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Wendy R. Dixon, EIS Project Manager  
Yucca Mountain Site Characterization Office  
Office of Civilian Radioactive Waste Management  
U.S. Department of Energy  
P.O. Box 30307, Mail Stop 010  
North Las Vegas, Nevada 89036-0307

RE: Comments to Draft Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada

Dear Ms. Dixon:

Consistent with requirements of the National Environmental Policy Act (NEPA) and consistent with the fiduciary responsibility vested to it through designation by the Secretary of Energy as an "affected unit of local government" pursuant to the Nuclear Waste Policy Act (NWPA) the Ely Shoshone Tribal Council is submitting these comments to the Draft Environmental Impact Statement (DEIS) for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada. The Ely Shoshone Tribe is submitting these comments with full expectation that they will serve to enable the Department of Energy (DOE) to prepare a Final Environmental Impact Statement (FEIS) which meets the statutory requirements for a "legally sufficient" document which can be used by the Secretary of Energy, the Nuclear Regulatory Commission (NRC), the President of the United States, and the Congress in making major federal decisions regarding the transportation and disposal of spent nuclear fuel and other high-level radioactive waste. Failure by the DOE to

adequately address the Ely Shoshone Tribe's comments in preparing the FEIS may render the document legally insufficient to support major federal decisions.

1 These comments are divided into those concerning Western Shoshone Authority, Impossibility for Tribes to Participate Equally as States and Counties do, DOE must consult with Indian Tribes on a Government to Government Level, the process (ie. preparation of the FEIS), those of a general nature (not addressing a specific section of text in the DEIS) and those of a specific nature (addressing a specific section of text, particular table, etc.). [General comments focus upon fundamental deficiencies in the DEIS. Substantive changes to the DEIS are required to address the general comments provided by the Ely Shoshone Tribe. **To the extent that such changes introduce substantial new information or uncover previously undisclosed significant impacts, Ely Shoshone Tribe would encourage DOE to issue a revised DEIS for further public review and comment.** ]

Sincerely,

  
Arthur Kaamasee,  
Tribal Chairman

The Ely Shoshone Tribe is a member of the Western Shoshone National Council. The Western Shoshone National Council has the responsibility and authority as the legitimate protector of the interests of Western Shoshone citizens to ensure that Western Shoshone public health, safety, and property are protected because United States law provides too little protection for Western Shoshone people.

2 The Western Shoshone Nation secured formal recognition by the United States through the negotiation and signing of a treaty of “peace and friendship” for the benefit of both the Western Shoshone Nation and the United States. The Treaty of Ruby Valley (Appendix I) granted specific rights to the United States. All other rights, authority, title and interest within the boundaries of Western Shoshone Territory are reserved by the Western Shoshone Nation for the use and benefit of Western Shoshone citizens.

The Western Shoshone Nation possess an express reservation of power in freedom of action. The exercise of these powers exists in the National Council of the Western Shoshone Nation. The only rights surrendered by the Western Shoshone Nation to the United States come by the Treaty of Ruby Valley. It is through the Treaty of Ruby Valley that the United States may claim a right or exemption from the laws of the Western Shoshone Nation.

Further documentation of the lawful basis for the legitimate authority of the National Council is recognized by United States law and international laws as follows:

**The Northwest Territorial Ordinance of 1787**, *“The utmost good faith shall always be observed toward the Indians; their lands and property shall never be taken from them without their consent; and in their property rights and liberty they shall never be invaded or disturbed.”*

**US Constitution, Article VI, paragraph II**, *“This Constitution and laws of the US which shall be made in pursuance thereof and all treaties made, or which shall be made, under the authority of the US shall be the supreme law of the land; and the judges in every state shall be bound thereby, anything in the Constitution or laws of any state to the contrary notwithstanding.”*

**Treaty of Guadeloupe Hidalgo 1848, 9 Statute 922**, *“Special care shall be taken” against “those invasions (against the Indians) which the United States have solemnly obliged themselves to restrain.”*

**Act of Congress Organizing the Territory of Nevada 1861**, *“...Providing that nothing in this Act contained shall be construed to impair the rights or property now pertaining to the Indians in said territory, so long as such rights shall remain unextinguished by treaty between the US and the Indians.”*

**Impossibility for Tribes to Participate Equally as States & Counties Do**

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| The Ely Shoshone Tribe believes that safety and health of the Indian people and Tribal

resources within Nevada will be at greater risk if the Yucca Mountain Project goes forward. This is true due to the fact that while the state and counties prepare for the risks associated with the transportation and storage of radioactive material, Tribal Governments remain unprepared.

The main reason for this situation and the disproportionate effects from the Yucca Mountain Project on Indian people and resources is that DOE has provided financial assistance to the State of Nevada, Nevada Counties, and one California County, but Indian Tribes located within those same geographical boundaries have been refused similar assistance. Thus, while state and county have used the millions of dollars which they have received from DOE so they could learn about the problems associated with the Yucca Mountain Project and participate in addressing those problems, Tribes have not had an equal opportunity to do so. This has resulted and will continue to result in a disproportionate impact of the Yucca Mountain Project to Indian Tribes and resources located within Nevada.

DOE's refusal to provide the financial assistance to Tribes that have been provided to state and county governments violated federal law.

### **DOE Must Consult With Indian Tribes on a Government To Government Level**

The Ely Shoshone Tribe feels that DOE has failed at consulting with Indian Tribes on a Government to Government Basis. The Ely Shoshone Tribe has never been approached by the DOE to discuss the EIS scoping process nor the Draft EIS.

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In a letter written to Wendy R. Dixon, EIS Project Manager, by A. Brian Wallace, Chairman of the Washoe Tribe and Nevada Indian Environmental Coalition (NIEC), dated 12/2/95, states "On April 17, 1995, the DOE, Nevada Operations Office issued a memo which stated that: Public meetings may not be the appropriate way to consult with Tribal groups. Instead, DOE said that they consider all federally recognized Indian Tribes, "to be independent sovereign governments and will consult with those Tribes on a government-to-government basis".

This promises reflects President Clinton's directive to all federally departments and agencies dated April 29, 1994. As Secretary Hazel O'Leary explained in her May 18, 1994 memo. President Clinton requires the federal government "to ensure that the rights of sovereign Tribal governments are fully respected and that departmental activities affecting Native American Tribal rights or trust resources are implemented to a knowledgeable and sensitive manner respectful of this Tribal sovereignty".

DOE is also bound to respect Tribal Sovereign rights under the federal trust obligation.

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The U.S. Supreme Court defines the federal trust obligation as a responsibility imposed upon the federal government, including Congress, as well as federal agencies such as the DOE, to protect and advance Indian interest and act with good faith and utter loyalty to the best interest in the Indians. We believe that the federal trust obligation required DOE to examine all concerns

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and issues facing each Indian Tribe individually as a result of the Yucca Mountain Project more carefully than concerns of the general public.

### **Process Comments**

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In preparing the FEIS, 40 CFR 1502.9(b) requires DOE to respond to all comments received and to discuss any opposing views on issues raised. The Ely Shoshone Tribe understands that DOE has the option to group comments together and to provide generic responses to input received. However, given the complexity of the repository project and the geopolitical brevity and differences of the affected region, the Ely Shoshone Tribe urges DOE to provide individual responses to all comments it receives. The Ely Shoshone Tribe deserves to know DOE's specific response to each comment and how, if at all, said comment resulted in a revision of the DEIS. **The Ely Shoshone Tribe requests that DOE prepare a comment response document and that said document be made available prior to or concurrent with release of the FEIS.**

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**Prior to release of the FEIS, DOE is encouraged to meet with affected units of Tribal Government to discuss how the Department intends to revise the DEIS in responding to local government comments.** Such a meeting will insure that DOE fully understands the Tribal government comments and that the proposed response or revision to the DEIS satisfies the issue of concern.

7 | **DOE is encouraged to identify and make commitments within the FEIS to reasonable measures to mitigate significant impacts.** The subsequent Record of Decision to be issued by DOE should also identify mitigation measures to be implemented. DOE is discouraged from preparing a separate and stand-alone mitigation plan. Such a document does not fulfill the requirements of and indeed is outside the NEPA legal framework governing the minimization of the effects of major federal decisions. |

8 | The DEIS does not reveal the process DOE plans to use in selecting a preferred rail and/or heavy-haul corridors. The baseline information provided in Chapter 3, and the impact analysis provided in Chapter 6 and Appendix J, are particularly deficient regarding impacts on highly populated areas, engineering feasibility; construction costs, and cost uncertainties; potential for voluntary acquisition of private lands; impacts on Native American lands and cultural resources; and economic development costs and opportunities, including risk-induced socioeconomic impacts. The FEIS must include a specific framework for identifying preferred transportation modes and routes. |

### **General Comments**

9 | The Western Shoshone Government understand that the United States Department of Energy is lame in capacity to address political matters. However, Western Shoshone customary law, and treaties must be given due account in the relationship between the United States and the Western Shoshone Nation in order to put into operation superior power to protect the health, rights, liberties, freedoms, and environment of the Western Shoshone people from an

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increasingly aggressive United States bureaucracy.

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The protection provided by these laws preempt the application of United States laws, rules, and regulations. The only opportunity by which the United States may make a lawful claim for nuclear material transportation, use, storage, or disposal in under the Treaty of Ruby Valley and the Nuclear-Free Zone Resolution (attached Appendix II), which has provisions for dealing with existing problems from past United States nuclear activities which creates an opportunity, under section 2, for the harmonization of United States regulation under Western Shoshone law. Only initiative of the part of the United States is lacking. |

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| In its current form, the DEIS does not contain sufficient information to fully assess all reasonable alternatives. For example, the DEIS does not consider specific impacts associated with legal-weight shipments of spent nuclear fuel along U.S. Hwy 93, U.S. Hwy 6, and State Route 318 through White Pine County. Given that this route has been identified by the Nevada Department of Transportation<sup>1</sup> as one of two candidates for designation by the Governor as an alternate to Interstate 15 and U.S. Hwy 95 through Las Vegas and given that the State of Nevada<sup>2</sup> has already encouraged DOE to use the Hwy 93, Hwy 6, SR 318 route to ship LLW and thereby avoid the Las Vegas Valley, it is a clearly reasonable alternative for which specific

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<sup>1</sup> Adrila-Coulson, M.V., 1989, *The Statewide Radioactive Materials Transportation Plan. Phase II*, College of Engineering, University of Nevada-Reno, Reno, Nevada.

<sup>2</sup> Governor Kenny Guinn, *Letter to Chairman Julio Costello of the White Pine County Commission Dated August 24, 1999*, State of Nevada, Office of the Governor, Carson City, Nevada

analysis in the DEIS is lacking. With respect to eastern Nevada, the DEIS fails to consider the potential impacts of legal weight truck (LWT) shipments of Spent Nuclear Fuel (SNF) and high-level radioactive waste (HLW) through Elko and White Pine Counties. Studies prepared for the Nevada Department of Transportation (NDOT) have identified Alternate US 93 from West Wendover to Lages Station, US 93 from Lages Station to Ely, US 6 from Ely to Tonopah, and US 95 from Tonopah to Yucca Mountain as a possible route for highly radioactive materials shipments. Appendix J of the DEIS identifies this route, the so-called "NDOT B Route," as a potential state-designated alternative route for truck shipments to the repository. DOE used portions of this route for truck shipments of SNF from the Nevada Test Site the Idaho National Engineering and Environmental Laboratory in the 1980s.

According to the DEIS, there could be about 49,500 to 96,000 LWT shipments to the repository under the mostly truck scenario. Ninety percent or more of these shipments, an average of 5 to 10 trucks per day, could travel the NDOT B Route through West Wendover, McGill, and Ely.

The Draft document fails to consider unique local conditions along the NDOT B Route that could result in significantly higher routine radiological exposures than those calculated by DOE using the RADTRAN 4 computer model. For example, individuals who reside, work, or attend school at certain locations within 6 to 40 meters (20 to 130 feet) of a nuclear waste highway route could receive exposures in excess of the average annual background radiation dose. DOE has failed to investigate whether such conditions exist near school zones and

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pedestrian crossings, left-turn lanes and traffic signals, congested intersections, and uphill grades in West Wendover, McGill, and Ely. |

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| The DEIS also falls to consider unique local conditions along the potential truck route that could cause unacceptable safety and security risks for truck shipments using General Atomics GA4/9 casks. Primarily a rural two-lane highway with numerous steep grades and sharp curves, the route traverses high mountain passes subject to severe winter storms. Long segments (up to 60 miles) have no safe parking areas, few refueling facilities, and limited local emergency response capabilities. The Draft report assumes that almost all truck shipments will be made in the new GA-4/9 casks. The weight of the loaded GA-4/9 cask requires that it be used in conjunction with a specially designed trailer, a lower weight, cab-over-engine tractor, and a single fuel tank. DOE has failed to demonstrate that the GA4/9 system is appropriately designed for a decades-long, nationwide shipping campaign to Yucca Mountain. |

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| The Draft EIS fails to consider unique local conditions along the NDOT B Route which may increase the probability of severe accidents, and which could exacerbate the consequences of a severe accident or terrorist attack resulting in a release of radioactive materials. There are numerous mountain passes, such as White Horse Pass, Currant Summit, Black Rock Summit, Sandy Summit, and Warm Springs Pass. Near-route terrain frequently includes drop-offs into deep canyons or river valleys that would make response to an accident or attack, and recovery of the cask, damaged or not, quite difficult. Route proximity to surface water and groundwater resources is a major concern. DOE has failed to address the implications of route-specific

14 conditions for accident prevention, emergency response, and the economic costs of cleanup and  
continued recovery. |

15 | The DEIS fails to consider unique local conditions along the NDOT B Route which could  
result in unacceptable adverse socioeconomic impacts. During the past decade, there has been  
significant demographic and economic growth in and around West Wendover and Ely. Most of  
the new commercial development, including hotels, casinos, restaurants, and retail sales  
establishments, has occurred within two miles of the NDOT B Route. The Draft EIS ignores the  
potential adverse impacts of large numbers of SNF shipments on tourism-based economics  
located near highway routes to Yucca Mountain. State-of-the-art risk studies sponsored by the  
State of Nevada researchers have documented the public perception of risks associated with  
nuclear waste transportation. DOE has failed to address potential adverse impacts on year-round  
tourism, seasonal tourism, and special-event tourism; the effects of risk perception on property  
values along shipping routes; and risk-related impacts on business location and expansion  
decisions. |

16 | The draft EIS fails to consider transportation impacts on specific Native American  
communities located in proximity to potential spent nuclear fuel and high-level radioactive waste  
routes. In particular, there is no evaluation of possible impacts to the Ely Shoshone Reservation,  
which is located proximity to US 6 & 93, potential proposed alternative routes. |

17 | The DEIS does not include a reasonable No Action Alternative. It is unlikely that either  
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of the No Action Alternatives included within the DEIS would ever be considered for implementation. In particular, No Action Alternative Scenario 1 entails radioactive waste to be left at the 77 sites where it is now found, but under institutional control for 10,000 years. Scenario 2 envisions loss of institutional control after 100 years. NRC guidelines discourage licensees from assuming institutional control beyond 100 years. However, it is highly unlikely that waste would be allowed to be stored at generator sites without any form of institutional control. A more reasonable No Action alternative would see waste stored on-site indefinitely with continued institutional controls.

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The Ely Shoshone Tribe is troubled by the DOE's failure in the DEIS to recognize the Ely Shoshone Tribe and its members as potentially impacted by on-going and proposed radioactive waste management activities in Nevada. Despite the direct risk to resident public health, safety and welfare associated with the Yucca Mountain project, the DEIS does not afford any assessment of impacts to member residents and the environment in the Ely Shoshone Reservation.

This failure to consider impacts in White Pine County appears contradictory to the Secretary of Energy's previous action to designate White Pine County as "affected" pursuant to the Nuclear Waste Policy Act. The Secretary's designation, which is not required but is discretionary, clearly suggests the relationship of ongoing and proposed DOE radioactive waste management activities in Nevada to possible localized impacts in White Pine County. It is inconceivable that the Secretary of Energy would consider White Pine County "affected" yet the

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DEIS would not consider impacts which might accrue to residents and/or the environment of  
White Pine County. |

During the scoping process, White Pine County voiced and submitted their concerns. The DEIS does not adequately address those issues raised and substantiated by White Pine County. A summary of key issues raised by White Pine County which have not been sufficiently addressed within the DEIS follows:

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1. | The scope of the repository EIS should not be narrowly defined by inclusion of alternatives which are limited to the confines of existing law. Rather, consideration of alternatives that are outside the scope of what Congress has approved or authorized can and should be evaluated in the EIS as the document may serve as a the basis for framing subsequent Congressional decisions.<sup>3</sup> In this regard, current legislative proposals concerning interim storage of waste and related transportation systems should be evaluated within the repository EIS. **The DEIS limits the alternatives it considers to only those to which current Congressional authorization exists. The document is therefore not useful as a tool for the Administration or the Congress to use in shaping possible new approaches to management of spent nuclear fuel.** |
  2. | The repository EIS must consider the possibility that U.S. Highways 93 and 6 and State Highway 318 through White Pine County will be used for both high-level and low-level radioactive waste shipments. Alternatives considered within the EIS should consider

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<sup>3</sup> See 40 CFR 1502.14(c) for regulatory guidance on the relationship of NEPA compliance documents to congressional decision-making.

with and without LLRW shipments along highway access options through White Pine County. **The DEIS does not consider the cumulative impacts (radiological, socioeconomic, etc.) of shipments of HLW and LLW through White Pine County.**

3. **The repository EIS must include a comparative evaluation of the extent to which alternatives for accomplishing construction, emplacement, closure, and post-closure phases of the facility achieve containment of radioisotopes during volcanic eruption, earthquakes, and loss of criticality control. The comparative evaluation of alternatives for repository design, construction and operation should consider the full spectrum of uncertainty attendant to such options. In this way, the EIS should facilitate decision-making under conditions of uncertainty. **The DEIS does not provide a comparative analysis in a useful summary form of the extent to which construction design and operational alternatives provide containment of radioisotopes from the accessible environment. It is not easy to conclude from the information in the document which design and operational alternative is preferred.****
4. Beyond construction of the repository, alternative methods for conducting waste emplacement operations should be considered. Critical issues include candidate materials from which waste packages might be fabricated and alternative materials for fabrication of waste package baskets. **The DEIS does not appear to consider technology alternatives or material choice in construction of waste packages.**
5. **The EIS should consider the possibility that the repository may never be permanently closed. Long-term below ground monitored retrievable storage at the site should be evaluated within the EIS. A comparative analysis of the merits of backfilling the facility**

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vs. other means of closure should be included within the EIS. Alternative materials which might be used to achieve closure should be evaluated against their contribution to risk management, retrievability and cost. **The DEIS does not consider a repository with indefinite institutional control and lack of closure activity. Alternative methods for closure of the repository are not considered. Retrieval of waste (where waste is taken and how) is not considered within the DEIS.**

6. The EIS should evaluate the risk management contributions of alternative methods of warning future generations of the hazardous nature of materials located within the repository. **The DEIS does not consider the risk management benefits or the costs of alternative methods for warning future generations.**

7. Alternatives to be considered should include construction and use of a hazardous cargo route around the City of Ely. **The DEIS does not consider the benefit, feasibility or cost of this alternative.**

8. The risks associated with use of U.S. Highways 93 and 6 and State Highway 318 through the County should be compared against the risks of using other routes (ie. I-15 to U.S. 95). **Although Table J-48 provides a summary of risks for each route, there is no analysis of the data in this table. In fact, Table J-48 reveals that the risks of transporting waste through White Pine County are significantly greater than through the Las Vegas Valley. The detailed analysis of routes through the Las Vegas Valley then do not bound the range of expected impacts the text in Chapter 6 implies. Table J-48 makes clear that specific impacts of transportation through White Pine County should have been included within the DEIS.**

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- 24 9. Legal weight truck operational alternatives which should be considered within the EIS include escorted versus unescorted shipments. **The DEIS does not consider the risk benefit/cost implications of escorted vs. unescorted shipments.**
- 25 10. The analysis should evaluate the risk management benefits of time-of-day travel restrictions (ie. to avoid transport past the White Pine County High School during school hours). **The DEIS does not consider time-of-day travel restrictions as a risk management option.**
- 26 11. The EIS should assess the regional economic benefits of using of local versus non-local trucking firms. **The DEIS does not provide a comparative assessment of the regional economic benefits of using local v. non-local trucking concerns.**
- 27 12. The impacts of alternative vehicle payloads upon highway infrastructure, maintenance costs and traffic safety should also be addressed within the EIS. **The DEIS does not appear to assess added maintenance costs or the change in crash rates per vehicle miles travelled as a result of slow-moving vehicles (ie. heavy-haul trucks).**
- 28 13. The EIS must consider alternatives for provision of effective emergency first response capabilities along legal weight truck routes in White Pine County. **The DEIS does not consider existing emergency response capabilities to respond to incidents/accidents involving spent nuclear fuel or high-level radioactive waste.**
- 29 14. Because of the latent consequences associated with repeated exposures to radioactivity and given uncertainty associated with historic dose levels to residents, White Pine County is convinced that the description of the affected environment must contain a before repository system (baseline) assessment of public health conditions. **The DEIS does not**

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**provide a baseline or "before repository" assessment of public health conditions.**

15. The DEIS should consider those environmental features which may affect safe transport of radioactive materials. Examples include weather conditions, wildlife conflicts with vehicles, and flood prone areas, among other possibilities. **The DEIS only considers these environmental features as such may be impacted by construction and operation of the transportation system. The extent to which these environmental characteristics may impact upon safe transportation is not addressed within the DEIS.**

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16. DOE is encouraged to make use of the White Pine County Economic Impact Model in preparation of the repository EIS. **DOE did not utilize the White Pine County Economic Impact Model despite said model having been given to the Department. The DEIS does not include an assessment of economic or fiscal impacts in White Pine County.**

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17. The repository EIS should consider existing capabilities of local first responders in White Pine County. **The DEIS does not consider existing capabilities of emergency first responders in White Pine County.**

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18. The Department of Energy should acquire and make use of each of the White Pine County sponsored technical studies, models and data sets in preparing a comprehensive description of the affected environment within White Pine County. **Despite White Pine County having responded to a DOE request for "reference materials", DOE did not apparently use this information as none of the White Pine County provided source materials are referenced in the DEIS.**

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19. It is imperative that the repository EIS include an exhaustive evaluation of the environmental consequences of waste transport through White Pine County. Because of the unique attributes of the County and its communities, the analysis must be specific to these geographic areas. A generic assessment of transportation risks will not facilitate identification of specific impacts and will preclude consideration of mitigation options necessary to alleviate such effects. **The DEIS includes only a cursory assessment of transportation impacts in White Pine County. Socioeconomic, environmental, land use, etc. is not assessed. Measures to mitigate impacts of transportation through White Pine County is not included within the document.**
20. The repository EIS must consider these significant differences in risk (estimated by UNLV-TRC<sup>4</sup> as being significantly greater in White Pine County) and address appropriate methods for managing risks in the County to a level commensurate with other areas of the Nation. **Table J-48 of the DEIS confirms that risks of transporting waste through White Pine County are significantly greater than other routes involving Interstate highways. The DEIS does not address methods for managing transportation risks in White Pine County.**
21. The repository EIS should include assessments of transportation on property values. **The DEIS does not address the effects of transportation on property values.**
22. The EIS must include an exhaustive identification and evaluation of measures to mitigate

<sup>4</sup> Parentela, Emelinda, et. al., Risk Analysis for Spent Nuclear Fuel Transportation Through White Pine County: Highway Routes, University of Nevada-Las Vegas, Transportation Research Center, prepared for White Pine County Nuclear Waste Project Office, UNLV/TRC/RR-95/9, November 1995.

repository system impacts. **The DEIS identifies mitigation measures for only a fraction of the impacts identified within the document. None of the mitigation measures identified is evaluated as to its technical, institutional, or economic feasibility. The DEIS contains no identifiable commitments to mitigation.**

37 Collectively, failure of the DEIS to address most of the issues raised by White Pine County during scoping renders the document wholly inadequate.

38 The National Environmental Policy Act (NEPA) requires federal agencies to consider "connected actions". Construction and operation of a repository at Yucca Mountain will result in spent nuclear fuel and high-level radioactive waste being transported through Nevada (and in all likelihood by legal-weight truck in the short-term). The prospect of transportation of spent nuclear fuel and high-level radioactive waste through the Las Vegas Valley will likely trigger a decision by the Governor of Nevada to designate alternative routes. Therefore, the FEIS must consider the impacts of State of Nevada identified alternative routes as a connected action pursuant to NEPA.

39 With regard to failure of the DEIS to adequately address transportation impacts it is important to note that transportation induced stigma must also be considered within the Final EIS. Research sponsored by the Board of Lincoln County Commissioners has demonstrated that transportation induced stigma can result in significant economic and fiscal impacts along

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transportation corridors.<sup>5</sup> In the event of an accident involving transportation of spent nuclear fuel in the weeks preceding peak tourist travel to and through White Pine County, local businesses may be impacted and tax revenues lost to Ely Shoshone Tribe, White Pine County and the City of Ely. It could take several weeks to many months for the area to recover from negative perceptions about safe travel in White Pine County.

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A serious omission in the DEIS is the identification and evaluation of alternatives for mitigation of impacts. Ely Shoshone Tribe's preliminary review of the DEIS has found no obvious commitments by DOE to mitigate any impacts. The FEIS must include both the identification and evaluation of mitigation alternatives as well as commitments to feasible mitigation measures.

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The description of the repository system, including transportation, is too vague to enable assessment of impacts. The degree of ambiguity and uncertainty associated with key assumptions (ie. whether or not State of Nevada will designate alternate routes) renders the analyses deficient for decision-support. DOE is encouraged to validate assumptions, reduce uncertainty, and remove as much ambiguity as possible in presenting a revised analysis of impacts in the FEIS.

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Although the DEIS acknowledges that there could be impacts to Native American

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<sup>5</sup> Himmelberger, Jeffery; Baughman, Mike L.; and Yelena A. Agneva-Himmelberger, October 1993, *Tourism Impacts of Three Mile Island and Other Adverse Events: Implications for Lincoln County and Other Rural Counties Bisected By Radioactive Wastes Intended for Yucca Mountain*, Clark University,

cultural sites along rail spur routes or at Yucca Mountain, the draft document completely ignores wider issues and impacts to Native peoples and communities. The draft includes a discussion of the Native American "perspective" on the project, but then proceeds to discount the viewpoint expressed and goes on to conclude that no significant impacts to Native Americans will occur, even though no substantive impact assessment work has been done in any of the Native communities potentially affected by the facility or by transportation routes.

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Impacts on American Indian communities within the DEIS are specified in more detail than other communities. There seems to be some bias that the only "Traditional Cultural Properties" considered are those related to American Indian Communities. This is a misconception. Traditional cultural properties could also be related to Pioneer settlements (for example the original Wagon Train route used to settle Preston and Lund or the Keystone and HiLine steam railroad corridor for the Nevada Northern Railroad). There is no assessment of the impacts of the proposed action on cultural tourism. This is a particularly important issue for the Ely Shoshone Tribe and to White Pine County (and other areas like Death Valley National Park) where the economy is currently being re-arranged from traditional extractive industries to tourism.

43 It is very difficult within the DEIS to evaluate impact on communities in the major zone  
 of influence. One is hard pressed to find any quantification of how many actual legal weight-  
 truck haul loads could be expected through Ely on the US 93 or SR 318 scenario. The table on J-  
 7 might indicate around 1500 shipments from the Idaho National Engineering and Environmental  
 Laboratory 800 shipments from Hanford that might use a route through Ely as an alternate to  
 Interstate routes, spread over a 20-year period (Table J-4). It would be useful if there was analysis  
 of some key points like Ely (apparently a relatively low impact area with about 350 shipments of  
 high-level radioactive waste a year, Table J-4) as opposed to perhaps high impact Mesquite with  
 119 perhaps an average of 1700 shipments a year of commercial spent nuclear fuel (Figure J-10). The  
 120 FEIS should identify the impacts of this increase of traffic on tourism trade. The DEIS should  
 describe time of day, day of week and seasonal characteristics of shipping campaigns. Would  
 121 there be an effort for shipments to occur during low season traffic times? The FEIS should  
 122 consider the changing demographics of "snow-birds". The attitudes of snowbirds toward  
 123 radioactive waste shipments should be considered within the FEIS. Would shipments be  
 scheduled to occur during low traffic or high traffic hours, being moved at night or during the  
 124 day? The effect of transport corridors be designated as "heavy-haul nuclear free" as a mitigating  
 measure in order to alleviate concerns of motorists who wanted to avoid worst case scenario  
 nuclear accidents should be considered within the FEIS? The extent to which such a measure  
 might also reduce the possibility of exposure if there was a highway accident causing a loss of  
 containment should be addressed within the FEIS?

The prevailing impression (including within the DEIS) is that significant archeological

properties can be bought. Yet the cost of conducting data recovery operations is not specified within the DEIS. It appears that a majority of the significant archeological sites at the Yucca Mountain site have already been treated through data recovery. What have been the costs of this treatment? How do these costs at the sites at Yucca Mountain compare to data recovery costs at locations where highway or rail improvements may be made? The kinds of sites at Yucca Mountain may be much less expensive to conduct data recovery operations than sites in valley floors or riparian zones that tend to be more complex and therefore expensive to conduct data recovery operations. What kind of sites might be of such high value that data recovery should not be undertaken, but rather sites should be avoided by through re-routing and preserved in place. This is a particularly relevant question for a situation like Five Finger Ridge along I-70 between Richfield and Cove Fort in Utah. This site should have (and could have) been avoided if there had not been a mentality at work in the early 1980's that all archeological sites could be "mitigated" by data recovery. Why has the DEIS not considered off-site mitigation along potential "tourist corridors" that would be alternative routes to avoid heavy haul nuclear waste shipments?

There is reference to a DOE, Advisory Council on Historic Preservation agreement in each DEIS section on cultural resources. This agreement is now several years old. There are new standards for these agreements that emphasize public involvement and alternatives to data recovery as mitigation measures. Will this agreement be modified to deal with the very different issues in treating cultural properties on linear corridors rather than in large area blocks? Will there be more emphasis on public involvement and public availability of popular and research

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reports emanating from mitigation? \_\_\_\_\_

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Can the experience of transport of low-level and transuranic nuclear waste and impacts (ie. Waste Isolation Pilot Plant (WIPP) and shipments to Nevada Test Site) be used as a model for the Yucca Mountain repository? To what extent was WIPP Program Implementation Guide for transportation considered as a model for Yucca Mountain regarding mitigation within the DEIS? Was the experiences of these other shipping campaigns used as examples to assess community impacts and transport accident rates within the DEIS? \_\_\_\_\_

46  
continued  
on page  
26

A variety of discrepancies within the DEIS text and tables and inconsistencies in data presented in the document exist. Several of the risk computations use assumptions that do not appear to be consistent with known references, and reasonable expectations. Examples of these problems with the DEIS are included within the specific comments which follow. Several of the "worst case scenarios" do not appear to be "worst case" for Ely Shoshone Tribe or White Pine County. Using known intersections, traffic conditions, established weather patterns and road usage, reviewers were able to develop several worst case scenarios that meet or easily exceed the ones listed in the DEIS. Examples of possible "worst case" scenarios which should be considered within the FEIS as a means to bound impact assessment and to identify reasonable mitigation measures include: \_\_\_\_\_

### Accident Scenarios

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continued

1. Legal weight truck loaded with spent fuel collides with double-trailer gasoline tanker on U.S. 6 immediately south of the City of Ely main water supply at Murry Springs. Both vehicles engulfed in flames. Fire of sufficient heat and duration to destroy cask seals resulting in breach of containment. Direct impacts include environmental contamination, closure of U.S. 6 and enhanced public perception of risk and related area stigmatization.
  
2. Legal weight or heavy-haul truck loaded with spent fuel collides with double-trailer gasoline tanker at intersection of U.S. 93 and State Route 375 near Crystal Springs in Lincoln County. Both vehicles engulfed in flames. Fire of sufficient heat and duration to destroy cask seals resulting in breach of containment. Indirect impacts in White Pine County include reduction of vehicular traffic along U.S. 6 and U.S. 93 through the County and related reductions in visitation to Great Basin National Park and other destination locations within the County.
  
3. Legal weight truck loaded with spent fuel collides with double-trailer tanker on U.S. 93 thirty miles north of Ely. Both vehicles engulfed in flames. Fire of sufficient heat and duration to destroy cask seals resulting in breach of containment. Direct impacts include environmental contamination, closure of U.S. 93 and enhanced public perception of risk and related area stigmatization. Economic and fiscal consequences of road closure.

**Non –Accident Scenarios**

- 47
1. Nevada’s Governor designates U.S. 93 south from I-80 at Wendover through Ely to U.S. 6 then south to U.S. 95 then on to the Nevada Test Site as an alternate to transportation through Las Vegas via I-15. Direct impacts include residents and visitors in White Pine County being exposed to risk of radiological exposure. Indirect impacts include enhanced public perception of risk and related area stigmatization.
  2. Nevada’s Governor designates U.S. 93 south from I-80 at Wendover through Ely to U.S. 6 then south to State Highway 318 through Lund to State Highway 376 to U.S. 93 then south to I-15 to U.S. 95 north to the Nevada Test Site. Direct impacts include residents and visitors in White Pine County being exposed to risk of radiological exposure. Indirect impacts include enhanced public perception of risk and related area stigmatization.

**Repository Pre-closure/Post-closure Scenarios**

- 48
1. Disruptive event ( ie. volcanism, nuclear criticality) of unanticipated nature through repository horizon and of sufficient force to produce an emission plume and related deposition across White Pine County. Direct impacts include increased risk to residents and visitors of White Pine County to exposure to radionuclides. Indirect impacts include enhanced public perception of risk and related area stigmatization.

49

Assumptions made in the DEIS, especially as such relate to cask permeability and potential for breach, seem very conservative and perhaps not well thought through. The use of

conventional highway traffic data, while convenient may have limited applicability when examining scenarios within White Pine County.

Failure of the DEIS to designate a specific route, or even mode of transportation in advance of evaluation of the environmental impacts, grossly impacts the ability to prepare for and ameliorate the consequences of potential crash, or breach of containment. Here the cart is clearly before the horse. Government agencies, even individuals cannot adequately prepare for an infinity of scenarios. The designation of modes of transportation, the material to be transported (BWR, PWR, Greater than Class C, Weapons Grade Plutonium, Special Performance Assessment-Required LLW, etc), the routes, timing, seasonal and other factors should be ostensibly determined in advance of evaluation of environmental impacts.

Several things were not even considered, or were given extremely low priority in this DEIS, most noticeably the lack of assessment of socioeconomic impacts and public perception in both eventful and uneventful transport. While most considerably a statewide issue and one that will greatly impact Nye and Clark counties, White Pine County, by virtue (or lack thereof) of relative economic poverty could conceivably suffer severe economic hardships. This is especially true in worst case scenarios. The lack of consideration for these issues may stem from the lack of designated routes and modes of transportation. Nonetheless, the DEIS should address these concerns and offer mitigating proposals to offset the deleterious effects.

Understanding that the public's perception of nuclear waste as inherently dangerous rather than potentially dangerous, the DEIS should address in detail the public's concern, the potential

51 for economic downturns, and suggest economic and social compensation for both uneventful  
continued transportation and storage scenarios as well as worst case scenarios. |

52 | The DEIS conveys preconceived notions regarding the safety and efficacy of  
transportation of high-level nuclear waste and their subsequent storage at the Yucca Mountain  
site. Recognizing that transportation of hazardous materials and especially radioactive products  
has an excellent track record in the United States, and moreover that many great minds have  
established proven protocols to handling these products, the Ely Shoshone Tribe recommends  
that the results of this DEIS be reviewed by an independent technical group to ensure that  
analyses are appropriate and that all measures to effectively manage risk have been considered.  
While admittedly a costly measure, because of the nature of the material involved and longevity  
of the impact, a second study, ordered by the Congress of the United States, by another agency or  
group, might well be undertaken in an effort to confirm or dispute the findings in this report. At  
the very least, a group of experts in the various fields associated with this report, not associated  
with the Department of Energy or even the NRC should be assembled and charged with the task  
to carefully review this document with the understanding that their comments would be accepted,  
utilized and indeed exercised even after the February 9, 2000 comment period expired. |

53 | The Ely Shoshone Tribe is concerned that here is no review of potential state-wide  
continued impacts, how changes in regional economic trends might impact neighboring counties, or  
on page 20 impacts that could occur in counties along proposed transportation routes. It is not possible to  
suggest specific positive or negative impacts to the Ely Shoshone Tribe and White Pine County

53  
continued  
on page 31

without initial analysis on anticipated state and regional impacts. In addition, the DEIS should include a separate review and analysis of impacts to communities along transportation routes once they have been selected. The FEIS should commit to such an analysis and the related identification of mitigation measures.

All communities with the state could be impacted by changes in the economic picture for the entire state because of the repository. The DEIS provides no assessment of the impacts to counties and cities from losses in state-level economic and fiscal activity. The State of Nevada Nuclear Waste Project Office has demonstrated the potential for statewide tourism related economic and fiscal impacts as a result of nuclear waste being transported throughout the state and stored at Yucca Mountain. State sales and gaming tax revenues could be reduced, and this would impact state services and funds available to counties and cities for local services. It is also possible that the fact that high level nuclear waste is being transported on Nevada highways may influence motor freight routes. Communities like Ely receive a significant economic benefit from the increasing amount of truck traffic over US Highway 93 and State Route 318. If trucking firms elected to use Interstate 15 instead to avoid the routes used for high level nuclear waste, then our communities and the state as a whole would feel an economic impacts. Each of these key issues needs to be addressed in the FEIS.

Positive and negative impacts in neighboring counties including Lincoln, Nye, and Eureka Counties could indirectly impact White Pine County. Moderate increases or decreases in population and economic strength in Eureka, northern Nye, and northern Lincoln Counties could

impact the Ely Shoshone Tribe and White Pine. These areas currently depend, at least in part, on Ely as a commercial and professional center. Decreases in their economies could reduce White Pine County's economic activity from its neighboring counties. Increases in population and activity could increase the economic activity in White Pine County. If the increases in the neighboring areas were significant enough to support development of new commercial and professional activity, it could decrease the activity now coming to Ely Shoshone Tribe and White Pine County. These connected actions or impacts have not been considered within the DEIS.

It is possible that selection of transportation routes through the Ely Shoshone Reservation and White Pine County could result in socioeconomic impacts for Ely Shoshone Tribe and White Pine County. If the presence of trucks hauling high-level nuclear waste in White Pine County required new state and/or federal employees in the area, their households would generate revenue in the community. New private sector ventures could be warranted to provide parking areas or shuttle services between parking and motels. However, the negative impacts of the presence of high-level nuclear waste could include reduced tourist traffic to Ely Shoshone Tribe and White Pine County attractions, reduced customers for businesses located along the transportation routes or near the parking areas, reluctance of lenders to finance projects located within the corridor because of potential environmental hazards or increased risk perceived for the area; and regulations governing the use of areas along the transportation route could deter future land use decisions on mining, grazing, or tourism/recreation projects. The identification and analysis of impacts to the local economy in the Ely Shoshone Tribe, White Pine County and the City of Ely need to be included within the DEIS. Absent such analyses and identification of appropriate

measures to mitigate impacts, potential effects will go unmitigated. Such an outcome is inconsistent with the intent of NEPA. The limited discussion regarding Clark, Lincoln, Nye, Eureka, Lander, and Esmeralda Counties does not show the true picture of impacts White Pine County could expect from the development of Yucca Mountain to store high level nuclear waste.

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continued  
on page 31

Although White Pine County is a remote rural area, the topography, climate, population concentration, existing transportation systems and economic condition are unique and must be considered in any decision on transportation routing for hazardous materials. The absence of any data in the DEIS concerning this are is particularly disconcerting for the County's emergency first responders. Besides transportation issues, it is a fact that the Ely Shoshone Reservation is downwind of Yucca Mountain and its residents have had health problems from testing conducted at the NTS. Reservation residents would probably prefer the no action alternative where wastes are stored at their current locations. The DEIS should consider baseline health and public perceptions of risk.

54

Transportation routes identified by the State of Nevada and evaluated in Appendix J go through White Pine County's most populated area and county seat, Ely. Here, ninety percent of the County's population exists within a 15 mile radius of the Ely city center and proposed transportation route. The main highway to the southwest goes five miles uphill along a winding, mountainous two lane route to Murry Summit (which is 7,300 feet high) passing within yards of the main water supply for the city. For six to eight months of many years, U.S. Hwy 6 is often icy and snow covered. It is not unusual for emergency first responders to take an hour to reach

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on page 33

an accident site on any major highway because of the distances involved. If any highway is closed there are limited alternatives for routing traffic. The resulting economic impact could be devastating. Fog and snow can and has closed the only airport. The only hospital has limited capabilities. Volunteers are relied upon for fire and EMS resources. The DEIS does not adequately address these issues. The FEIS should include an assessment of unique circumstances impacting upon effective emergency first response in White Pine County. The Ely Shoshone Tribe is not adequately prepared for any emergency response situations. The Ely Shoshone Tribe currently relies on the White Pine County emergency response team.

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continued  
on page 34

Studies need to be undertaken to provide accurate assessments for those who are making transportation decision concerning this area. Resources are limited and often inadequate without adding another demand on them. Money needs to be provided to increase the capabilities to specified levels and it must be provided to maintain those levels. Communications systems, support facilities, shelters, training and equipment, as well as qualified personnel are really inadequate to handle any serious accident. If a decision is made to route radioactive wastes through the county the costs associated with providing proper health and safety response agencies must be considered. There are some problems which money cannot solve. The DEIS then, must consider a combination of mitigation and compensation if risk management through effective emergency first response is to occur.

Before any decision is made concerning routing shipments through the Ely Shoshone Reservation and White Pine County a thorough assessment needs to be conducted and the results

conveyed to those who will make the decision. This information, if not contained within the FEIS, should be a component in a subsequent supplement to the FEIS.

Carrier and shipper responsibilities and emergency response procedures require that response entities have a response team on call 24 hours a day. Will DOE and its carriers require/request 24 hour response capabilities of local first responders? The regulations at 10 CFR, Part 73, govern special safeguards. These regulations specify that transport vehicles carry personal communications devices. The DEIS should evaluate the extent to which such devices will function in rural Nevada and the extent to which rural emergency first responders have compatible communications capabilities. Communications would be helpful to situation assessment. Keeping in mind that there is a lot of highway area and distance to travel, emergency first responders would benefit from knowing what was occurring at the incident before these Emergency Response Teams from White Pine County arrive. The FEIS should consider what enhancements in local communications capabilities would be required to facilitate such communication. The FEIS needs to include more investigation, study and planning if transportation is to be safe for both the environment and the communities within White Pine County.

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continued

The DEIS mentions "uncertain" transportation-related decisions, "potential transportation impacts" and regulatory agency "attempts" to reduce potential hazards. Specific rail routes, heavy-haul routes and withdrawal lands need to be identified and analyzed as part of this EIS, not in the future. The FEIS must demonstrate how can true environmental impacts can

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continued  
on page 35

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continued

be addressed, and major transportation decisions made, without this information.

### Specific Comments

57  
Page 1-1 [ A definition of an EIS is given here. The FEIS should also note that an EIS can and should be used to inform decision-makers of reasonable alternatives that would minimize impacts. Such alternatives could become the basis of Administrative proposals for legislation. The DEIS does not provide decision-makers with adequate information on alternatives to minimize impacts.]

58  
Page 1-1 [ 2nd paragraph. Even if transportation-related decisions are uncertain at this time, any potential routes need to be field surveyed, local governments consulted and environmental analysis done as part of the EIS, not after the fact. For example, where does the EIS analyze potential impacts (socioeconomic, etc.) of transporting spent nuclear fuel and high-level radioactive waste on U.S. Highway 6 between U.S. Highway 93 and State Route 318 or U.S. Highway 93 between Ely and Caliente? Do mountain roads in January increase accident risks? These characteristics should have been considered as a component of the description of the affected environment.]

59  
continued  
on page 36

Page 1-4 [ Section 1.2.1, Generation of Spent Nuclear Fuel and High-Level Radioactive Waste, Paragraph 5, Line #2 states "All of these reactors have been shut down for several years". This statement is not entirely correct. Most of these reactors have

59  
continued

been shut down for several years, however the production of plutonium for weapons research and other research purposes have continued. In any case, it would be useful to reference how many years the reactors have been shut down, and what storage problems and considerations were observed, perhaps in the appendices. |

60

Page 1-6. Section 1.2.2. "Cladding, if it is not damaged or corroded, has the capability to isolate the spent nuclear fuel and delay the release of radionuclides to the environment for long periods." What is a "long period." This is not quantified. |

61

Page 1-6. Section 1.2.2.2. How was the spent nuclear fuel from the "55 university- and government-owned test reactors" transported to Hanford and Savannah River? What was the accident record? |

62

Page 1-6. Section 1.2.2.2 "Additional small quantities remain at other Locations." What is going to be done with these quantities? Will they be dealt with under this planned action?

Page 1-7. Section 1.2.4. Will the plutonium at the Pantex Plant, Rocky Flats Environmental Technology Site, Los Alamos and Lawrence Livermore National Laboratories be treated by this proposed action? If so why are these not included in the maps, transportation routes and analysis? |

Page 1-7

Section 1.2.3, High-Level Radioactive Waste, Paragraph 2, line(s)3-4 The text here states, "Treatment ordinarily includes separation of the waste into high activity and low activity fractions, followed by vitrification of the high activity fraction". High and Low fractions are not clearly defined. It would be advantageous to list the criteria for high and low fractions in the appendices not only for storage limitations but also for transportation criteria. Furthermore, the type of canister the vitrified high fraction material is stored in should also be listed both for storage and transportation purposes as this material may present different packaging demands than fuel assemblies.

63

Page 1-8

The DEIS does not consider the potential for certain defense high-level radioactive wastes to have security requirements which limits pre-notification of emergency first responders about pending shipments. Measures to mitigate pre-notification restrictions should be addressed within the FEIS.

64

Page 1-8

This section of the DEIS should discuss repository siting activities at Lyon, Kansas including why the site was not developed and what lessons for the Yucca Mountain project can be applied.

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continued  
on page 38

Page 1-9

The entire first full paragraph on this page, while offering history on the determination that a miens deep geologic repository was the final conclusion as

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continued

best treatment alternative, it offers information that is 20 years (plus) old. If newer studies or reviews have been completed or if other finding support or dispute these conclusions, they should be referenced. In light of the technological advancement, should other alternatives be considered?

66 Page 1-11. Section 1.3.2.2 The weight of inventory of radioactive heavy metal is Specified as 70,000 MTHM but how does this convert to volume?

117 Page 1-11 Section 1.3.2.2 indicates that DOE used 0.5MTHM per canister for defense high-level radioactive waste. The justification given in the document is that DOE has used this value "since 1985". This is no justification at all. Rather, the FEIS should base the assumed volume of waste per canister on current characteristics of waste and canisters to be utilized. Use of the assumed 0.5 may underestimate the number of defense waste canisters which must be transported to, and disposed of within the repository. While long-term repository performance may not be affected, underestimation of canister numbers will bear upon waste handling, emplacement, retrieval and transportation facets of the repository system and impacts related thereto.

118 Page 1-12. Section 1.3.2.2 Do we assume that the 105,000 MTHM of waste from operating nuclear power plants through 2046 would equal 210,000 canisters of waste. Why is this not specified when the 2,500 MTHM of DOE spent nuclear fuel translates

to 22,280 canisters, far more than the 0.5 MTHM proposed per canister? |

Page 1-14 | 2nd paragraph. States that if the land to be withdrawn included land that this EIS  
 67 does not consider for withdrawal, DOE would perform additional analysis as  
 required. The EIS should consider all possible withdrawal land. The land to be  
 withdrawn should have been determined prior to finalizing the EIS. Same  
 comment applies to Section 11.1, Statutes and Regulations Establishing or  
 Affecting Authority To Propose, License, and Develop a Monitored Geologic  
 Repository Federal Land Policy and Management Act of 1976, 3rd paragraph. |

Page 1-14 | Section 1.4.1. Is DOE considering withdrawal of Rail and Highway Transport  
 68 routes that would be constructed exclusively for transport of canisters to Yucca  
 Mountain. |

Page 1-17 | Section 1.4.2 "if authorized, would be a facility for permanent disposal of 70,000  
 69 MTHM of spent nuclear fuel...". What about the 105,000 MTHM mentioned  
 earlier? Is this action going to cause an expansion of Yucca Mountain repository?  
 Is this EIS to cover 70,000 and 105,000 additional MTHM? Or just 70,000  
 MTHM? Would approval of the 70,000 MTHM repository result in a reasonably  
 foreseeable 105,000 MTHM addition? What are consequences of this on transport  
 and expansion of the facility and associated risks? |

Page 1-20

Section 1.4.3.3 "The views and comments of the governor and legislature of any state and of the governing bodies of affected Native American Tribes". Federal regulations nowhere define "Native American Tribes." Federal regulation deal with "recognized American Indian Tribes."

70

Page 1-20

Failure to provide institutional control over this sensitive and potentially dangerous material (provided governmental agencies concerned with this still exist) is poor logic. Perhaps the DOE could consider alternatives in the range between 100 and 10,000 years. Other parts of the document discuss permanent closure after 300 years. This appears inconsistent with other statements in the document.

71

Page 1-22

Section 1.5.1 How will American Indian Tribes affected by long distance haul routes be consulted? Other tribes and non-Indian communities outside the Yucca Mountain area itself should be consulted and may in fact be more impacted by transport than Tribes with traditional ties in the Yucca Mountain area itself.

72

Page 1-23

The first full paragraph here states that DOE invited affected units of local government to "prepare their own documents setting forth perspectives and views on a variety of issues of local and regional concern, which DOE agreed to incorporate be reference in the EIS." In response to this offer, White Pine County provided DOE with a complete set of technical studies and economic impact

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on page 41

models developed for the County and asked that these be used by DOE in preparing the DEIS. The County is dismayed that not a single document provided to DOE is included in the list of references. The County must assume that DOE did not refer at all to the documentation, data and models provided in preparing the DEIS.

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continued

Page 1-24

States that the Caliente-Chalk Mountain rail line and route was added to four rail corridors and four heavy-haul routes previously identified for "potential transportation impacts." The transportation analyses described in Chapter 6 and Appendix J is insufficient for the EIS (see comments to Page 1-3).

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Page 1-24

Section 1.5.2 indicates that calculations were verified independently. The FEIS should indicate the nature of the independent verification (who was involved).

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Page 2-1

The second paragraph notes that the No Action Alternative is intended to serve as a baseline against which the Proposed Action can be evaluated. Because waste managed on-site at generator locations has institutional controls, the No Action assumption of loss of institutional controls is not a true reflection of baseline conditions.

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77 Page 2-1  
continued  
on page 42

It is unclear from the discussion on this page whether the Secretary of Energy's determination whether to recommend Yucca Mountain to the President will

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continued

include consideration of transportation issues. The FEIS should indicate whether transportation issues will be considered as a component of the Secretary's site recommendation.

Page 2-1

78

The DEIS is very vague as to whether DOE will and if so, when DOE would make decisions regarding transportation modes and routes. The FEIS should clearly state if DOE intends to make transportation decisions, what decisions the Department will and will not make, and a best estimate of when transportation decisions would be made. If DOE is assuming that and transportation decisions will be made by other parties, the nature and expected timing of such decisions should be identified.

Page 2-5

79

The FEIS should consider a rail to legal-weight truck alternative. Such an alternative is very plausible and could involve intermodal and routing alternatives not currently considered within the DEIS.

Page 2-47

80

Page 2, Paragraphs 4 and 5 of White Pine County's comments to the scope of the DEIS (1/22/95) address valid concerns that routing of waste may indeed occur through White Pine County. This occurrence should be considered and addressed by the DEIS.

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continued  
on page 43

Page 2-47

Section 2.1.3.3.1 should recognize and explain the role that states may play in

81  
continued

routing. The assumption that waste will enter Nevada via Interstate 15 assumes that the State of Utah and the State of Nevada have not made alternatives routing designations. The DEIS should review the process and difficulties which may attend definition of a national system of state-accepted routes. |

Page 2-80

82

| Table 2-8. This table is unclear to the reader in that it doesn't define time parameter being measured. Does the table imply that the Maximally exposed individual receives 48 rem per year; over the course of all shipments; and so on. Units of measure should be defined over what time period, number of individuals exposed (i.e. collective dose stats) or in percentages based on shipments. The DEIS lacks sufficient information to allow the reader to deduce from either the table or appendices how these figures were arrived at. A maximally exposed individual receiving 48 rem per year (about 10 times maximum allowed under U.S. Federal Radiation Counsel Guidelines and 24 times the maximum accepted as safe practice by DOE) would have significant health risks. Even if this individual was exposed over the course of 10 years, his latent cancer probability should, on the basis of the logic in the DEIS, be about 10 times what the table predicts. The table itself should reference the appendices and how this data was developed and how those figures were arrived at, including related references. |

Page 2-80

83  
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on page 44

| The third point on this page states, "Impacts from the transportation of spent nuclear fuel and high level radioactive waste from the commercial and DOE sites

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continued

to the Yucca Mountain Site would be low for either national shipping mode." This statement is unsubstantiated in as much as the table it references is both unclear in its statistics and does not account for worst case scenarios. A better statement would be that statistical probability of impacts would be low, but actual impacts are not only unknown, but liable to random accident, man caused incidents and acts of nature. While these are addressed later in the study, they should at least be prefaced here.

Page 2-80

84  
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on page 45

Section 2.4.4.1, 3rd paragraph states, "The National Transportation of spent nuclear fuel and high level radioactive waste would use existing highways and railroads and would represent a small fraction of the existing national highway and railroad traffic etc... "In as much as burden placed on the national highway system by the transportation of high level nuclear waste would be small this statement is pertinent to the study, however using accident prediction statistics would not be pertinent in as much as high level waste products, even in most minor accidents can cause tremendous traffic problems in light of the material being shipped. Consequently, a better analysis would be of known shipments of low level waste products, fuels transported to nuclear plants and studies that reflect accident rates for other hazardous materials. Studies of hazardous shipments would reflect the impact on roadways and populace where (for example) road closures over extended periods of time occurred or secondary accidents occurred as a result of higher traffic loads. While these shipments

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continued

would most probably display lower accident rates compared with all commercial freight, the costs associated with the accidents that did occur and impacts of those accidents might be significantly higher than other freight modes. ]

Page 3-70

Section 3.1.6.2.2. "According to Native American people, the Yucca Mountain area is part of the holy lands of the Western Shoshone, Southern Paiute, and Owens Valley Paiute and Shone peoples. Native Americans generally do not concur with the conclusions of archaeological investigators that their ancestors were highly mobile groups of aboriginal hunter-gatherers who occupied the Yucca Mountain area before Euroamericans began using the area for prospecting, surveying, and ranching." This statement is unsubstantiated, unquantified and insupportable. What are "holy lands?" How is it determined that Native Americans generally do not concur? What was the sampling design to determine this opinion. What "Native Americans" were interviewed or questioned? How were they determined to be representative? What were the specific questions asked to determine that there is a disagreement with archeological scholars? These statements are outrageous and insupportable stereotyping based on a sample of unknown representatives. ]

85

Page 3-98

Section 3.2.1.2 states, "Rail transportation routing of spent nuclear fuel and high level radioactive waste is not regulated by the U.S. Department of Transportation. The responsibility of designation of rail routing of high level waste products should be determined in advance. While this issue is addressed under the concern

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on page 46

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continued

that at the time of writing this document no specific route or mode of transportation is recommended or assigned, of great concern is the lack of designated responsibility for routing during the shipment. If USDOT individuals are not designated as responsible, some entity must assume authority and that designee should be identified within the FEIS.

Page 3-98

The text here states "Final Transportation mode and routing decisions will be made on a site specific basis during the transportation planning process. . . ." The DEIS should indicate whether local government such as White Pine County will be involved with this process. If not, then the DEIS should address routing through White Pine County.

87

Page 3-99

Section 3.2.2 address legal wight truck shipments on U.S. Highway 95. Does failure of the DEIS imply that legal wright shipments would not be allowed on other routes without supplemental NEPA documentation? The DEIS should indicate what, if any, supplemental NEPA documentation would be required for a route other than those assessed within the DEIS.

88

Page 3-99

Section 3.2.2 implies that only data for U.S. Highway 95 was used in the analysis. If this is the case. the analysis may not accurately represent risks of shipping fuel on other Nevada highways. Nevada's highways are characterized by unique traffic patterns, load levels, seasonal environmental conditions and physiography.

Page 3-112 | Section 3.2.2.1.5 Analysis of a corridor limited to only 0.2 kilometers is incredibly restrictive for an overview assessment. This results in small sample sizes and an inability to reasonably characterize the affected environment. A wider corridor or sample design based on topographical, geomorphic, and vegetative strata for the corridors would be much more in keeping with current professional practice to predict impacts to cultural resources.

89

Page 4-60 | Paragraph 2 of Section 4.1.8 Accident Scenario Impacts, states, "The impacts to offsite individuals from repository accidents would be small etc..." This statement appears unsubstantiated in as much as no appendices are listed where the reader can obtain the underlying data used to compute dosages and confirm or dispute the conclusions. The 0.013 rem threshold seems very small as it is significantly less than background radiation levels (background radiation levels as much as 0.15 rem, Source Book on Atomic Energy, Glasstone et al, 18.38 pp745) and would be difficult to determine or quantify. The bounded worst case scenario for the non involved worker seems extremely low at 31 rem given nature of material being handled. Perhaps the drafters of the DEIS here assume safety measures for containment that are not otherwise described within the DEIS. Again this statement should reference the data used to compute it and what bounding criteria was utilized.

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Page 5-38

The entire paragraph for Section 5.5.1 is vague. It doesn't reference what estimates were used to arrive at the calculation. Admittedly, carbon-14 release would in most probability be small, especially after traversing from storage facility to outside air. However, because the data points were not included, even in the appendices, the reviewer cannot ascertain how the conclusions were reached. Anytime "average values for stochastic (random) values" are used, it leads the reader to the suspicion that the values were "made up". The 14C existing in the atmosphere is being formed continually as a result of nuclear reactions between atmospheric nitrogen and neutrons from cosmic rays (DOE Radiological Handbook). At the very least, the baseline data used for this computation and the assumptions made should be listed in the appendices for confirmatory purposes.

91

Page 6-11

Section 6.1.2.5 The archeological impacts on the five rail corridors are essentially unassessed and unquantified. There is no information provided that would allow assessments to be made of the option to avoid outstanding significant sites rather than to damage, destroy or treat through data recovery. Sites should be characterized by type and the constraints provided for avoidance rather than damage or data recovery by rail corridor construction.

92

Page 6-26

The fourth paragraph of Section 6.2.4.1 appears to make some assumptions which do not concur with other data presented in this document or supposed worst case scenarios. Assuming 0.1 person rem per ?? accident, ??annual average, ??hour...

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on page 49

93  
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this is far less than worst case scenarios for transportation, intermodal transfer, cask placement accidents etc. Worst case scenarios presented in this document call for higher dosages than that. What might be said is that experience to date reflects this to be handling accident statistics, however as quantities are increased and shipments begin, this dosage could be higher. White Pine County does not agree with the assumption that "handling incidents involving high-level waste would be less than those involving spent nuclear fuel".

Page 6-27

94  
continued  
on page 50

The assumptions underlying this section and related table are suspect. First, the assumption appears to be that the cask cannot be breached in any way, either by heat or physical forces. While the data presented here and in the supporting texts indicate the improbability of cask breach, they cannot rule it out. Rail casks, speared by a rail during accident would cause cask breach, extreme heat might damage seats, a terrorist act could breach the container, etc. Collective doses in these scenarios would be considerably higher than the data presented here. DOE should thoroughly re-think these hypotheses and present data that includes the potential for containment breach, along with the statistical probability of such an accident occurring. Second, distances from containers either during an accident or in subsequent clean up are not presented, either here or in appendix J. It would be possible to skew data either up or down by adjusting the distance from radiation source. In other parts of this document (6.2.4.2.3 1 6, line 4-5) the assumed distance from source is 150 Meters (about 500 feet). Here again the data

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presented (if I understand the writer correctly) appears to disagree with data presented later on in the document on maximum exposure risks. Without knowing how this data was calculated, we cannot confirm or dispute the findings, and on the face of it, these exposure risks, associated with an accident appear artificially low.

Page 6-29

95

"The Modal Study", page 6-29, Paragraph 3. The NWPO. didn't suggest alternative analyses or models and did not offer differing values for using estimating consequences or risks of severe accidents. While the paragraph following this one leads the reader to believe that the data used in risk computation

were extremely conservative, it is poor statistical research, in principle to use only one set of data points, or a single model to predict outcomes. The DOE and writers of this document should be commended on the research models done and obviously a great deal of research was done to assemble these models. It does not however relieve the DOE, the writers of this DEIS, or it's editors from the responsibility to provide other research models to determine accident scenarios or to use data sets and conditions that might otherwise offer different conclusions.

Page 6-31

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continued  
on page 51

Section 6.2.4.2. 1, Paragraph 2 states "The accident risk for legal-weight truck shipments dominates the total risk. . . ." If this is the case and shipments through White Pine County are even a remote possibility, then detailed analysis of such

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shipments through White Pine County should be addressed in the DEIS.           

Page 6-31

97

Paragraph 3, Last Line of this page states, " The maximally exposed individual, assumed to be about 360 meters (1 180 feet) from the accident would receive a dose of about 3.9 rem (table 6-1 1)". The assumption of the maximally exposed individual at nearly 1200 feet is an unrealistic assumption. Where was this derived from? Is there a national standard that references that distance as a common reference? If an average lane, on an average US Highway is 14 feet, and the average setback distance in any given municipality is about 50 feet, (I have no reference for this, but could probably produce one), then the maximally exposed individual might be an average (not including morons who came in for a closer look) of 64 feet from the accident site. Assuming that the radiation dose is inversely proportional to the square of the distance from the source (Sourcebook on Atomic Energy, Glasstone 1979, pp752 footnote) it is conceivable that a maximally exposed individual might receive perhaps 800 to 1000 rem. Even a brief exposure at this distance would most probably prove fatal. Extended exposures, (greater than an hour) would certainly prove fatal. The estimates of dose do not appear realistic and could be easily exceeded.           

Page 6-38

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on page 52

Section 6.3.1. Although proposed shipments using legal weight trucks would represent only a fraction, about 1 percent) of total truck traffic on Nevada highways, because of the nature of the material shipped, the impact on such things

as socioeconomics, aesthetics and perception by the public could be significant.

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continued

The relationship to regular commercial traffic is only applicable in the amount of fossil fuels burned and related impacts. Truck volume and other impact experiences from transport of spent fuel and other nuclear and hazardous wastes should be used to determine impacts of transportation.

Page 7-48

Section 7.3.2.5. This is inadequate treatment of the known cultural situation where expansion of facilities would be undertaken. If there are existing DOE and Commercial facilities what is known of the cultural resources in these areas and what would be the specific impacts on known cultural resources. If Scenario 1 is expansion at Yucca Mountain, what would the site-specific surface ground disturbing impacts be?

99

Page 8-79

Section 8.4. 1. I Inventory module I or 2 impacts, and Table 8-59. Some of the data reflected in this table does not seem to compute correctly. Specifically, a 58 percent increase in time spent shipping material reflects nearly 90 percent increase in kilometers traveled (580 million kilometers traveled vs. 1. Billion kilometers traveled) with only a 50 percent increase in fatalities (8.6 to 12.9) the fatality rate per kilometer driven actually drops in the inventory module I or 2 scenario from the proposed action (by about 20 percent). This doesn't seem logical. An argument that the kind of waste being transported is a consideration is not meritorious in as much as trucks must still travel the same highways and therefore

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on page 53

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would incur the same risks as other commercial trucking and have roughly the same number of accidents.

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on page 54

Page 8-82:84 | Section 8.4.1.2 and Table 8-60 are very misleading. The premise of this argument is based on original shipments of nuclear material in the United States around 1943. If truth were known, shipments of everything from heavy water to uranium 235 began in the early 1900s and occurred regularly (albeit clandestinely) in the 1930's especially around 1939 as original research that would later become the Manhattan Project began. DOE use of 1943 is arbitrary as the University of Chicago graphite reactor was first tested December 2, 1942 and the Oak Ridge Reactor became operational on November 4, 1943. High energy materials, Deuterium, graphite's, U-235, Radium and other products were routinely shipped, in small quantities, cross country throughout the 1930's and 40's This is, ostensibly irrelevant to the shipment of high level nuclear waste products and spent nuclear fuel as proposed to begin in 2010. Also irrelevant are shipments made between 1943 and about 1957 when the 'Plowshare Program began because they pale in comparison to shipments since 1957 both in quantity of material and number of shipments. With the first "commercial reactor" coming online in Shippingport, PA at the end of 1957, shipments and management of high level nuclear waste of sufficient quantity became the concern we address Yucca Mountain Project. Hence, 1943 is a superfluous date. Even the shipments of high energy nuclear products since 1957 have little relevance except as statistical data

that can predict 'per shipment' occurrences. To divide the total number of cancer fatalities by 100 years is rather akin to dividing all traffic fatalities by the number of years that cars have been on the road, or the incidence of atherosclerotic heart disease by the number of people that have died in the last one hundred years. Just because Oak Ridge and Hanford came online 1943 and 1944 bears little or no relevance to the prediction of LCF's related to the shipment of highly radioactive waste in 1999, 2010 or even 2047. Furthermore, using national cancer statistics as a baseline is truly a comparison between "apples and oranges". Millions of carcinogens, most of which are not radioactive are included in ACS statistics. Even comparing lung cancer with pancreatic cancers is a slippery slope. Stating that the estimated number of transportation related latent cancer fatalities would be indistinguishable from other cancer fatalities is as absurd as stating that colon cancer fatalities are virtually indistinguishable from auto accidents. The research presented here strains even the most clever of minds and gives rise to the skepticism that runs rampant in the general public about the DOE and this particular project. Even the material comparing module I and 2 vs. the proposed action are suspect. Here we have 600 percent more shipments, over 14 additional years and yet only a 17 percent increase in person-rem delivered and the subsequent LCF. The statistics presented here (.0007 percent) of the total cancer statistics is at least deceptive and could be construed as a deceitful means to manipulate statistics to make this project appear something it is not - inherently safe and nearly insurable.

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Table 8-60 uses baseline data that indicates that no fatalities have occurred to date as a result of radiological accidents related to traffic accidents. The fact that we have not had one yet bears pertinence only in indicating that this industry has had a stellar track record and proper safety measures have been employed. Not discussed is the quantity of materials shipped so far, that fact that spent nuclear fuel has far higher emission rates in curies than does un-reacted fuels, and all of the material currently stored on site will have accrued since the early 1940's but will be shipped to a single location from sites throughout the United States between 2010 and possibly as late as 2047.

103

The final paragraph, (page 8-84) indicates that 4.4 million people have or will die between 1943 and 2047, and that the additional 100 killed in the process of transportation of spent nuclear fuels, high level nuclear waste and other radioactive products is a terrible comparison of statistics. It bears no relevance to the problems associated with transportation issues and is illusory giving the impression that virtually no risk are associated with management of this material. There are so many things wrong with this that the DOE should remove this entire section.

Page 9-9

Section 9.2.4. " The Programmatic Agreement Between the United States Department of Energy and the Advisory Council on Historic Preservation for the Nuclear Waste Deep Geologic Repository, Yucca Mountain, Nevada." Please

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on page 56

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provide this document and the "Research Design and Data Recovery Plan for the Yucca Mountain Project- Permanent Copy" in the appendices. Do these documents adequately treat the rail and highway heavy haul routes and the Scenario 1 and 2 options discussed in the EIS. Will a new programmatic agreement be developed to deal with these dated (1998 AND 1990) documents.

Page 9-16

105

Not considered among the land use mitigation measures considered here is the need for additional 'safe havens' for operators of legal weight and heavy haul trucks along Nevada highways. Additional land areas, and resources, especially security resources will need to be allocated for provisions of safe havens along any and all designated routes.

Page 9-22

106

Section 9.3.5 "Conduct preconstruction surveys to ensure that work would not affect important archaeological resources and to determine the reclamation potential of sites." This statement should emphasize avoidance of significant sites. What is "the reclamation potential" of archeological sites?=20

Page 10-5

107

Section 10. 1. 2. 1 Land Use, Paragraph 1, last sentence. The text here states "Most of the land along the corridors under consideration is "government owned". White Pine County recommends that DOE use the term government-administered to describe land managed by the Bureau of Land Management.

Page 11-8 Flood Plain /Wetlands Environmental Review Requirements:

108 4th paragraph, 2. Any potential rail corridor or heavy-haul route needs to be considered in the EIS and a more detailed assessment done. |

Page 11-10 Department of Transportation Hazardous Materials Packaging and Transportation Regulations 49 CFR:

109 4th paragraph. These regulations "attempt" to reduce potential hazards ..... At present, the Department of Transportation does not regulate the routing of rail shipments of radioactive materials. The EIS does not address the environmental impact of an accident using specific rail routes for radioactive materials. |

Page 11-14 Executive Order 11593 is now incorporated (since 1986) as Section 110 of the National Historic Preservation Act as an Agency responsibility. References to EO 11593 are no longer appropriate as Section 110 of NHPA clarifies and mandates procedures for conformance with law. |

110

### Land Use and Ownership

111 The Department of Energy has consistently disregarded the law of the land and has turned the United States Constitution on its head if we are to believe in the assumption that the Nuclear Waste Policy Act as Amended in 1987, preempts or is somehow paramount to a treaty which shares equal footing with the United States Constitution. To the United States DOE's credit, there is made nowhere a claim of title or ownership to Yucca Mountain. The Western Shoshone

111  
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on page 58

111 government awaits all claims by the United States DOE of title to any part of Western Shoshone  
continued Territory. |

112 In Vol. I-Impact Analysis, Chapters 1-15, at 3.1.1.3 the DOE misrepresents the facts of  
the Nuclear Regulatory Commission licensing criteria for a repository (10 CFR Part 60).

The Nuclear Regulatory Commission requires site ownership and control, not ownership,  
or permanent control which is represented by the DOE DEIS 7, Affected Environment, page 3-7. |

113 continued In Vol. I-Impact Analysis, Chapters 1-15, at 3.1.1.4 Native American Treaty Issues, the  
on page 59 DOE again misrepresents the facts.

The validity of the Treaty of Ruby Valley is nowhere acknowledged in the Draft  
Environmental Impact Statement. There is no formal acknowledgment by the United States DOE  
to the solemn obligations which the United States solemnly agreed to by treaty with the Western  
Shoshone Nation.

To follow through with the United States DOE's over simplified interpretation of law is  
to trampled on the rights of the Western Shoshone people, ignore law, make no analysis, or  
investigation which would provide the DOE with an understanding of impacts to the Western  
Shoshone Nation.

The United States relies on decisions in the Dann litigation, especially United States v.  
Dann, 470 U.S. 39 (1985), and United States v. Dann, 873 F.2d 1189 (9th Cir., 1989), cert. den.,

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continued

493 U.S. 890 (1989), to argue that *"the statutory bar enacted by Congress when it established the Indian Claims Commission precludes"* Western Shoshone intervention to protect their territorial integrity. The edifice of federal Indian law, including the Indian Claims Commission and the Supreme Court's conjuring in *Dann*, of a bar to actual litigation of Shoshone rights to territorial integrity, demonstrates what one scholar has called a "consistent arrogation of power."<sup>6</sup> The United States cannot demonstrate title to any portion of Western Shoshone Territory.

To the contrary, the authorities stated earlier in these comments are the basis of continuing protections of the Western Shoshone people and the foundation of the exercise of Western Shoshone rights, title and authority in conformance with international norms.         

### CULTURAL RESOURCES

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continued  
on page 60

         In Vol. I-Impact Analysis, Chapters 1-15, Affected Environment, 3.1.6.2 Native American Interests, the DEIS fail to identify the Western Shoshone Nation as we actually exist. For the purpose of cultural resource studies at Yucca Mountain, the DOE created the Pharump Paiute Tribe and attributed historical tribal status to the Las Vegas Indian Center which, out of 100 % of its service, serves 3% of Western Shoshone and 6% Southern Paiute who may have ties to Yucca Mountain. The Western Shoshone National Council was not identified for the purpose of this cultural resource study and the Treaty of Ruby Valley was not included in any review.

The Director on the Las Vegas Indian Center, who participated in the cultural resource study, became a paid consultant for the DOE then an employee of the Department of Energy. The

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<sup>6</sup> Milner S. Ball, *Constitution, Court, Indian Tribes*, 1987 Am. B. Found. Res. J. 1, 59 (1987).

problem with this relationship is that this Department of Energy employee sat in a capacity making recommendation for the Las Vegas Indian Center, the Pharump Paiute Tribe, and the Community Advisory Board for the Nevada Test Site, and the National Indian Nuclear Waste Policy Committee. It is through this unethical misrepresented relationship that the Department of Energy bolsters claims of Native American Involvement. Researchers working with Dr. Stoffle, the principle investigator conducting the DOE cultural study, recognizing the moral and ethical problems associated with Dr. Stoffle study activities, "...found it necessary to withdraw from the Department of Energy's American Indian Religious Freedom Compliance Program for personal and philosophical reasons."<sup>7</sup>

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on page 61

The systematic process used in the cultural study developed for the United States DOE is called "*cultural triage*,"<sup>8</sup> Which is defined as, "*the forced choice situation in which an ethnic group is faced with the decision to rank in importance equally valued cultural resources that could be affected by a proposed development project.*" The term was created by Dr. Richard Stoffle of the University of Michigan, Institute for Social Research. According to the Oxford English Dictionary, the word triage is of French origin and comes from "*trier*", to pick or cull. It denotes, "*The action of sorting according to quality*". When used by the DOE to support its development, triage equals genocide. Under International Law, genocide is defined as, "*the systematic killing of a people in whole or in part.*"

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<sup>7</sup>Letter from Cathrine Fowler and Mary Rusco to Chief Yowell, February 25, 1994. On file with the WSNC.

<sup>8</sup>Stoffle, Halmo, Olmsted and Evans. Native American Cultural Resources at Yucca Mountain. SAIC DOE contract DE-AC08-87NV10576 (Page 168).

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This is what is happening to Western Shoshone people, slowly, piece by piece our cultural resources are taken or destroyed in part. The acts of the DOE in developing Western Shoshone Territory for a nuclear waste dump violate Western Shoshone custom, International Law under the United Nations Convention on Prevention and Punishment of the Crime of Genocide,<sup>9</sup> and United States law under the United States Genocide Implementation Act.<sup>10</sup>

### **ENVIRONMENTAL JUSTICE**

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on page 62

In Vol. I-Impact Analysis, Chapters 1-15, Environmental Consequences of Repository Construction, Operation and Monitoring, and Closure, 4.1.13, Environmental Justice, the DOE missed the mark. E.O. 12898 requires federal agencies to specifically consider ethnic minorities with subsistence lifestyles. This is not considered in the DEIS.

The Western Shoshone government is faced with a serious public health crisis from legacy nuclear weapons testing of the United States and the United Kingdom which have seriously contaminated the soil and groundwater of Western Shoshone Territory. We have undertaken research into the existing uncertain health effects which are known to be plausible from radiation exposure. We are currently in the process of determining the causal relationship between nuclear weapons testing and our own experience of adverse health effects. It is from this informed experience that we present these comments to the US DOE here today.

It is primarily from lifestyle differences that we now understand that our exposure from

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<sup>9</sup>General Assembly Resolution 260 A(III) December 9, 1948.

<sup>10</sup>The Proxmire Act, 102 Stat. 3045, November 5, 1988.

radioactive iodine-131 in fallout from the Nevada Test Site was seven times greater than non-native populations. Lifestyle differences are important, but are not considered in the DEIS.

It is primarily from lifestyle differences that we now understand that our exposure from radioactive iodine-131 in fallout from the Nevada Test Site was seven times greater than non-native populations. Lifestyle differences are important, but are not considered in the DEIS.

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on page 63

The National Council believes racial discrimination plays a role in the selection of Western Shoshone Territory for site investigation as a proposed high level nuclear waste repository from nine sites to one politically weak one within the Western Shoshone Nation. We expect the United States DOE to investigate the processes by which site selection and standards are proposed to

uncover institutional racism which the National Council believes results in forcible trespass by the DOE.

Since racism and discrimination are not openly admitted in the process of selecting a nuclear waste repository, a cursory review is inadequate to identify racial discrimination. A thorough investigation is therefore necessary to get to the root cause of racial discrimination.

### CONCLUSION

In conclusion, we hereby request that DOE honor their trust obligation to the Indian Tribes in developing the FEIS, follow the federal law concerning the legal rights of the Tribes to

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fully participate, equally. Please work with the Western Shoshone people to understand the full  
scope of probable impacts, for our sake and that of our future generations. |

Sincerely,



Arthur Kaamasee, Tribal Chairman  
Ely Shoshone Tribe