (LBP-13-09), "[t]he Board does not expect intervenors to raise a concern regarding each portion of the process, but instead notes that, in situations such as this, intervenors need not file a contentions until all relevant parts of a process are completed." Order at 77. In this case, the U.S. FWS letter is new information in the FSEIS that, along with the issuance of the FSEIS, confirms NRC Staff has completed its efforts with respect to the MBTA and Eagle Protection Act requirements as far as they relate to the NEPA process, making this contention both ripe and timely.

The FSEIS confirms that the NRC licensing action may effect MBTA-listed species, bald eagles, and their habitat and confirms that mitigation plans for protected species is being developed, but will not be completed until after licensing, during the pre-construction phase:

> For example, as previously stated in Section E.5.22.5, the applicant (Powertech) is actively working on an avian monitoring and mitigation plan with FWS, SDDENR, and SDGFP that will be approved before construction activities begin and will be incorporated into the SDDENR large-scale mine permit. The avian monitoring and mitigation plan will include mitigation measures to protect all birds, including whooping cranes and raptors.

FSEIS E-156. Although the applicant may be working on impacts identified in the DSEIS comments that were not addressed FSEIS, NRC has taken inadequate steps to fulfill its duties under federal laws. FSEIS at E-154.

NRC has violated the "hard look" requirements of the NEPA, MBTA, and the Eagle Protection Act by delaying the consultation, collection of data, analysis, and adoption of mitigation measures until after the NEPA process is complete. The Eagle Protection Act and MBTA contain civil and criminal enforcement provisions that protect listed species on public and private lands. A violation of the MBTA or Eagle Protection Act, including NRC licensing activities that cause the unpermitted disturbance of breeding behavior or a current or previously used nest site, can result in significant fines that double for organizational violators and can include imprisonment for a first offense.

The Migratory Bird Treaty Act, MBTA provides protection to avian species (any bird or bat listed in 50 C.F.R. § 10.13) throughout the U.S., Canada, and Mexico. Under the MBTA, taking, killing, and possession of migratory birds and bats, and their eggs, young, or active nest is prohibited unless authorized by permit from the Secretary of the Interior. In conjunction with NEPA analysis, NRC must consult with U.S. FWS concerning potential impacts to migratory birds. 16 U.S.C. § 703.

Species of eagles that nest or feed in or near the project site are protected by the Bald and Golden Eagle Protection Act ("Eagle Protection Act") (16 U.S.C. §§ 668-668c). Similarly, the Eagle Protection Act also requires action agencies to seek U.S. FWS' expert analysis and permitting where impacts may result, including Powertech's future activities near a previously used nest site, even if conducted during a time when eagles are not present. Here, the proposed

action may cause "take" of protected eagles by impacting known nesting habitat and disturbing normal breeding, feeding, and/or sheltering behavior. Id.

The FSEIS reveals that active bald eagle and other raptor nests are known to exist in and near the proposed project site. FSEIS at 4-147, *accord* at 3-46 ("Five confirmed, intact raptor nests and one potential nest site were observed within the proposed project area, and the applicant identified two additional nests within a 1.6-km [1-mi] radius of the study area (Powertech, 2009a)"). However, the FSEIS omits analysis or project mitigation measures informed by U.S. FWS consultation regarding the direct and cumulative impacts on normal breeding, feeding, and/or sheltering behavior of bald eagles, despite a confirmed, active nest in the project area. FSEIS at 3-46 to 3-47.

Likewise, the FSEIS contains no analysis or mitigation based on consultation with U.S. FWS concerning MTBA-listed raptor species, including "red-tailed hawk, American kestrel, and northern harrier [which] were the most commonly seen raptor species in the proposed project area and will be the primary raptor species impacted by project activities." FSEIS at 4-149. Although Powertech "will have to abide" by federal laws and obtain various FWS permits for its activities (FSEIS at 4-96), Powertech promises do not relieve NRC of statutory duties regarding eagles and migratory birds and bats that spring from NEPA, MBTA, and the Eagle Protection Act. Further, the NRC staff who prepared the FSEIS have no apparent expertise in such matters, and are wrong to assert that these acts do not protect habitat. Id. ("these statutes do not provide for habitat protection").

The FSEIS confirms impacts to other MTBA-listed species. See, e.g., FSEIS at 4-97 to 4-98 ("All of these birds are BLM sensitive species and protected by the MBTA."). The text of

the FSEIS confirms that NRC staff did not seek expert consult with U.S. FWS in preparation of the SEIS:

> NRC staff expect that similar potential impacts described in SEIS Section 4.6.1.1.1.1.2, including injury or mortality from vehicles and electrical lines, fragmentation, vegetation conversion, and loss of breeding habitat, for nongame and migratory birds will also potentially impact chestnut-collared longspur, dickcissel, loggerhead shrike, and blue-grey gnatcatcher.

FSEIS at 4-98. Reliance on what "NRC staff expect" cannot substitute for the expert analysis of U.S. FWS that is required by federal law. See FEIS at 4-86 - 4-92 (portion of Section 4.6.1.1.1.1.2 that addresses birds and raptors).

NRC Staff correspondence presented for the first time in the FSEIS regarding ESA consolation duties confirm that MBTA and Eagle Protection Act consultation with U.S. FWS has not taken place, even though U.S. FWS alerted NRC Staff to these consolation requirements during correspondence regarding Endangered Species Act requirements. FSEIS at A-157. In short, NRC Staff completed the NEPA process without the procedural and substantive protections afforded these species by NEPA, MBTA, and the Eagle Protection Act.

FSEIS Contention 2: Inadequate Analysis of Direct, Indirect, and Cumulative Impacts of Disposal of Solid 11e2 Byproduct Material or the Reasonable Alternatives to Transportation and Disposal at the White Mesa Facility

The FSEIS indicates that after the DSEIS was released for comment, Powertech, NRC staff, and other ISL facility operators have finalized their designation of the White Mesa Uranium Mill near the White Mesa Ute Community in Utah as the site for disposal of more than 300 cubic yards of 11e2 Byproduct generated annually by at the proposed Powertech Facility and other ISL facilities in the region. FSEIS at 2-53. This information was not available in the DSEIS and thus forms the basis for a new contention. The FSEIS correctly confirms that the

solid 11e2 Byproduct Materials is subject to licensing requirements of 10 CFR Part 40, Appendix A, Criterion 2. FSEIS at 2-53.

The White Mesa Mill is not licensed to receive or dispose of Powertech's solid 11e2 Byproduct Material. The draft license does not authorize Powertech to dispose of solid 11e2 Byproduct Material at White Mesa. Although comparisons of alternatives forms the heart of the NEPA process, the impacts of transporting and disposing of the solid 11e2 Byproduct Material in Utah was not compared against any other alternative disposal site. Further, neither the FSEIS nor the GEIS address the cumulative impact or alternatives to Utah licensing the White Mesa Mill as the disposal facility for the NRC-licensed ISL wastes.

The FSEIS fails to provide a meaningful review of foreseeable impacts of generating many tons of solid 11e2 Byproduct Materials by merely stating that permanent disposal will occur in conformance with applicable laws, but does not analyze any of the applicable criteria of regulations applicable to solid 11e2 Byproduct Material disposal. FSEIS at 2-53. This lack of NEPA analysis violates 10 C.F.R. §§ 51.10, 51.70 and 51.71, and the National Environmental Policy Act and implementing regulations.

A properly conducted NEPA process must ensure that the impacts and alternatives of creation, storage, and disposal of mill tailings – aka 11e2 Byproduct Material - are fully analyzed and addressed. Permanent disposal of solid 11e2 Byproduct material is a central feature of the modern Uranium Mill Tailings Radiation Control Act licensing regime under which Powertech seeks to operate its ISL facility. 10 C.F.R. Part 40, Appendix A. Nowhere do NRC regulations or NEPA allow NRC staff to merely assert that solid 11e2 Byproduct Materials will be handled in accordance with applicable law without further analysis. The opposite is required by federal law: now that the FSEIS, for the first time, firmly identifies the White Mesa Mill as to repository

for its waste, the FSEIS must analyze all impacts and alternatives involved with disposing of wastes created at an ISL facility, including the permanent disposal of solid 11e2 Byproduct Materials generated at the facility. The FSEIS reveals that NRC staff proposes to issue a license permitting Powertech to create and store solid 11e2 Byproduct Materials (aka tailings or UMTRCA wastes) on site for an indefinite period, with no disposal license, and no analysis of the impacts or alternatives to shipment and disposal at White Mesa.

This contention is a combination contention of omission and inadequate NEPA analysis, and thus does not require expert support. The relevant regulations applicable to new uranium processing operations state in plain language:

> ***Every applicant for a license to possess and use source material in conjunction with uranium or thorium milling***, or byproduct material at sites formerly associated with such milling, ***is required by the provisions of § 40.31(h) to include in a license application proposed specifications relating to*** milling operations and ***the disposition of tailings or wastes resulting from such milling activities***.

40 C.F.R. Part 40 Appendix A (emphasis added). This regulation implements the UMTRCA amendments to the Atomic Energy Act, which require NRC to ensure that the specific proposal for disposition of tailings and wastes involved in milling is subjected to license scrutiny and approval in initial license application that allows creation of the wastes in the first instance. However, the FSEIS now identifies a plan to dispose of the 11(e)2 Byproduct that will be produced by Powertech and other ISL facilities. The FSEIS confirms that White Mesa lacks a license approval from Utah to accept and dispose of the wastes created by the draft license or other NRC-licensed ISL facilities in the region. FSEIS at 3-116. However, the FSEIS does not analyze the impacts such disposition would entail, does not compare those impacts to other reasonable disposal alternatives, and does not analyze whether disposal at White Mesa facility

can be accomplished in accordance with 40 C.F.R. Part 40 Appendix A or the corresponding Utah Agreement State provisions.

The FEIS contains is no analysis of whether or not Utah law or the Mill owner's (Energy Fuels) license would allow the interstate transport and disposal of Powertech's 11(e)2 byproduct given the history of leaks and violations at the White Mesa facility. Interstate transportation impacts across the Intermountain West are recognized, but are dismissed without specific analysis asserted on the naked assertion that impacts of shipping yellowcake to Tennessee in sealed containers poses the same risks as shipping solid 11e2 Byproduct Materials across the Intermountain West, for disposal at White Mesa. FSEIS at 4-22. The FSEIS presents no information on the type of containers that would be required for the shipments to White Mesa and no corresponding information on the moisture content of the solid 11e2 Byproduct Materials or the anticipated decommissioning wastes. FSEIS at 4-22.

Although NEPA requires comparison across reasonable alternatives, the FSEIS identifies no other site that is currently licensed to dispose of 11e2 Byproduct Material. The reader of the FSEIS is left to conclude that no other licensed facility exists in the United States that could accept the Powertech 11e2 Byproduct Material. Whether or not this is the case, White Mesa is not currently licensed to accept Powertech wastes, or wastes from other facilities identified in the GEIS.

The failure to address and license the disposal of solid 11e2 Byproduct Material is not a technical deficiency that can be ignored or pushed off until a later time. UMTRCA requires disposal of solid 11e2 Byproduct Material is subject to licensing, from the time the facility is first issued a license to create these regulated wastes to such time as final disposal and closure

takes place. 10 C.F.R. Part 40, Appendix A. Both the draft license and the FSEIS ignore this key feature of the post-UMTRCA licensing requirements.

Further, the agency has a duty to provide specific information, analysis, and alternatives regarding on this major feature of an ISL license in order to allow the Tribe, the Ute Mountain Ute Tribe, the public, NRC, and other government decisionmakers to conduct a meaningful analysis of the full scope of environmental impacts involved with Powertech's license application.

The policies set forth by NEPA prevent the NRC staff from segmenting the disposal issues from the inquiry into whether applicant will be allowed to create solid 11e2 Byproduct Material in the first instance. *In re Pac. Gas & Elec. Co.*, 67 N.R.C. 1, 13 (N.R.C. Jan. 15, 2008)("There is no genuine dispute that NEPA and AEA legal requirements are not the same [. . .] and NEPA requirements must be satisfied."). Failure to analyze the permanent disposal facility in the FSEIS avoids examination of all direct, indirect, and cumulative impacts of the proposal and alternative disposal options, as required by NEPA. *Custer County Action Ass'n v. Garvey*, 256 F.3d 1024, 1035 (10th Cir. 2001)(Where a "federal action" exists, the NEPA process must "analyze not only the direct impacts of a proposed action, but also the indirect and cumulative impacts of 'past, present, and reasonable foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.'").

Where "federal action" triggers NEPA -- here, the applicant's proposal to conduct ISL mining activities that create solid 11e2 Byproduct Materials -- an agency cannot define "the project's purpose in terms so unreasonably narrow as to make [NEPA] 'a foreordained formality.'" *City of Bridgeton v. FAA*, 212 F.3d 448, 458 (8th Cir. 2000)(citations omitted). Here, NEPA mandates that the NRC consider the ISL mining activities which create tailings at

the same time it considers the specific method, transportation requirements, and site for the solid 11e2 Byproduct Material disposal. This mandate of federal law attaches at such time as the need for disposal of solid 11e2 Byproduct material is reasonably foreseeable and is already confirmed in the FSEIS as a necessary component of the licensed activity. FSEIS at 2-53. Ongoing NRC problems with delaying waste disposal decisions until after wastes are created should confirm that NEPA analysis and UMTRCA licensing cannot reasonably wait until a later time to be determined after the waste-generated activity is licensed. See *New York v. NRC*, 681 F.3d 471, 483 (D.C. Cir. 2012)(rejecting NRC attempts to avoid NEPA analysis of permanent disposal options).

The NRC regulations and CEQ regulations that apply to each agency's implementation of NEPA state that the requisite site-specific environmental impact statement for disposal activities should be available at all stages of the decision-making. Id. Upon selecting the White Mesa Mill as the proposed destination for the waste from this proposal and the region, as has been done at the FSEIS stage, the NRC Staff must follow through with the necessary analysis. The FSEIS lacks site-specific analysis of disposal alternatives, including, but not limited to, access, geology, hydrogeology, quantitative impacts upon water supplies for domestic use, livestock, agriculture, non-domesticated plants and animals, and qualitative on-going and subsequent impacts to water supplies of all the same due to releases of chemicals into the surface, groundwater and aquifers flowing through the licensed disposal site.

Failure of the FSEIS to analyze the site-specific impacts and alternatives sites, along with cumulative impacts of shipping other regional wastes not analyzed in the GEIS, means that the final decision cannot comply with NEPA. At a minimum, without a completed, site-specific environmental impact statement as a guide, NRC staff, the public, other governmental entities,

and the Tribe have no basis to identify and access alternatives to the license application and find ways to avoid or mitigate possible adverse environmental impacts of the licensed activity.

These NEPA requirements are consistent with the requirement in Subpart 40, Appendix A's *Criteria One*, which requires that the applicant and the NRC examine "alternative tailings disposal sites" when considering a milling application. See *Natural Resources Defense Council v. Hodel*, 865 F.2d 288, 299 (D.C. Cir. 1988)(*citing Kleppe v. Sierra Club*, 427 U.S. 390, 410 (1976)(formulation of alternatives during the NEPA disclosure and study process is at the heart of the NEPA-mandated procedures).

FSEIS Contention 3: Failure to Provide NEPA Comment Opportunity for Impacts Associated with Air Emissions

The DSEIS violates 10 C.F.R. §§ 51.10, 51.70, 51.71, the National Environmental Policy Act and implementing regulations, by failing to conduct the required "hard look" analysis at impacts of the proposed mine associated with air emissions and liquid waste disposal.

Although significant new information was provided in the FSEIS, no opportunity was provided for the Tribe or the public to comment on the data and analysis provided for the first time in the FSEIS. FSEIS at E-164 to E-167 (summarizing new air information and analysis in the FSEIS). This is a contention of omission and of inadequate NEPA analysis, where a main purpose of NEPA - allowing public involvement and comment - was denied by delaying meaningful analysis of air emissions until the FSEIS. This NEPA analysis used by NRC denied the public and NRC decisionmakers the benefit of comments of other agencies with jurisdiction, control, and expertise on air emissions, including the Environmental Protection Agency and the National Park Service.

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 the federal agency to ensure "that the agency will inform the public that it has indeed considered environmental concerns in its decision making process." *Baltimore Gas and Electric Company v. NRDC*, 462 U.S. 87, 97 (1983). Federal courts have ruled that in the mining context specifically, "[w]e must also ensure that the agency took a hard look at the environmental consequences of its action." *Great Basin Mine Watch v. Hankins*, 456 F.3d 955, 962 (9th Cir. 2006).

NEPA's analysis and disclosure goals are two-fold: (1) to insure that the agency has carefully and fully contemplated the environmental effects of its action, and (2) "to insure that the public has sufficient information to challenge the agency." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989). By focusing the agency's attention on the environmental consequences of its proposed action, NEPA "ensures that important effects will not be overlooked or underestimated only to be discovered after resources have been committed or the die otherwise cast." *Robertson*, 490 U.S. at 349. "NEPA procedures must ensure that environmental information is available to public officials and citizens before decisions are made and before actions are taken." 40 C.F.R. § 1500.1(b). The NEPA document offered for comment must consider all direct, indirect, and cumulative environmental impacts of the proposed action. 40 C.F.R. §§ 1502.16; 1508.8; 1508.25(c). NRC regulations at 10 C.F.R. §§ 51.10, 51.70, and 51.71 carry forward and supplement these requirements.

In this case, with respect to air emissions, the FSEIS confirms that the DSEIS lacked accurate, current, and confirmed information on air emissions and their local and regional impacts. FSEIS at E-164 - 165 (summarizing new information and analysis in the FSEIS).

Although not identified or analyzed in the DSEIS, the FSEIS confirms impacts to people, plants, animals, water bodies, soil, National Parks, etc. Although significant new emissions information was provided in the FSEIS, no opportunity was provided for the Tribe or the public to comment on the data and analysis provided for the first time in the FSEIS. This is a contention of omission and NEPA inadequacy, where a main purpose of NEPA – allowing public involvement and comment by other agencies - was denied by delaying the air analysis until the FSEIS. That portion of the emissions permitting is being done by another agency does not relieve NRC of the NEPA duty to analyze the direct, indirect, and cumulative impacts of the project in a NEPA document hat is subjected to comment by the public and other agencies. 10 C.F.R. § 51.70(a)("To the fullest extent practicable, environmental impact statements will be prepared concurrently or integrated with environmental impact analyses and related surveys and studies required by other Federal law.").

The proper course of action is to invalidate the FSEIS and direct NRC Staff to release a supplemental DSEIS with accurate air emission information and modeling data that allows comment by the Tribe, the public, and other state and federal agencies. Where the DSEIS was released without the necessary information and analysis required for meaningful public comment, the FSEIS and NEPA process are invalid and cannot support the proposed licensing decision.

III. CONCLUSION

For the foregoing reasons, the Tribe has demonstrated that its FSEIS contentions are admissible, including under the migration tenet and as contentions of both omission and adequacy. Therefore, the Tribe is entitled to a hearing on each of these contentions.

Respectfully Submitted,

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Dated at Lyons, Colorado
this 17th day of March, 2014

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
POWERTECH (USA) INC.,	)	Docket No. 40-9075-MLA
	)	ASLBP No. 10-898-02-MLA-BD01
(Dewey-Burdock In Situ Uranium Recovery Facility)	)	
	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Statement of Contentions in the captioned proceeding were served via the Electronic Information Exchange ("EIE") on the 17th day of March 2014, and via email to those parties for which the Board has approved service via email, which to the best of my knowledge resulted in transmittal of same to those on the EIE Service List for the captioned proceeding.

/s/ signed electronically by_____

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