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)	)	
	)	

Oglala Sioux Tribe's Statement of Position on Contentions

In accordance with 10 C.F.R. § 2.1207 and this Board's Order of June 2, 2014, Intervenor Oglala Sioux Tribe ("OST" or "Tribe") hereby submits this Statement of Position on Contentions 1A, 1B, 2, 3, 4, 6, 9, and 14 as previously admitted in this proceeding.

INTRODUCTION AND SUMMARY

Powertech and NRC Staff have had over four years to obtain, submit, analyze, and consider the necessary information to achieve compliance with NRC rules and the National Environmental Policy Act ("NEPA"), but have chosen not to. The inadequate information and analysis extends from the required cultural resource surveys and mitigation plans to baseline water quality data to information on the hydrologic and geologic conditions at the proposed mine site. In each of these instances, NRC Staff and Powertech concede that the information is necessary to ensure public health and environmental protection, but rather than require the data as part of the licensing and NEPA review processes, NRC Staff finalized the Final Supplemental Environmental Impact Statement ("FSEIS") and approved the license based on promises that the required data and information will be collected at a future time.

The OST respectfully requests the Board reject NRC Staff's approach, and invalidate the FSEIS and license, both of which defer critical components of the licensing and NEPA

process until after the license has issued, and after all avenues for public involvement or scrutiny have been closed. As discussed in detail herein, this approach violates NRC rules and NEPA.

BACKGROUND ON NEPA REQUIREMENTS

NEPA is an action-forcing statute applicable to all federal agencies. Its sweeping commitment is to "prevent or eliminate 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). The statute requires "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).

As the United States Supreme Court has explained when examining the statute, in a NEPA document, the government must disclose and take a "hard look" at the foreseeable environmental consequences of its decision. *Kleppe v. Sierra Club,* 427 U.S. 390, 410 n.21, 96 S. Ct. 2718, 2730 n.21 (1976); *Citizens to Preserve Overton Park, Inc. v. Volpe,* 401 U.S. 402, 416 (1971).

Closely related to NEPA's mandate that agencies take a "hard look" at environmental impacts, NEPA prohibits reliance upon conclusions or assumptions that are not supported by scientific or objective data. *Citizens Against Toxic Sprays, Inc. v. Bergeland,* 428 F.Supp. 908 (1977). "Unsubstantiated determinations or claims lacking in specificity can be fatal for an [environmental study] …. Such documents must not only reflect the agency's thoughtful and probing reflection of the possible impacts associated with the proposed project, but also provide the reviewing court with the necessary factual specificity to conduct its review." *Committee to Preserve Boomer Lake Park v. Dept. of Transportation,* 4 F.3d 1543, 1553 (10th Cir. 1993).

NEPA's implementing regulations require agencies to:

> [I]nsure the professional integrity, including scientific integrity of the discussions and analysis in environmental impact statements. [Agencies] shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement.

40 C.F.R. § 1502.24 (Methodology and Scientific Accuracy). Further, where data is not presented in the NEPA document, the agency must justify not requiring that data to be obtained. 40 C.F.R. § 1502.22.

The CEQ regulations require that: "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)(emphasis added). As the federal circuit courts have held:

> NEPA ensures that a federal agency makes informed, carefully calculated decisions when acting in such a way as to affect the environment and also enables dissemination of relevant information to external audiences potentially affected by the agency's decision. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989). ... NEPA documentation notifies the public and relevant government officials of the proposed action and its environmental consequences and informs the public that the acting agency has considered those consequences ….

Catron County Board of Commissioners v. U.S. Fish and Wildlife Service, 75 F.3d 1429, 1437 (10th Cir. 1996). The statutory prohibition against taking agency action before NEPA compliance applies to NRC decisionmaking. 42 U.S.C. § 4332(2)(C) *cited by New York v. NRC*, 681 F.3d 471, 476 (D.C. Cir. 2012). Otherwise, NEPA's mandate that agencies "shall […] utilize a systematic, interdisciplinary approach" is reduced to an after-the-fact formality. 42 U.S.C. § 4332(2)(A).

In order to meet these requirements "an agency must set forth a reasoned explanation for its decision and cannot simply assert that its decision will have an insignificant effect on the environment." *Marble Mountain Audubon Society v. Rice*, 914 F.2d 179, 182 (9th Cir. 1990),

citing Jones v. Gordon, 792 F.2d 821 (9th Cir. 1986). "An agency cannot avoid its statutory responsibilities under NEPA merely by asserting that an activity it wishes to pursue will have an insignificant effect on the environment. The agency must supply a convincing statement of reasons why potential effects are insignificant." *Public Service Co. of Colorado v. Andrus*, 825 F.Supp. 1483, 1496 (D. Idaho 1993) *citing The Steamboaters v. FERC*, 759 F.2d 1383, 1393 (9th Cir. 1985) (internal quotes and citations omitted).

NEPA also requires that all connected, similar and cumulative actions be considered in the same environmental review. NEPA defines connected actions as those which are "closely related," including those that "[c]annot or will not proceed unless other actions are taken," or those that are "interdependent parts of a larger action and depend on the larger action for their justification." *Id*. at § 1508.25(a)(1). Cumulative actions are those that "have cumulatively significant impacts and should therefore be discussed in the same impact statement." *Id*. at § 1508.25(a)(2). Similar actions include those that have "common timing or geography." *Id*. at § 1508.25(a)(3).

A federal agency may not simply claim that it lacks sufficient information to assess the impacts of its actions. The courts are very clear with respect to an agency's statements in a NEPA document that "[a] conclusory statement unsupported by empirical or experimental data, scientific authorities, or explanatory information of any kind not only fails to crystallize the issues, but affords no basis for a comparison of the problems involved with the proposed project and the difficulties involved in the alternatives." *Seattle Audubon Society v. Moseley*, 798 F. Supp. 1473, 1479 (W.D. Wash. 1992), *aff'd* 998 F.2d (9th Cir. 1993).

NEPA requires that mitigation measures be reviewed in the NEPA process. "[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), *accord New York v. NRC*, 681 F.3d 471, 476 (D.C. Cir. 2012).

NEPA regulations require that an EIS: (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). In a similar case involving the Forest Service, the federal courts ruled:

> The Forest Service's perfunctory description of mitigation measures is inconsistent with the "hard look" it is required to render under NEPA. "Mitigation must be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated." *Carmel-By-The-Sea v. Dept. of Transportation*, 123 F.3d 1142, 1154 (9th Cir. 1997) (*quoting Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 353 (1989)). "A mere listing of mitigation measures is insufficient to qualify as the reasoned discussion required by NEPA." *Northwest Indian Cemetery Protective Association v. Peterson*, 795 F.2d 688, 697 (9th Cir. 1986), *rev'd on other grounds*, 485 U.S. 439 (1988).
> * * *
> It is also not clear whether any mitigating measures would in fact be adopted. Nor has the Forest Service provided an estimate of how effective the mitigation measures would be if adopted, or given a reasoned explanation as to why such an estimate is not possible. … The Forest Service'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 Forest Service is required to provide.

Neighbors of Cuddy Mountain v. U.S. Forest Service, 137 F.3d 1372, 1380-81 (9th Cir. 1998).

> Federal regulations define "mitigation" as a way to avoid, minimize, rectify, or compensate for the impact of a potentially harmful action. 40 CFR §§ 1508.20(a)-(e). ... In order to be effective, a mitigation measure must be supported by analytical data demonstrating why it will "constitute an adequate buffer against the negative impacts that may result from the authorized activity." **The proposed monitoring program fails this test, as it could detect impacts only after they have occurred.** [The agency's] statement that it would reserve the authority to modify approved operations does not provide enough protection under this standard. A court must be able to review, in advance, how specific measures will bring projects into compliance with environmental standards. *See Nat'l Parks & Conservation Ass'n v. Babbitt*, 241 F.3d 722, 733 ("The Parks Service proposes to increase the risk of harm to the environment and then perform

> its studies.... This approach has the process exactly backwards."). **Monitoring may serve to confirm the appropriateness of a mitigation measure, but that does not make it an adequate mitigation measure in itself.**

*Alaska Wilderness League v. Kempthorne***,** 548 F.3d 815, 827-828 (9th Cir. 2008)(emphasis added).

Last, "for contentions based on NEPA, such as the one at issue here, the burden shifts to the Staff, because the NRC, not the applicant, bears the ultimate burden of establishing compliance with NEPA." *In re Calvert Cliffs 3 Nuclear Project, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), LBP-12-17, 76 N.R.C. 71, 80 (2012); *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.").

BACKGROUND ON NATIONAL HISTORIC PRESERVATION ACT STANDARDS

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 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 and describe them in the EA.")

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 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 CFR § 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 C.F.R. § 800.1(c) (emphasis added). 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 C.F.R. § 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").

Contention 1: 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, and 40 C.F.R. §§ 51.10, 51.70 and 51.71, along with the NRC, 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 the NHPA. 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.

Thus, these two contentions are separate in their legal bases and supporting facts. Contention 1A deals with the failure of NRC Staff to comply with NEPA, and implementing regulations, before issuing the FSEIS. Contention 1B deals with the failure to comply with the NHPA, and implementing regulations before issuing the license. Where the original contention is now split into two separate contentions, NRC Staff can no longer defend a lack of proper NEPA review by relying on non-NEPA documents that attempt to achieve post-licensing compliance with the NHPA and NEPA. The caselaw supports the independent review of NEPA and NHPA compliance where "compliance with the NHPA 'does not relieve a federal agency of the duty of complying with the impact statement requirement 'to the fullest extent possible.'" *Lemon v. McHugh*, 668 F. Supp. 2d 133, 144 (D.D.C. 2009) *quoting Preservation Coalition, Inc. v. Pierce*, 667 F.2d 851 (9th Cir. Idaho 1982) *quoting* 42 U.S.C. § 4332.

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

Contention 1A addresses NRC Staff's failure to adequately analyze cultural and historic resources under NEPA, in an environmental document before the license issues. "'Environmental document' includes the documents specified in 40 C.F.R. § 1508.9 (environmental assessment), § 1508.11 (environmental impact statement), § 1508.13 (finding of no significant impact), and § 1508.22 (notice of intent). 40 C.F.R. § 1508.10.

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.

The promised field survey and information were not provided in the FSEIS or other NEPA environmental document. The only Class III level archaeological survey conducted in this case is the original survey by the students at Augustana College. The Augustana College survey was presented by the Applicant in the Environmental Report, at Appendix 4.10-A. Exhibit APP-009. This submittal demonstrates that the Augustana College survey left a significant number of archaeological, historical, and traditional cultural resources on site unevaluated; therefore, the potential impacts to these resources have not been addressed. Among these are 87 known sites. ER, Appendix 4.10-A at ii. Given the lack of any identifiable survey

protocol and methodology developed with the involvement by the Tribe, however, this number is undoubtedly higher.

Further, there are discrepancies between the number of sites identified in the report included in the Application at ER, Appendix 4.10-A and sworn testimony given by the state historic preservation officer in a State of South Dakota proceeding related to this matter, such that significant sites are not be included or discussed in the Application. See Declaration of Wilmer Mesteth at ¶¶ 15-19; Exhibit OST-15. Where no NEPA environmental document contains a scientifically-defensible protocol and methodology for analysis of cultural resources, the NRC Staff has not satisfied NEPA.

The FSEIS admits this deficiency by discussing the NRC Staff's unsuccessful attempt to secure a scientifically-valid independent cultural survey of the project area, and further confirms 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; Exhibit NRC-008-A. NRC Staff and the applicant will no doubt continue to avoid the admitted NEPA violation by pointing 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 preparing an environmental document based on 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, and outside any NEPA-recognized environmental documents. Further, regardless of how NRC Staff attempts to discharge its duties under NHPA, the fact remains that the FSEIS – the relevant environmental document - 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.

The Tribe's position on this contention is supported by the Declaration of Wilmer Mesteth, Oglala Sioux Tribe Tribal Historic Preservation Officer (Exhibit OST-15), record documents referenced in the FEIS as described and in Appendix A to the FSEIS (Exhibit NRC-008-B), recent letters to the NRC Staff from Oglala Sioux President Bryan Brewer and Standing Rock Sioux Tribe Tribal Historic Preservation Officer (Exhibit NRC-0016), the Declaration of Michael CatchesEnemy (Exhibit OST-14), as well as omissions in the FSEIS. Each of these documents demonstrate the inadequacy of the cultural resource surveys and analyses conducted at the site as of the legally-critical date of the issuance of the FSEIS, marking the completion of the NEPA process.

NEPA and its implementing regulations from both NRC and CEQ require that the environmental document on which action is based must contain 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 NHPA. 10 C.F.R. § 51.60 requires the presentation of the information specified in 10 C.F.R. § 51.45. In turn, 10 C.F.R. § 51.45(b) requires a "description of the environment affected" and a discussion of the "impacts of the proposed action on the environment." These requirements are also mandated under the National Environmental Policy Act. 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; Exhibit NRC-008-A); therefore, the potential impacts to cultural and historical resources have not been adequately addressed in a NEPA environmental document.

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 include in the environmental document analysis of the content and effectiveness of 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 PA is yet another NRC Staff promise of future compliance that confirms the lack of necessary information in the FSEIS or any other NEPA environmental document that could satisfy NEPA and implementing regulations. *Sierra Club v.*

United States DOE, 255 F. Supp. 2d 1177, 1186 (D. Colo. 2002)("Although Defendants' assurances of future NEPA review possess a certain pragmatic appeal, such assurances cannot obviate the need for compliance with NEPA 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 of impacts may be appropriate for a generic analysis, but demonstrates the lack of information inherent in the site-specific NEPA analysis of the current licensing action. In any case, any pre-ordained and categorical conclusion, without the benefit of necessary information and a competent analysis, demonstrates 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.

Consistent with NEPA, NRC guidance documents further demonstrate that state of the NRC Staff's NEPA analysis of cultural resources is insufficient. For instance, NUREG-1569 Section 2.4 imposes several requirements in terms of Section 2.4.3 Acceptance Criteria that have not been met in this case. In particular, Section 2.4.3(1) requires a listing for all properties included in, or eligible for inclusion in, the National Register. As stated, the application materials admit that scores of sites have not been evaluated for listing eligibility.

NEPA repeatedly requires participation of cooperating agencies, tribes, and the public, at the earliest possible stages of the analysis, not after the decision issues. 40 C.F.R. §§ 1501.2, 1501.6, 1508.5. Similarly NUREG-1569.Section 2.4.3(3) specifically mandates consultation with tribal authorities on the likely impacts on Native American cultural resources, which has not occurred in this case. Similarly, section 2.4.3(4) requires evidence of contact with appropriate state historical preservation office and tribal authorities – information lacking in the application

with respect to tribal contact. Lastly, section 2.4.3(5) explicitly contemplates a memorandum of agreement "among the state historic presentation officer, tribal authorities, and other interested parties regarding their satisfaction with regard to the protection of historic, archaeological, architectural, and cultural resources during site construction and operations."

The Programmatic Agreement relied upon by the NRC Staff is not a NEPA environmental document capable of satisfying NEPA duties. Even if it were a NEPA environmental document, which it is not, the Programmatic Agreement includes only the state and federal agency personnel, and was signed over the objections of tribal authorities and other interested parties. See letter dated February 5, 2014 from OST President Bryan Brewer (Exhibit NRC-0016); Declaration of Michael CatchesEnemy (Exhibit OST-14). Given these inadequacies, the application should never have been deemed complete – and the NRC Staff's FSEIS has never corrected these problems.

The FSEIS does not contain the disclosures, information, mitigation, and analysis necessary to satisfy NRC's NEPA duties. OST respectfully requests the Board invalidate the application, the FSEIS, and all decisions based on the FSEIS, including the license.

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, 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. The federal mandates are unique to Indian Country and 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, NRC Staff has not yet completed the required consultation process. Although NRC Staff and Powertech will no doubt attempt to point to numerous conversations NRC Staff has had with Tribes, this consultation has not been meaningful or reasonable because the NRC Staff has refused to work through the serious problems identified by the Oglala Sioux Tribe and its representatives.

These problems are described in email and letter correspondence between affected Tribes and the NRC Staff (see communications regarding NEPA and NHPA compliance)(Exhibit OST-11, pages 272-325). These letters to NRC Staff come from the Standing Rock Sioux Tribe (pages 272-277), the Sisseton Wahpeton Oyate (pages 280-281), the Rosebud Sioux Tribe (pages 288-293), and the Yankton Sioux Tribe (page 294). Remarkably, each of these letters details the legitimate objections these Tribal historic preservation officers had to the proposed NRC Staff scientific methodology in conducting the necessary cultural resource impact survey of the proposed mine site. The Standing Rock Sioux Tribe's highly detailed letter specifically identifies objections targeted he geographic scope of the NRC Staff proposed surveys (only a small portion of the project area), as well as the scope of the impacts to be considered (direct impacts vs. indirect impacts), the timing of the survey, the resources available for Tribal participation, the selection process for the survey contractor, and the protocols for identifying sites and gauging their significance. Despite these objections, the Tribe's committed to working with NRC Staff and the Applicant in good faith, if only NRC Staff and the Applicant would assure a meaningful process and credible methodology. Unfortunately, NRC Staff abandoned this effort a short time later and instead went forward with a survey method that lacked any

organized or scientifically determined methodology. FSEIS at 1-23 to 24; Exhibit NRC-008-A. This demonstrates a lack of good faith and reasonable consultation under the NHPA.

More recently OST President Bryan Brewer and the Standing Rock Sioux Tribal Historic Preservation Officer again described at length the problems they have encountered with a lack of adequate consultation and lack of meaningful review of cultural resources in the ongoing NHPA process. See Exhibit NRC-0016. These detailed concerns have not been addressed and support both Contention 1A and 1B in this proceeding.

As these letters make abundantly clear, the problems with NRC Staff's consultation under the NHPA 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. This includes the failure of NRC Staff and Powertech to take the Tribe's criticisms seriously. Instead of including the Oglala Sioux Tribe and other Tribes, NRC Staff and Powertech hurriedly finalized a 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.

As discussed in Contention 1A, the activities identified in the PAs are required before the finalization of the FSEIS. By approving the action prior to identifying mitigation or impacts to cultural resources, this approach also severely undermines the NHPA process and reveals that NRC Staff and Powertech joined together in treating NHPA consultation as an obstacle to overcome, instead of the federal duty imposed by NHPA . The failure to engage the Tribe on NHPA issues in a meaningful way, including related, but independent failure to do so at the earliest possible time and within the NEPA process set forth in Contention 1A, violates the

"reasonable and good faith effort" consultation requirement of NHPA. See *Muckleshoot Indian Tribe v. U.S. Forest Service*, 177 F.3d 800, 805 (9th Cir. 1999); 36 CFR § 800.8(c)(1)(v).

Here, the application was initially submitted to the NRC in February of 2009. Yet, the PA was finalized over the Oglala Sioux Tribe's legitimate objections, and without including the Tribe, 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 very NHPA process meant to protect its cultural and historic resources.

NRC Staff's scheme contravenes the requirements of the NHPA, 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"). NRC Staff's post-licensing NHPA scheme also diminishes and disregards the federal government's trust obligations to the Tribe.

Given these requirement of the NHPA, 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 hold up a Programmatic Agreement that excludes the Tribe as the evidence of NHPA section 106 consultation and survey of the affected areas. Meaningful relief is available in this case by invalidation of the PA, the license and any other actions that rely on the PA for NHPA compliance, and a declaration that NRC Staff have not satisfied the statutory and Trust duties NRC owes to the OST and other tribes whose cultural and historical resources will be impacted by NRC's licensing decision.

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, the applicant and NRC Staff have provided no significant or additional baseline water quality information since the application was submitted. 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). The admitted data gaps, and the failure to gain additional sampling before the FSEIS issued, establishes that NRC Staff has not required or used the

collection of any additional baseline data for its characterization of baseline water quality, and that NRC Staff 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.

This approach contravenes NEPA. NEPA requires that information necessary to gauge the scope of impacts be presented in the NEPA document – and if not, that the agency explain that the information "cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known." 40 C.F.R. § 1502.22.

In addition to NRC Staff admissions, the Opening Written Testimony of Dr. Robert E. Moran (Exhibit OST-1) provides additional support this contention. Dr. Moran Opening Written Testimony at 16-18. Specifically, Dr. Moran notes the lack of analysis of impacts from past mining activities (p. 16), the lack of necessary information as to the chemical compositions and volumes of wastes, among others (p. 17), the potential bias of the data thus far provided (p. 18) along with the scientifically invalid tactic of requiring the Applicant to collect meaningful water quality data to be used in the configuration of mine design in the future and outside of the public review:

> The delayed production of this critical baseline information until after licensing is not scientifically defensible as it prevent establishment of a baseline on which to identify, disclose, and analyze environmental impacts, alternatives, and mitigation measures involved with the Dewey-Burdock proposal. A scientifically defensible monitoring and mitigation of an operating project is not possible based on the baseline data and analyses I have reviewed.

Exhibit OST-1 at 17. This critique is amplified by the NRC Staff's adopted plan in the FSEIS to defer collection of baseline and to rely on future analysis of future baseline analyses outside of

the public purview – through a so-called Safety and Environmental Review Panel (SERP) – outside of the NEPA process.

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). The scheme to allow the operative data to be collected at a later date, after license issuance, violates these requirements.

Additionally, Dr. Moran specifically relies on the Declaration of Dr. Richard Abitz detailing the requisite standards for scientific validity in a baseline analysis also support this contention. Exhibit OST-1, at 2. *See also*, Exhibit OST-11, pages 92-123; 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."); *accord* ¶¶ 47-74, 75, 82-84, 92-94, 95.

Lastly, the FSEIS improperly relies on the outdated NRC Regulatory Guide 4.14 (1980) to designate the boundary for which groundwater monitoring will be required. This guidance is outdated and is designed specifically for conventional mills. No update of any kind has been prepared the unique issues with ISL mines.

In this case, the FSEIS fails 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. The deferral of this

necessary information to after license issuance and outside of the NEPA process 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.

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.

As with Contention 2, the FSEIS does not identify new data associated with the proposal since the application material was submitted. The FSEIS confirms this in the 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.

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 approach violates NEPA and the cited implementing regulations – 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.

This approach to collect data later also violates 10 C.F.R. Appendix A, Criteria 5G(2), which specifically requires:

> detailed information concerning extent, thickness, uniformity, shape, and orientation of underlying strata. Hydraulic gradients and conductivities of the various formations must be determined. This information must be gathered from borings and field survey methods taken within the proposed impoundment area and in surrounding areas where contaminants might migrate to ground water. The information gathered on boreholes must include both geologic and geophysical logs in **sufficient number and degree of sophistication to allow determining significant discontinuities, fractures, and channeled deposits of high hydraulic conductivity.**

10 C.F.R. Appendix A, Criteria 5G(2)(emphasis added). The lack of this data is acknowledged in the FSEIS, where the NRC Staff admit that Powertech has not conducted the necessary studies to identify "significant discontinuities, fractures, and channeled deposits." This issue is addressed head-on by Dr. Moran, who points out the significant contradictory evidence in the application and the FSEIS. Exhibit OST-1, at 18-22.

Specifically, Dr. Moran notes the overwhelming body of evidence showing the FSEIS conclusion that the production zone is hydraulically isolated from surrounding aquifers. *Id*. at 18-19. Further, Dr. Moran demonstrates that numerous potential pathways for groundwater conductivity, including inter-fingering sediments, fractures and faults, breccia pipes and/or collapse structures, and the 4000 to 6000 unidentified exploration boreholes present at the mine site. *Id*. at 20. Dr. Moran concludes that "these inconsistencies make clear that Powertech and NRC Staff have failed to define the detailed, long-term hydrogeologic characteristics and

behavior of the relevant Dewey-Burdock aquifers and adjacent sediments." *Id*. This approach violates NEPA and 10 C.F.R. Appendix A, Criteria 5G(2).

The lack of data extends to the lack of analysis of evidence of "fault zones" in the proposed mining area (Exhibit OST-1, p. 20-21) as well as the existence of a "trench" in the potentiometric surface of the Fall River aquifer. *Id*. at 21. Breccia pipe formations and collapse features round out the list of potential migration pathways for which the application and FSEIS fail to address. *Id*. at 21-22.

Instead of conducting the rigorous scientific review necessary to determine the hydrogeology of the area, as noted by Dr. Moran, NRC Staff simply proposes to allow Powertech to collect this information in the future, after NEPA is complete and after a license is issued, through the use of a Safety and Environmental Review Panel (SERP). FSEIS at 2-18 (NRC-008-A). Notably, this post-NEPA SERP review is not just a confirmation of information already in existence – rather:

> The wellfield hydrogeologic data package will describe the wellfield, including (i) production and injection well patterns and location of monitor wells; (ii) documentation of wellfield geology (e.g., geologic cross sections and isopach maps of production zone sand and overlying and underlying confining units); (iii) pumping test results; (iv) sufficient information to demonstrate that perimeter production zone monitor wells adequately communicate with the production zone; and (v) data and statistical methods used to compute Commission-approved background water quality….

Id. As Dr. Moran testifies, this approach is not scientifically-defensible. Exhibit OST-1, at 22-23. Indeed, this is the same evidence of the existing inadequacy of the data and analysis has been echoed throughout this process. See e.g., Exhibit OST-11, at 109 (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); Exhibit OST-11, at 15-

18 (OST List of Contentions on DSEIS at 15-18 (including substantial discussion of NEPA statutory, regulatory, and case law); Exhibit OST-10, at 21-25 (OST Statement of Contentions on Application at 21-25).

The only additional information provided by Powertech and NRC Staff related to this contention since the admission of this contention based on the application material is a 2012 report referenced in the FSEIS from Petrotek regarding modeling of the hydrogeology. The FSEIS relies heavily on this report throughout its discussion of confinement issues, as well as geology and water usage impacts. See Exhibit NRC-008-A (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).

Dr. Moran 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 Exhibit OST-1, Moran Opening Testimony at 23-26. Specifically, the Petrotek Report relies on inadequately detailed inputs into its model, including for hydraulic conductivity and assumptions of no water flows vertically, which is contradicted by the scientific literature, and unsupported assumptions as to the effect of unplugged boreholes in the area and the lack of any faults or fractures. *Id*. at 23-24. Dr. Moran further points out the contradictions between the Petrotek Report and NRC Staff conclusions in the FSEIS with regard to the existence of fractures or other flow paths. *Id*. at 24. Dr. Moran completes his review with a litany of unsupported assumptions made in the Petrotek model that skew the results and render it unreliable as a scientific tool to predict hydraulic conductivity at the site – the ability of the hydrogeology to contain the contamination associated with ISL mining. *Id*. at 24-26.

Based on this demonstration, 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.

This argument is supported by Dr. Moran's Opening Testimony at 26-28. Exhibit OST-1, at 26-28. See also, Exhibit OST-11 at 104 (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; Exhibit OST-10 at 25-28 (Petition to Intervene and Request for Hearing at 25-28); Exhibit OST-11, at 18-20 (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 "water balance" contained in the FSEIS does not provide sufficient information to adequately analyze the groundwater quantity impacts.

Specifically, Dr. Moran testifies 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.

OST-1 at 27 (Moran Opening Written Testimony at 27). 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 also labeled as "Typical Project-Wide Flow Rates," which more accurately describes what is contained in the FSEIS. The flow rates calculation 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.*

Exhibit OST-1 at 27-28 (Moran Opening Testimony at 27-28).

As such, despite the inclusion of the additional information in the FSEIS, the analysis lacks a scientifically-defensible analysis with respect to an analysis of ground water quantity impacts associated with the proposed project. This failure violates NEPA and implementing regulations.

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. 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 NRC Staff's reliance on a future, as yet-unsubmitted, mitigation to prevent/mitigate adverse impacts to these resources also violates NRC duties under NEPA. NEPA, and NRC implementing regulations, require full review of these impacts as part of the public review process – something which has not occurred here.

> As the D.C. Circuit explained, "whether the analysis is generic or site-by-site, it must be thorough and comprehensive." […] Thus, the NRC must produce a comprehensive and thorough NEPA analysis of all NEPA issues […], including mitigation […], and if the issue is not covered in a generic EIS it must be covered in the site-specific NEPA document.

In re Calvert Cliffs 3 Nuclear Project, LLC, (Calvert Cliffs Nuclear Power Plant, Unit 3), LBP-12-18, 76 N.R.C. 127, 178 (2012) *discussing New York v. NRC*, 681 F.3d at 480-81. NRC

precedent confirms the duty to examine mitigation of impacts (including with respect to "environmental justice" communities) in NEPA documents.

> We expect NRC EISs, and presiding officers in adjudications, to inquire whether a proposed project has disparate impacts on "environmental justice" communities and whether and how those impacts may be mitigated.

In Re Hydro Resources, 53 N.R.C. 31, 64 (N.R.C. 2001) (emphasis supplied) *citing Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 106-110 (1998)(remanding for consideration of mitigation measures).

Issues involving NRC Staff promises to later comply with National Historic Preservation Act are irrelevant to summary deposition of NEPA claims where "compliance with the NHPA 'does not relieve a federal agency of the duty of complying with the impact statement requirement 'to the fullest extent possible.'" *Lemon v. McHugh*, 668 F. Supp. 2d 133, 144 (D.D.C. 2009) *quoting Preservation Coalition, Inc. v. Pierce*, 667 F.2d 851 (9th Cir. 1982) *quoting* 42 U.S.C. § 4332.

To satisfy NRC's NEPA duty to disclose and analyze mitigation measures, the NEPA documents must: (1) "include appropriate mitigation measures not already included in the proposed action or alternatives," and (2) "include discussion of . . . Means to mitigate adverse environmental impacts (if not already covered under 1502.14(f))." 40 C.F.R. § 1502.14(f); 40 C.F.R. § 1502.16(h). "Mitigation" is defined 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), 50 C.F.R. 51.14(b)(adopting CEQ definition). The NEPA duty to include and analyze mitigation measures is applicable directly to NRC actions via the CEQ regulations and via NRC's NEPA regulations. 10 C.F.R. §§ 51.10, 51.70 and 51.71.

NEPA requires that mitigation measures be discussed with "sufficient detail to ensure that environmental consequences have been fairly evaluated." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 352 (1989). "[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*, 490 U.S. at 353. Regardless of whether or not mitigation can be legally required, the NEPA discussion of mitigation measures must assess their effectiveness in context of the proposed action and proposed alternatives. 40 C.F.R. § 1502.14(f).

An essential component of a reasonably complete mitigation discussion is an assessment of whether the proposed mitigation measures can be effective. *Compare Neighbors of Cuddy Mountain v. U.S. Forest Serv.*, 137 F.3d 1372, 1381 (9th Cir. 1998) (disapproving an EIS that lacked such an assessment) *with Okanogan Highlands Alliance v. Williams*, 236 F.3d 468, 477 (9th Cir. 2000) (upholding an EIS where "[e]ach mitigation process was evaluated separately and given an effectiveness rating"). The Supreme Court has required a mitigation discussion precisely for evaluating whether anticipated environmental impacts can be avoided. *Robertson*, 490 U.S. at 351-52 (citing 42 U.S.C. § 4332(C)(ii)).

A NEPA-compliant mitigation discussion without at least some evaluation of effectiveness is useless in making that determination. *South Fork Band Council v. U.S. Dep't of Interior*, 588 F.3d 718, 726 (9th Cir. 2009). Agencies cannot rely on untested mitigation measures:

> [T]he Court holds that the Corps' reliance on mitigation measures that were unsupported by any evidence in the record cannot be given deference under NEPA. The Court remands to the Corps for further findings on cumulative impacts, impacts to ranchlands, and the efficacy of mitigation measures.

Wyoming Outdoor Council v. U.S. Army Corps of Eng'rs, 351 F. Supp. 2d 1232, 1238 (D. Wyo. 2005). This is especially true where the effectiveness of mitigation is challenged in the comments. "The comments submitted by [plaintiff] also call into question the efficacy of the mitigation measures and rely on several scientific studies. In the face of such concerns, it is difficult for this Court to see how the [agency's] reliance on mitigation is supported by substantial evidence in the record." *Wyoming Outdoor Council*, 351 F. Supp. 2d at 1251, n. 8.

Simply listing the mitigation measures, and asserting that they may be successful in eliminating or substantially reducing the Project's adverse impacts, with no scientific evidence or analysis to support those claims, is the definition of an arbitrary and capricious decision. "[T]he Court [cannot] defer to the [agency's] bald assertions that mitigation will be successful." *Id*. at 1252. Mitigation must be "supported by …substantial evidence in the record." *Id*. Without that support, the agency "was arbitrary and capricious in relying on mitigation to conclude that there would be no significant impact to [environmental resources]." *Id.*

The duty to timely propose and analyze the effectiveness of a range of possible mitigation measures in an EIS has been recognized by NRC precedent.

> Under NEPA, an EIS must discuss "any adverse environmental effects which cannot be avoided should the proposal be implemented […]," and must provide "a reasonably complete discussion of possible mitigation measures."

In re Detroit Edison Co. (Fermi Nuclear Power Plant, Unit 3), LBP-12-23, 76 N.R.C. 445, 486 (2012) *quoting Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 351-52 (1989). In confirming that already admitted NEPA contentions migrated from the draft to final EIS stage, the *Detroit Edison* opinion confirms that "the revised site layout and draft mitigation plan constitute alternatives to the project as originally proposed that might, if implemented, reduce impacts to the species." *Id. at* 467 (emphasis supplied). The matter went to hearing on the

question of whether the proposed alternative mitigation measures received a "reasonably complete discussion." *Id*. No such mitigation plan exists here, as NRC Staff admits that Chapter 6 provides "only a summary of proposed measures." NRC Staff Response to FSEIS Contentions at 23-24.

Here, NRC Staff expressly and repeatedly relies on mitigation in gauging the level of impacts and in justifying its recommendation to issue the proposed license. Exhibit NRC-008-A, FSEIS at xxxii. Unfortunately, the proposed mitigation consists largely, if not exclusively, of a list of plans to be developed later, outside the NEPA process. Exhibit NRC-008-B, FSEIS at 6-1 through 6-19.

For instance, with regard to the cultural resources impacts, the FSEIS concedes that consultation was not complete upon the conclusion of the NEPA process, including the lack a signed Programmatic Agreement, which is supposed to describe mitigation measures, and is subject to considerable controversy and objection by the Tribes. See Exhibit NRC-008-A, 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)." Exhibit NRC-008-A, FSEIS at 4-157. See also, Exhibit NRC-008-A, FSEIS at 1-16, 1-22, 5-47, 5-48; Exhibit NRC-008-B, FEIS at 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, Exhibit NRC-0016 (letters from OST President Brewer and Standing Rock Sioux Tribe).

Instead of providing a reasonably complete NEPA discussion of mitigation and providing an 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. Exhibit NRC-008-B, FSEIS at E-135 to 136.

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. Exhibit NRC-008-A, 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. 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." Exhibit NRC-008-B, 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 are "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.

As detailed in the Tribe's repeated 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 Exhibit OST-11 at 25-26 (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).

The same problems exist where the FSEIS lacks sufficient detail and simply requires plans to be submitted in the future to address other impacts, including air impacts (Exhibit NRC-008-B, 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.

Other aspects of the FSEIS suffer the same frailty. Specific examples of mitigation measures that are vaguely and inadequately referenced in the FSEIS and filed materials but fall short of the NEPA standards are listed in the statement of facts, and include:

- Reliance on the future submission and potential issuance of a National Pollution Discharge Elimination Standards ("NPDES") permit to specify mitigation measures and best management practices ("BMPs") to prevent and clean up spills. Exhibit NRC-008-A, FSEIS at 4-57.

- A Fish and Wildlife Service ("FWS") raptor monitoring and mitigation plan has not been developed despite confirmed raptor activity in the project area. Exhibit NRC-008-A, FSEIS at 4-151 *compare* at 4-91("Map of Raptor Nest Locations in the Dewey-Burdock Project Area and Planned Facilities for the Deep Class V Injection Well Disposal Option").

- FWS permits to avoid and mitigate impacts to Bald Eagles' use of three existing Bald Eagle nests were not provided by Powertech and were not analyzed by NRC Staff in the FSEIS. Exhibit NRC-008-A, FSEIS at 3-46, 4-88, *accord* Powertech Response to FEIS Contentions at 21 quoting FRN at Vol. 74, No. 175 (September 11, 2009)(asserting Powertech must obtain take permits).

- Ongoing non-NEPA development of mitigation plans for listed species. *Id*. at 21 ("Powertech also is developing mitigation plans for bald eagles and other MBTA-species for each phase of the proposed project based on collaboration with South Dakota Department of Game, Fish, and Parks (SDGFP) and FWS.").

- Generic reference to working BLM mitigation and reclamation guidelines (BLM, 2012a) that NRC Staff incorporated into the FSEIS without analysis. Exhibit NRC-008-A, FSEIS at 4-80.

- Vaguely referenced and unspecified sound abatement controls. Exhibit NRC-008-A, FSEIS at 4-149.

- Generically referenced mitigation of evaporation pond impacts that are and deferred to later analysis by the Environmental Protection Agencies pursuant to the Clean Air Act's Hazardous Air Pollution provisions. Exhibit NRC-008-A, Exhibit NRC-008-A, FSEIS 4-248.

- The FSEIS did not examine groundwater mitigation where Powertech excluded such mitigation measures from its proposal. Powertech Response in Opposition to FSEIS Contentions at 15. ("Groundwater restoration mitigation measures" pursuant to 10 CFR Part 40, Appendix A, Criterion 5(B)(5) "are irrelevant in this proceeding and outside the scope of Powertech's proposed action.")(emphasis supplied).

- The FSEIS included mitigation measures involving groundwater restoration as within the scope of the action, and instead of analysis, merely assumed that Powertech will comply with NRC regulations. Exhibit NRC-008-A, FSEIS at 4-46.

The FSEIS fails to provide the required detailed analysis of proposed mitigation measures, and makes no attempt to evaluate the effectiveness of the proposed mitigation. This approach was rejected in another case where NRC Staff delayed disclosure and analysis of impacts to cultural resources. *In the Matter of Hydro Resources, Inc.*, 50 N.R.C. 3 (N.R.C. 1999). There, the Commission eventually excused the NRC Staff's NEPA violations where a post-EIS analysis and review was completed before licensing. *Id*. at 14 ("Even if one assumes that the FEIS did not contain all the information considered by the Staff in its decision, the overall record for the licensing action includes a complete analysis of the cultural resources for Section 8."). There has been no update to cultural resource impact analysis here, nor is one contemplated.

More recently, "the Staff used the NEPA process and documentation required for the preparation of an EIS/ROD to comply with NHPA Section 106, as it is permitted to do," *In re Detroit Edison Co.* (Fermi Nuclear Power Plant, Unit 3), LBP-12-23, 76 N.R.C. 445, 488 (2012). However, the converse is not true, as "compliance with the NHPA 'does not relieve a federal agency of the duty of complying with the impact statement requirement 'to the fullest extent possible.'" *Lemon v. McHugh*, 668 F. Supp. 2d 133, 144 (D.D.C. 2009) *quoting Preservation Coalition, Inc. v. Pierce*, 667 F.2d 851 (9th Cir. 1982) *quoting* 42 U.S.C. § 4332.

Assuming, *arguendo*, that NEPA duties could be fulfilled during the hearing process, no additional surveys or analyses are contemplated by NRC Staff here. Moreover, NHPA-generated mitigation and analysis submitted during the hearing cannot remedy a NEPA violation.

> The preparation of an EIS also entails similar public and interagency participation. [. . .] This cross-pollinization of views could not occur within the enclosed environs of a courtroom.

Sierra Club v. Hodel, 848 F.2d 1068, 1094 (10th Cir. 1988) *citing* 40 C.F.R. §§ 1503.1(a)(4), 1506.6, *overruled in part on other grounds, Los Ranchos de Albuquerque v. Marsh*, 956 F.2d 970 (10th Cir. 1992).

In summary, given the NRC Staff's reliance on mitigation when evaluating the level of impacts from the project necessitates an evaluation of the effectiveness of any proposed mitigation measure is required by NEPA. 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.

NRC Staff references some mitigation in Chapter 4 of the FSEIS and in the Response to Comments Appendix E, but these do nothing to rehabilitate the failure, and in fact accentuate it. For instance, the air quality section of the FSEIS <u>does</u> include at least some quantitative analysis of effectiveness presenting a percentage reduction of emissions based on the type of mitigation measure being implemented. "Table C–5 describes the effectiveness (i.e., the percent that the emissions are reduced) of the different tier levels based on the associated emission factors." FSEIS at C–8. This critical quantitative approach is lacking in the other identified key areas of the mitigation measure analysis.

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. 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.

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." Exhibit NRC-008-A, 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. Exhibit NRC-008-B, 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."); Exhibit NRC-008-A, FSEIS at 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 Exhibit NRC-008-B, 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: Endangered Species Act Consultation (14A) and Analysis of sage grouse, whooping crane, and black-footed ferret

Although OST does not concede that the NEPA environmental documents or the consultation documents provided by NRC Staff protect Powertech or NRC Staff against the civil and criminal penalties contained in the Golden Eagle Protection Act ("Eagle Protection Act") (16 U.S.C. 668-668c), Migratory Bird Treaty Act ("MBTA"), 16 U.S.C. § 703-711, and Section 7

and 9 of the Endangered Species Act, 16 U.S. Code § 1531, et seq. and in an effort to streamline the present proceedings, the Oglala Sioux Tribe voluntarily withdraws Contention 14A and 14B. The Tribe reserves the right to pursue any action involving violation of these statutes in the appropriate forum, in accordance with these statutory provisions.

CONCLUSION

For the foregoing reasons, the Tribe has demonstrated that the FSEIS and Application materials are not in compliance with law and the FSEIS and license should be remanded back to the NRC Staff for it and the Applicant conduct the necessary analyses to comply with NEPA, the NHPA, the AEA, and implementing regulations.

Respectfully Submitted,

/s/ Jeffrey C. Parsons

Jeffrey C. Parsons
Western Mining Action Project
P.O. Box 349
Lyons, CO 80540
303-823-5732
Fax 303-823-5732
wmap@igc.org

Travis E. Stills
Energy and Conservation Law
Managing Attorney
Energy Minerals Law Center
1911 Main Avenue, Suite 238
Durango, Colorado 81301
stills@frontier.net
phone:(970)375-9231
fax: (970)382-0316

Attorneys for Oglala Sioux Tribe

Dated at Lyons, Colorado
this 20th day of June, 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 20th day of June 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_____

Jeffrey C. Parsons
Western Mining Action Project
P.O. Box 349
Lyons, CO 80540
303-823-5732
Fax 303-823-5732
wmap@igc.org