

# Letter/Attachment for GTCC EIS Scoping Comment #81

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9/21/07

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U.S. Department of Energy  
1000 Independence Avenue, SW.  
Washington, DC 20585-0119.

**RE: Notice of Intent to Prepare an Environmental Impact Statement for the Disposal of Greater-Than-Class-C Low-Level Radioactive Waste**

Dear Mr. Joyce,

Please consider these comments as part of your Notice of Intent (NOI) to prepare an Environmental Impact Statement for the Disposal of Greater-Than-Class-C Low-Level Radioactive Waste (GTCC). These comments are on behalf of the Nevada Conservation League (NCL), a public interest conservation organization based in Las Vegas, Nevada.

**Analyze hardened on-site storage (HOSS)**

We commend the Department of Energy (DOE) for acknowledging in the NOI the new and emerging threats posed by terrorism and deliberate or accidental attacks at nuclear facilities. We therefore urge the DOE to analyze the potential and impact of safeguarding GTCC waste in hardened, on-site storage (HOSS) facilities. A thorough HOSS analysis would ensure that GTCC waste is not subject to risks posed by wildfire or other natural or man-made disasters. HOSS facilities must not be regarded as a permanent waste solution, however, and thus should not be constructed deep underground. A HOSS design would allow the waste to be retrievable, and monitored in to detect any early radiation releases. A HOSS design would further reduce if not eliminate the need to transport GTCC thousands of miles across the country to a designated GTCC waste facility. Although not relevant to this NOI, a HOSS strategy is also applicable to High-Level waste storage. The overall objective of HOSS should be that the amount of releases projected in even severe attacks should be low enough that the storage system would be unattractive as a terrorist target. Design criteria must include resistance to severe attacks, such as a direct hit by high explosive or an aircraft loaded with fuel and/or explosives.

A HOSS analysis is imperative considering the 9th Circuit Court's decision in June of 2006 that required the Nuclear Regulatory Commission (NRC) to consider the environmental impacts of intentional attacks on the proposed dry cask storage installation at Diablo Canyon Nuclear Power Plant.

This analysis should be considered as in addition to the No-Action alternative. That is, this specific HOSS analysis will reduce long term costs and immediately increase safety at nuclear waste storage facilities in order to find a viable solution to GTCC disposal.

For more information on HOSS, please visit,  
<http://www.ananuclear.org/Portals/0/documents/GTCC/thompsononHOSS.pdf>

**Periodic review of HOSS facilities should be required**

Once HOSS facilities are implemented, there should be annual reports reviewing the safety condition of each HOSS facility that includes meaningful participation from public stakeholders, regulators, and utility managers at each site. The reports must be made publicly available and may include recommendations for actions to be taken, if necessary.

**DOE should dedicate funding to local and state governments for independent monitoring**

Funding for monitoring the HOSS facilities at each site must be provided to affected local and state governments. The affected public must have the right to fully participate and have the adequate resources to do so.

**Do not consider the proposed Yucca Mountain High-Level Waste repository as a disposal site for GTCC**

NCL contends that it is premature and irresponsible to even begin to consider Yucca Mountain as the repository for GTCC. The proposed Yucca Mountain facility is not yet licensed and is mired in technical and legal delays which may lead to Yucca never opening. There exists an abundant amount of evidence that clearly identifies Yucca Mountain as an inadequate facility for High-Level waste, let alone GTCC.

Considering Yucca Mountain at this stage is also highly suspect and disrespectful to the State of Nevada. As your office is considering a site for GTCC waste, the Office of Civilian Radioactive Waste Management within the DOE is blatantly disregarding state and federal law by using the state's water for further site characterization of Yucca Mountain. There exists no trust among the public of Nevada for the DOE being able to carry out Yucca Mountain or any type of nuclear waste facility. We strongly urge the DOE to immediately remove Yucca Mountain as a potential site for this reason, among others.

**DOE should clearly specify exactly what GTCC is**

It should specifically state what is and what is not included in the term "Greater Than Class C." For instance, are all Radioisotopic Thermal Generators (plutonium-238 batteries for spacecrafts) considered GTCC? Is storage tank sludge from plutonium reprocessing such as at the Hanford Nuclear Reservation considered GTCC? Are smoke detectors containing radioactive alpha emitters considered GTCC? Please explain why the above are or are not considered GTCC.

**DOE should analyze possible GTCC waste treatment alternatives, such as vitrification**

(encasing them in glass). Pre-treatment of GTCC wastes could possibly lessen disposal volumes.

**Analyze transportation impacts**

DOE should specify each site that has GTCC and the transportation impacts of shipping waste from each site to each of the potential disposal locations. Specify how many shipments would occur by truck, train, or barge. Specify how many shipping containers would be needed, their cost, whether they already exist or whether new containers would have to be developed. And, most importantly, the proposed routes these shipments would take to any or all of the proposed facilities. Full disclosure regarding transportation would help the DOE regain a modicum of trust among the public that has been left out of the transportation impact discussion.

**DOE should make clear what role the Nuclear Regulatory Commission will play in the siting of a GTCC waste facility**

It is clear in the NOI that DOE will be responsible for locating GTCC radioactive waste disposal/storage facilities and managing their construction and operation. However, it is unclear if the Nuclear Regulatory Commission (NRC) will have to license these GTCC facilities.

**Relationship to the Global Nuclear Energy Partnership**

The DOE must include in the EIS how specifically the GNEP proposal would impact the volume and classification of future GTCC waste. DOE should consider the waste streams GNEP would generate and what the proposed GTCC waste facility would accept, if any.

**Nuclear power expansion impacts**

The DOE should consider two alternative relating to nuclear power expansion. One alternative should look at if nuclear power retains its share of the commercial U.S. energy production (currently 20%) for the next 50 years. A second should consider an alternative where all current reactors are decommissioned at their planned license end date and those licenses are not extended.

As legitimate concerns regarding Global Warming increase, nuclear power is unfortunately being seen as an alternative or even solution to the Global Warming crisis. The EIS for disposing of GTCC waste should fully consider how the expansion or phasing out of nuclear power generation over the next 100 years would impact the volume of GTCC LLW waste and, in general, exacerbate an already difficult disposal problem.

**Relationship to the Complex 2030 proposal**

Earlier this year, the National Nuclear Security Administration within the DOE unveiled a major plan to renovate the nuclear weapons complex. This proposal includes the manufacture of a new nuclear warhead, the Reliable Replacement Warhead and a massive reinvestment into the nuclear weapons production infrastructure. NCL urges the DOE to include in the EIS how the Complex 2030 proposal would impact the siting of a GTCC waste facility. Specifically, what, if any, new waste streams would be created and the estimated volumes a whole new nuclear weapons production complex would impact the GTCC waste facility proposal.

**NOI inadequate in describing the near-surface facility alternative**

The EIS must fully explain how the Near-Surface facility would be sited, built, and maintained. Many questions arise regarding this alternative including: the depth of the boreholes, would the boreholes be lined, the impact and potential of water contamination, and how past and potential future underground nuclear weapons testing at the Nevada Test Site would impact this alternative? This is especially serious considering the fact that NTS remains on alert and capable of resuming underground nuclear weapons testing within as little as a 24 month period.

**Disposal of GTCC radioactive wastes should be the starting point for public discussions of nuclear reactor decommissioning and proposed future reactors, not an afterthought.**

Much of the future GTCC wastes will be the reactor parts themselves that won't enter into the waste streams until the 2080's. Reactor decommissioning is a tough problem. Do we wait 100 years for the radioactivity to decay away? That leaves an abandoned, contaminated site where no one will take responsibility. Should they be entombed? More broadly, are more nuclear power plants worth the expense and intractable waste problems that the taxpayer is expected to pay to solve? It is imperative that DOE analyze these issues because they have direct impact on the future generation of GTCC radioactive wastes. Support for safe, monitored storage of radioactive wastes is a matter of security and environmental protection. As such, it should not be interpreted as support for more nuclear weapons, nuclear power or the generation of more nuclear wastes.

**Conclusion**

NCL understands and recognizes the difficulty in siting any nuclear waste disposal facility. The most important goal, in our contention, should be to have full and total public involvement in the decision-making process. DOE must make every effort to solicit as much public comment and involvement as possible at every stage. Public hearings should be as numerous as possible and as convenient to attend as possible and should not be limited to only proposed GTCC waste facilities. They should also include sites along the proposed waste transportation routes and at sites that already store GTCC wastes. Hearings should also be formatted in a way to facilitate public involvement. DOE should consider inviting non-governmental experts to discuss the environmental, economic, and political impacts of the GTCC waste disposal.

Thank you for your consideration. If there are any questions regarding these comments, please contact [info@nevadaconservationleague.org](mailto:info@nevadaconservationleague.org) or 702-562-8147.

Sincerely,

Scot Rutledge  
Executive Director  
Nevada Conservation League

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