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*To: President Clinton
Senators and Representatives, US Congress
W.R. Dixon, US DOE*

*From: Mary Hoopes
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1 I am a student at the University of Notre Dame, majoring in biology and philosophy. I have read the DOE's Draft Environmental Impact Statement for the proposed Yucca Mountain Nuclear Waste Facility, which supports the building of the Yucca Mountain facility. For the reasons I have enclosed, I believe that there are several valid scientific and ethical reasons for opposing the repository.

Enclosed please find my analysis of the US Department of Energy Draft Environmental Impact Statement (DEIS) of the proposed Yucca Mountain Nuclear Waste facility in Nevada. I would encourage you to read the DOE's report, and to examine the ethical, logical, and scientific flaws inherent in the report. This proposed facility poses a very serious threat to American public health, and I hope to see a more thorough examination of the DEIS take place in the legislature before such a facility is considered for approval. I hope I can count on your support to facilitate such an examination. Thank you very much for your time.

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Six problems with the proposed Yucca Mountain Repository:

1. The D.E.I.S. (Draft Environmental Impact Statement) is problematic because it fails to comprehensively assess the possible public health risks involved in the transportation of radioactive material to the site, and involved in the building and closing of the repository. The report simply states that the project will “cause short-term public health impacts...these impacts would include some traffic fatalities and the potential for low radiological doses to members of the public”(http://www.ymp.gov). However, it suggests that the “specific number, location and severity of an accident can be predicted only in general terms”(D.E.I.S., Section 6.4.2.1). Such “general terms” are inadequate when considering exposure to radioactive waste and spent nuclear fuel. The drafters have failed in their responsibility to protect public welfare by not providing comprehensive data on the impact of accidents on public health.
2. The D.E.I.S. is problematic because it uses conservative scenarios rather than severe ones in its analysis of the costs and associated risks of transportation. In order to comprehensively estimate the risks associated with the transport of highly radioactive material from 77 sites in the U.S. for a substantial period of time, the potentiality of the “worst case scenario” must be factored into both the cost estimate and the health impact analysis. Factors such as emergency costs, decontamination costs, hospital costs, and evacuation in the event of a severe accident must be considered.
3. The D.E.I.S. is problematic because it fails to thoroughly study the primary means of contamination (water) from the Yucca Mountain site and the effects such contamination would have on public health. It is quite vague about risks such as the possibility of radionuclides reaching the accessible environment through its primary means, water. It simply states that “the natural features will act to limit the amount of water entering the repository, and engineered features would defer releases of radioactive material” (D.E.I.S. S.3.1.1.). It gives no consideration to potential health risks associated with contaminated water, and this constitutes a very serious omission in the report. Consistently throughout the report, the D.E.I.S. does not fulfill its responsibility to thoroughly consider the effects of such accidents on public health.
4. The D.E.I.S. is problematic because it fails to consider the possibility of human intervention during the loading, transport, and unloading phases of the transportation of radioactive material as a serious risk. Intervention such as sabotage or terrorism, which may include activities such as bombing or arson are not seen as serious risk factors. The consequences resulting from such activities are so grave that such an omission constitutes a very serious flaw in the predictive value of such a report.
5. The D.E.I.S. is problematic because the computer models used in place of real experimentation to estimate the consequences of a potential accident are flawed. For example, in SCAP’s (the program used to estimate the effect of two HEDD’s on the shipping casks) user manual, it states, “there may exist interface phenomena not modeled by the code which could result in serious difficulties in comparing SCAP modeling output and experimental data. For a limited number of interfaces the code should still be useful”(p 27 of manual, quoted from Lamb and Resnikoff). The computer programs used in the risk analysis have limited capacities to accurately estimate the impact of accidents involving radioactive material, and more comprehensive research must be performed.
6. The D.E.I.S. is problematic in its entirety because the project is based upon the assumption that environmental conditions will remain relatively unchanged in the next 300 years, yet this is a factor over which we, as humans, have no control. The report seems to neglect several features of the surrounding area which may render it even more dangerous when radioactive waste is placed into the mountain, such as its previous volcanic activity and the likelihood of earthquakes. When dealing with a substance as potentially lethal as radioactive waste, assumptions that there will be no significant, unpredictable changes in the future environment pose a very serious threat to public health.

Works Consulted:

The *Draft Environmental Impact Statement for a Geological Repository for the Disposal of Spent Nuclear Fuel and High-level Radioactive Waste at Yucca Mountain, Nye County, Nevada*. U.S. Department of Energy, Office of Civilian Radioactive Waste Management, July 1999.

Ballard, David. *The Impacts of Sabotage and Terrorism on Nuclear Waste Shipments: A Critique of the U.S. Department of Energy's Draft Environmental Impact Statement (ODE/EIS-02501D) for the Proposed Yucca Mountain, Nevada, Geological Repository*, January 2000. (Internet site: <http://www.state.nc.us/nucwaste/eis/yucca/rqmaymeis.pdf>).

Lamb, M. and Resnikoff, M. *Comment Summery- Yucca Mountain Draft EIS, Expanded version*, January 21, 2000. (Internet Site: <http://www.state.nv.us/nucwaste/eis/yucca/moore1a.pdf>).

Internet site: This quote was from a section on the webpage at <http://www.ymp.gov>, entitled "The Environmental Impact Statement". Please refer to this homepage for more information regarding the proposed facility, and for a copy of the DEIS.