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Document Manager  
Office of Regulatory Compliance (EM-10)  
U.S. Department of Energy  
1000 Independence Avenue, SW  
Washington, D.C. 20585-0119

**RE: Notice of Intent to Prepare an Environmental Impact Statement for the Disposal of Greater-Than-Class-C Low-Level Radioactive Waste. 72FR140, July 23, 2007, pp. 40135-40139.**

Dear Mr. Joyce:

This letter is to provide comments of the State of Nevada<sup>1</sup> on the above cited Notice of Intent (NOI). On June 9, 2005, we submitted comments on behalf of the State of Nevada, on the May 11, 2005 *Advance Notice of Intent (ANOI) To Prepare an Environmental Impact Statement For the Disposal of Greater-Than-Class-C Low-Level Radioactive Waste*, which we here incorporate by reference.

Please note that, as discussed in the comments below, the State of Nevada is adamantly opposed, on both scientific and legal grounds, to the use of either the proposed high-level waste repository at Yucca Mountain or the Nevada Test Site (NTS) for Greater-Than-Class-C (GTCC) waste disposal. Further, be advised that Nevada will vigorously contest any attempts by DOE to designate Yucca Mountain or the NTS as GTCC waste disposal sites. Consequently, we strongly urge DOE to remove Yucca Mountain and the NTS from the analysis of potential alternative locations in the EIS.

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<sup>1</sup> These comments were compiled by the Nevada Agency for Nuclear Projects (Office of the Governor) with input from the Nevada State Health Division and the State Historic Preservation Office.

## **Yucca Mountain and the Nevada Test Site are not realistic alternatives and should be dropped from consideration in the EIS**

Of the five alternatives proposed for evaluation in the NOI, sites in Nevada are featured in three. Alternative 3 would have disposal take place at the potential high-level nuclear waste repository at Yucca Mountain. Alternative 4 includes disposal in a new enhanced near-surface facility, possibly located at the Nevada Test Site. And, Alternative 5 includes disposal at a new intermediate depth borehole facility, possibly located at the Nevada Test Site.

The State of Nevada is strongly opposed to the use of either Yucca Mountain or the Nevada Test Site for the disposal of GTCC waste. Nevada believes that Yucca Mountain is geologically and technically unsuitable and unsafe for the disposal of spent nuclear fuel and high-level radioactive waste, and it would be equally unsuitable for GTCC waste disposal. Likewise, the NTS is an inappropriate location for such disposal. Many of the same conditions that disqualify Yucca Mountain are also present at the NTS (i.e., active seismic area; fast groundwater pathways; potential for renewed volcanism; highly corrosive subsurface environment; etc.). In addition, there are serious issues with cumulative impacts to the environment from past weapons testing activities (and resulting contamination) and current and planned low-level and mixed-low-level waste disposal activities.

Alternative 3, involving Yucca Mountain, is not a realistic alternative for consideration in the planned EIS. Under current, unrealistically optimistic DOE plans, it will not be known whether a Yucca Mountain repository is permitted to accept spent nuclear fuel and high-level radioactive waste until at least 2017, and likely considerably later, if ever. And then, the Nuclear Regulatory Commission license, if granted, would require amendment to accept GTCC and GTCC-like waste. This alternative prejudicially assumes that Yucca Mountain will be licensed as a repository and creates a conflict of interest for both the NRC, which will be a commenting agency for the GTCC EIS, and the EPA, which will be a cooperating agency (p.40136). EPA has yet to complete setting the environmental, safety and health standards for a Yucca Mountain repository, and NRC has yet to finalize its rules for evaluating a DOE application for a repository license at Yucca Mountain. NRC must rule on whether the EPA standard will be met if DOE submits a Yucca Mountain license application.

But, Alternative 3 also relies on an unacknowledged assumption that the Nuclear Waste Policy Act, as amended, authorizes the use of a Yucca Mountain repository for disposal of GTCC and GTCC-like waste. While the 2002 Yucca Mountain EIS considers these wastes in one of its options for extended use of the repository if the statutory capacity limit is repealed or increased, it does not explicitly consider the question of statutory authority for disposal of these wastes at Yucca Mountain.

The proposed use of the Nevada Test Site for Alternatives 4 and 5 also is not realistic or defensible. Nevada will strongly oppose any effort to use NTS for any GTCC waste disposal alternative. The original 1952 administrative land withdrawal for the

Nevada Test Site (Public Land Order 805) specified its use as a “weapons testing site.” In 1994, the State of Nevada filed a complaint in the U.S. District Court in Las Vegas against the Department of Energy alleging that the land withdrawals for NTS do not include low-level radioactive waste disposal from offsite sources as an intended use of the land. A settlement agreement was signed in April 1997, with a key component being DOE’s commitment to initiate “consultation with the United States Department of the Interior concerning the status of existing land withdrawals for the NTS with regard to low-level waste storage/disposal activities.” Nothing productive has come from that commitment.

In the Fiscal Year 2005 House Report to the Energy and Water Appropriations bill, there was a directive to DOE “to enter into formal consultations with the Department of the Interior regarding the multiple uses [of NTS] and, if necessary, *revise and update the land withdrawal to reflect those additional uses.*” In May 2007, DOE, responding to questions from the Senate Armed Services Committee, reported that consultations had been under way since 1997, without resolution. On June 29, 2007, Nevada Senator Harry Reid wrote to Energy Secretary Samuel Bodman that “the issue of the land status of NTS must be resolved” prior to any plans being made to ship waste (under another DOE proposal) to NTS. At present, the land withdrawal status of the Nevada Test Site does not permit its use for disposal of GTCC and GTCC-like waste, despite the statement in the NOI that “identification of these sites for potential analysis is based on mission compatibility” (p. 40138). Nevada considers any proposal to use NTS for this purpose to be in violation of the Settlement Agreement and illegal under the NTS land withdrawal legislation, and the State will challenge any attempts by DOE to use NTS for GTCC waste disposal of any kind.

The NOI says that the EIS “will describe the statutory and regulatory requirements for each disposal alternative and whether legislation or regulatory modifications may be needed to implement the alternative under consideration” (p. 40138). The status of Yucca Mountain’s availability even for consideration, as proposed in Alternative 3, is that it is a non-viable alternative. Nevada intends to vigorously contest any attempt by DOE to move forward with the Yucca Mountain project and to seek a license for the project from the NRC. The simple fact is that Yucca Mountain is NOT, and likely will never be, available for waste disposal of any kind. As such, this alternative should not even be included in the planned EIS for disposal of GTCC and GTCC-like waste.

Likewise, the current status of NTS is that it, too, is unavailable and not viable and should not be considered as an alternative location for GTCC disposal in the EIS.

### **The EIS should be a Programmatic EIS**

In our 2005 comments, we stated: “Given the complexity of issues and diversity of waste types that need to be addressed in the planned National Environmental Policy Act (NEPA) process, the development of a “Programmatic Environmental Impact Statement (PEIS)” is warranted. DOE should consider developing a PEIS to reach

decisions about major issues such as single versus multiple disposal sites; selections of disposal site configuration (i.e., borehole, repository, etc), and life cycle cost estimates for long-term surveillance and maintenance of disposal sites. By developing a PEIS, DOE could address these and other critical decisions as outlined below and subsequently “tier” EISs for specific program elements from the PEIS (as “tiering” is defined in the Council of Environmental Quality (CEQ) Regulations 40CFR 1508.28).”

We note that the current NOI, in summarizing and responding to public comment on the ANOI, does not acknowledge this comment. But, the NOI does indicate that the planned EIS will be programmatic to a limited extent. It states: “Including a generic commercial facility in the EIS would allow DOE to make a **programmatic determination** regarding disposal of GTCC LLW and GTCC-like waste in such a facility. Should one or more commercial facilities be identified at a later time, DOE would conduct further NEPA review, as appropriate.” (p. 40138, emphasis added). Given the range of decisions intended to be supported by the planned EIS, including single versus multiple sites, alternative disposal methodologies, and variable disposal methodologies based on waste characteristics, as well as the many current statutory and regulatory uncertainties, we remain convinced that the EIS should be wholly programmatic with all resulting preferred alternatives being submitted to further NEPA review on a site-specific basis.

### **Criteria for Identifying Disposal Site Locations & Waste Confinement Configurations**

Criteria for evaluating the alternative disposal site facility locations should be included in the EIS. For example, why were Idaho National Lab, Nevada Test Site, Los Alamos National Lab, Waste Isolation Pilot Plant, Savannah River Site, Oak Ridge Reservation, and Hanford identified as alternative locations for a new intermediate depth bore-hole facility and an enhanced near surface facility? Alternative locations should be identified based on objective and relevant criteria, such as favorable geology and/or engineering advantages, the distance of disposal sites to human receptors, risk and cost of transporting waste, waste packaging alternatives, etc. The only criteria to be inferred from the NOI appears to be that the location is an existing DOE site.

Likewise, criteria needs to be presented in the EIS to support the selection of alternative disposal site confinement configurations such as deep geological disposal, boreholes, and intermediate shallow land burial. Examples of selection criteria might include alternative geological formations, depth to groundwater, seismic activity, climate, flood plains, etc. The EIS should contain a thorough discussion as to why the identified alternative disposal approaches were selected.

### **Table 1 lacks complete information**

We note that Table 1, Inventory Summary of Estimated Quantities of GTCC LLW and DOE GTCC-Like Wastes, was the subject of a subsequent correction notice (72FR146, July 31, 2007, p. 41819.) The corrected table is an incomplete rendering of its

original source document, Table ES. 1 in the July 2007 *Greater-Than-Class C Low-Level Waste: Inventory Estimates*. The important information in Footnote (b) of the source document is not provided in Table 1 of the NOI, although an incomplete version of the information is incorporated into the text of the NOI. The missing footnote provides the basis and assumptions for the projected quantities of activated metals in Table 1 and should be included in its entirety with Table 1. Different assumptions could lead to significantly different projected amounts of activated metals that may have an effect on later decisions that rely on the EIS. The source(s) of the information in Table 1 also should be provided.

In addition, it appears that the data collected for Table 1 was deficient, at least with respect to sealed sources held by DOE/ NNSA. A program to collect sealed sources that are no longer in use by commercial entities is being carried out by NNSA, which recently reported having collected more than 15,000 of these sources containing over 0.074MCi, nearly six times the amount reported in Table 1. This NOI should have, and the EIS should provide a comprehensive and verifiable inventory of GTCC and GTCC-like waste.

### **Lifecycle Costs**

As we noted in comments on the ANOI in 2005, a programmatic decision concerning the long-term surveillance and maintenance costs and funding sources for retaining institutional controls over radioactive waste disposal sites should be addressed in the EIS. Specifically, the EIS should identify the estimated lifecycle costs for each of the alternatives evaluated. This is a significant programmatic decision given the long-term hazards to human health and the environment posed by GTCC waste. Hence, DOE should demonstrate the true long-term costs for maintaining in-perpetuity control of a single disposal site and/or multiple sites considered for GTCC wastes and potentially other “high activity” low-level wastes managed by DOE.

### **Regulatory issues must be resolved**

By law, a GTCC facility must be regulated by the NRC. Inclusion of DOE’s GTCC-like wastes that currently are managed under DOE Orders and stored at DOE facilities that operate under DOE Orders, will require that they be brought into the NRC regulatory regime. This is not a simple process, as evidenced by the high-level waste program where the decision was made to co-mingle commercial and defense waste. Resolution of waste characterization and security issues should be described in the EIS. Similar issues and additional regulatory authority matters arise with the DOE sites that are under consideration for a GTCC facility. The EIS should describe how an NRC-regulated facility can co-exist with a DOE self-regulated facility, or an EPA/state regulated facility, such as WIPP, and how the public can be assured that the NRC regulatory authority has primacy at the GTCC facility.

## **Transportation of GTCC Waste**

Any NEPA analysis addressing disposal of GTCC waste must thoroughly describe the transportation of such waste from generator/storage sites to proposed disposal facilities, and all impacts associated with such transportation must be fully assessed. Transportation issues and impacts could be addressed in a more general manner in the PEIS and subsequently dealt with more specifically in tiered site-specific EISs. Issues to be covered in the PEIS/tiered EISs include, but are not necessarily limited to, characteristics of the various forms of GTCC waste and the risks posed during transport; types and characteristics of shipping containers to be used for the various types of GTCC waste and documentation supporting the choice of containers; modes of shipment (highway, rail, barge); routing issues, including the identification of preferred and alternative routes from generator/storage sites to proposed disposal locations; consequences of worst case accidents involving GTCC waste shipments; potential for and consequences of successful sabotage or terrorism against GTCC shipments; and radiological and non-radiological impacts to people and communities located along GTCC shipping routes, including socioeconomic, risk perception and stigma-related impacts.

## **Historic Preservation Comments<sup>2</sup>**

DOE currently lacks a programmatic agreement for managing historic properties in the Yucca Mountain Project Area for the licensing stage of the project. The old agreement signed in 1988 dealt with the characterization phase of the YMP and not licensing. It does not reflect the amendments to the National Historic Preservation Act of 1992 or the changes to the accompanying regulations (36 CFR 800) to Section 106 of the Act, Protection of Historic Properties dated August 5, 2004. If, despite the strong State opposition to the use of NTS or Yucca Mountain, DOE seeks to persist in including the Nevada sites as alternatives for analysis in the EIS, DOE must include this latest proposed GTCC activity in a new negotiated agreement, and the EIS must thoroughly assess impacts to historic properties/historic preservation resulting from GTCC waste disposal and related activities.

Likewise, the cumulative effects of additional undertakings upon historic properties within both the Yucca Mountain Project Area and the NTS must be assessed. What are the long term effects of augmenting the labor force and number of areas where projects are constructed? It will become increasingly difficult to avoid impacting archaeological sites. The Nevada State Historic Preservation Office expects the EIS to address all historic properties present within the Yucca Mountain/NTS area, not just those within the area of direct effect.

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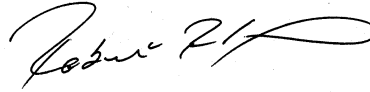
<sup>2</sup> These comments are submitted on behalf of the State of Nevada State Historic Preservation Office. For questions, contact Alice M. Baldrice, 775-684-3444, [ambaldri@clan.lib.nv.us](mailto:ambaldri@clan.lib.nv.us).

## Western Governors' Association Comments

The State of Nevada endorses comments on the NOI submitted by the Western Governors' Association (WGA) Technical Advisory Group and incorporates them by reference in these comments.

We appreciate the opportunity to comment on the Notice of Intent. If you have questions, please contact me.

Sincerely,



Robert R. Loux  
Executive Director

RRL/cs

cc Governor Gibbons  
Catherine Cortez-Masto, Attorney General  
Nevada Congressional Delegation  
Nevada State Clearinghouse  
Stan Marshall, NSHD  
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