

December 12, 2006

Mr. Lee Bishop  
EIS Document Manager  
Office of Logistics Management  
Office of Civilian Radioactive Waste Management  
U.S. Department of Energy,  
1551 Hillshire Drive, M/S 011  
Las Vegas, NV 89134

**Re: Comments on DOE's Amended Notice of Intent To Expand the Scope of the Environmental Impact Statement for the Alignment, Construction, and Operation of a Rail Line to a Geologic Repository at Yucca Mountain, Nye County, NV**

The undersigned environmental, public interest, and consumer groups submit the following comments on the scoping of the Environmental Impact Statement for the Alignment, Construction, and Operation of a Rail Line to a Geologic Repository at Yucca Mountain, Nye County, NV, as noticed by the U.S. Department of Energy (DOE) in the Federal Register on October 13, 2006 (Volume 71, Number 198, pages 60484-60490).

**Insufficient Comment Period for Concerned Citizens and Organizations across the Country, and Improperly Narrow Scoping Process**

DOE should withdraw, and re-issue, this Federal Register Notice. A map of the proposed route, with details, such as transfer stations and type of transport, must be provided in the new Notice of Intent to assure the public proper notice and detailed information so they can provide full, informed, and meaningful comments. The detailed maps must clearly show the proposed Mina corridor and various described alternative alignments within it, and its connection to existing mainline rail roads in the north and west of Nevada. The public is not familiar with this proposed corridor, as it has been little discussed in the past by DOE. How can scoping hearings happen before the publication of such detailed maps? The maps must be issued ahead of the hearings, so the fully-informed public can then carefully and thoughtfully formulate comments. And given DOE's false start and lack of sufficient information, the comment period should be extended to 90 days, beginning only when the re-issued NOIs appear in the Federal Register. The current 60 day comment period, without maps readily available to the public, has not been acceptable.

**Inadequate Information Regarding TAD Canisters for Use in Transport**

DOE is proposing to deploy TADs (Transport, Aging, and Disposal canisters), but scant information has been provided to the public. There will be reactor operational impacts of TADs (handling, loading, sealing, storing on-site, etc.), transportation impacts of TADs as they travel from reactor sites to the national repository, and disposal impacts of TADs at the dump. These operational aspects of loading and shipping wastes must be coordinated with repository operation, and vice versa.

There is the troubling potential for TADs to become contaminated on their exterior during transport, because they are going to be loaded underwater in waste storage pools at reactors. It is then that they could pick up significant external contamination. In France in the 1990s, 25% to 33% of all shipments bound for the La Hague reprocessing facility were contaminated externally, sometimes to levels hundreds to thousands of times the permissible radiation dose.

Without more detail on the design that DOE is specifically proposing for the TADs, it is difficult to make useful scoping comments. DOE should provide diagrams and detailed descriptions of the TADs in the Supplemental EIS. What is the status of the proposed TAD design? Are these TADs already licensed by the NRC, or would they be? Is the Holtec cask system a potential TAD in DOE's current estimation? What is the "corrosion-resistant" metal with which the burial over packs will be made? Will the TADs be tested at full-scale for severe accidents, such as long-duration/high-temperature fires, high-speed crashes, and long-duration/deep-underwater submersions?

There are significant quality assurance questions regarding TADs. Serious allegations have been raised by Oscar Shirani, formerly a senior lead quality assurance (QA) inspector for Commonwealth Edison/Exelon, about the structural integrity of Holtec dual purpose storage/transport containers. Shirani's quality assurance team found 9 major categories of violations, including regulatory code violations, weld flaws, design flaws, and manufacturing flaws, affecting Holtec casks at the U.S. Tool and Die factory in Pittsburgh, Pennsylvania subcontracted to construct them. Shirani's allegations of QA violations call into question the structural integrity of the Holtec shipping containers, especially under transport accident conditions. An investigation by the NRC's Office of Inspector General concluded that Shirani's allegations were "substantiated." How is DOE, which would be responsible for oversight and quality assurance of the TADs, going to ensure that quality assurance standards are consistently met to ensure worker and public health and safety? Severe accidents, such as high-speed crashes or long-duration, high-temperature fires, would exert tremendous destructive forces upon Holtec casks. Combined with their questionable structural integrity due to design and manufacturing failures, the containers could fail in severe enough accidents (or attacks), releasing catastrophic amounts of radioactivity.

DOE's own quality assurance failures at the Yucca Mountain Project only add to the urgency of QA concerns with waste shipping containers.

### **High-level Radioactive Waste Transportation Impacts to 45 States and the District of Columbia Must Be Addressed**

Due to DOE's Yucca FEIS proposal to ship irradiated nuclear fuel and high-level radioactive waste through 45 states and the District of Columbia, TADs on the roads (on heavy haul trucks), rails, and waterways (on barges, in rail-sized casks), will impact nearly the entire country. The limited time and information available to the public with which to file scoping comments on these latest proposed changes to the Yucca dump design and its associated transport systems undermines genuine, meaningful public participation under NEPA.

For that reason, the current 60 day comment period should be extended to at least 90 days. Why not, considering that DOE itself has projected that Yucca could not be opened before 2017 at the very earliest? DOE OCRWM director Ward Sproat announced just last week that 2020 is a more realistic opening date for Yucca. DOE Deputy Secretary Clay Sell just this week announced that Yucca's opening may not be for decades yet. So what's the rush on this public comment period?

In addition, DOE should hold hearings in major radioactive waste transportation crossroads, such as St. Louis and Kansas City, Missouri; Chicago, Illinois; Atlanta, Georgia; etc. In 1999 and 2000, DOE held nearly two dozen Yucca Draft EIS hearings across the country, a number of which were held in key transport-impacted communities. Around 15,000 comments were submitted, many having to do with transportation issues. DOE should do likewise this time, given the major overhaul to its transport and repository plans that the TAD proposal represents.

In particular, public scoping hearings must be held by DOE in Salt Lake City and Sacramento. Making Western Nevada a major high-level radioactive waste shipping route means that Salt Lake City, UT and Sacramento, CA will consequently be slammed with high-level radioactive waste train shipments headed for Yucca. The safety and security implications of shipping large numbers of high-level radioactive waste trains through these state capitals must be addressed. The safety and security risks of shipping unprecedented large quantities of high-level radioactive waste through eight northern Nevada counties and their principle population centers in Reno/Sparks, Fernley, Silver Springs, Lovelock, Winnemucca, Battle Mountain, Carlin, Elko, Wells and Wendover must also be addressed. The waste shipments would go directly through the heart of downtown Reno.

The Mina route impacts more Nevada cities and towns than any other route DOE could have selected. It does so much more than past proposals, such as the Caliente route. The Mina route would pass by or through numerous population centers in Nevada. The route passes through rural residential areas, as well as commercial interests such as agriculture.

Many Nevada communities – including a number of Native American tribes – would be negatively impacted. Impacts on users of the land (including Native Americans), to wildlife, to threatened and endangered species (including, within Nevada, wild horses and burros), on soils, on air quality, on visual resources, on current and future water resources/water users/and water quality, socioeconomic impacts, impacts on areas under consideration for designation as wilderness, and impacts on agriculture must be addressed.

The Mina route within Nevada hugs many rivers, thus exacerbating the risk that an accident or attack on a high-level radioactive waste shipment could destroy precious water resources. Vast quantities of high-level radioactive wastes would travel alongside rivers on the Mina route – 250 miles of the Humboldt River, 65 miles of the Truckee River, 12 miles of the Walker River, and 2 miles of the Carson River. High-level radioactive waste's threat to surface and ground water must be addressed. Water resources are especially precious and priceless in Nevada. A single severe accident or attack could devastate Nevada's precious river resources,

and DOE is proposing over 10,000 rail shipments alongside these rivers! That's a lot of rolls of the dice.

Many targeted road and rail routes across the U.S. for high-level radioactive waste shipments to Yucca Mountain also closely parallel rivers; proposed barge shipments directly impact waterways – rivers, lakes, and sea coasts. Potential impacts on water resources nationwide must be addressed. Are TAD canisters strong enough to survive long-duration underwater submersion without in-leaking of water that could initiate an inadvertent nuclear chain reaction in the still-fissile components of the waste (such as U-235 and Pu-239)?

The Mina route would also cross many thousands of acres of privately owned land in Nevada, another scarce commodity in a state that is 87% federal property. The negative impacts, in terms of property value loss, and prohibition of certain activities on private landowners' own land, must be addressed. Such property value impacts across the country must be addressed.

The Mina route would also impact on several state and federal wildlife management areas within Nevada, such as the Rye Patch State Recreation Area and the Fort Churchill State Historic Park. These impacts within Nevada, and similar impacts across the U.S., must also be addressed.

Accidents or attacks that contaminate I-80 could cause major socio-economic disruption, for example if semi-truck deliveries and personal commutes are indefinitely blocked.

In addition to potential impacts of accidents or attacks during transport of these deadly wastes, the radiological impacts of routine ("incident-free") rail shipments must also be addressed.

### **Impacts of Mixing Hazards During Transport of High-Level Radioactive Wastes and Irradiated Nuclear Fuel, and Impacts of Severe Rail, Truck, and Barge Accidents or Attacks (Terrorism/Sabotage) Must Be Addressed**

The Mina route should not be used for both high-level radioactive waste shipments and other hazardous, toxic, or explosive materials, despite calls from some to make the proposed Yucca rail multi-use and open to commercial materials shipments.

The Walker River Paiute Tribe already endures the shipment of large quantities of military high explosives across their reservation from the Hawthorne munitions depot, the largest such facility in the country. The mixing of high-level radioactive waste with high explosives, on the same rail line, in the same proximity, invites a catastrophic accident or sabotage. It makes no sense to bring high-level radioactive waste in large quantities, in high frequency, in close contact with high-level military explosives, in large quantities, frequently crossing the reservation.

High-level radioactive waste, when it must travel, must use designated trains that carry exclusively radioactive waste but no other hazardous substances, so as to avoid accidents involving high-level radioactive waste and other hazardous materials that would only make an atomic waste accident all that much worse.

Given the proposed transport of high-level radioactive waste close to Hawthorne military munitions depot and the Nellis Air Force Range, the risk of accidental or intentional (sabotage) fighter/bomber jet crashes and large explosions must be addressed.

The Union Pacific Railroad Company's past and current record of hauling radioactive materials and other hazardous, toxic chemicals must be addressed, given the safety and security implications of this unprecedented proposal.

The vulnerability of TAD canisters to severe accidents or terrorist attacks during transport through major population centers across the country must also be addressed.

### **Security Analysis of Storing and Shipping TAD Canisters Must Be Addressed**

Two recent U.S. Ninth Circuit Court of Appeals decisions rejected claims by the Nuclear Regulatory Commission (*San Luis Obispo Mothers for Peace, et al. v. United States Nuclear Regulatory Commission*) and the DOE (*Tri-Valley CAREs et al. v. Department of Energy et al.*) that the National Environmental Policy Act (NEPA) does not require consideration of the environmental effects of potential terrorist attacks. DOE must provide a full analysis of all impacts on public health and safety arising from a terrorist attack at the reactor sites, in transit, and at Yucca Mountain vis a vis the use of its proposed TAD canisters.

### **Environmental Justice Violations to Native American Interests Must Be Addressed**

Impacts on the Walker River Paiute Tribe from waste transport across its reservation, transport impacts upon a number of additional Native American communities in Nevada, and transport and disposal impacts on the Western Shoshone at Yucca Mountain itself, must be examined.

### **Alternatives: "Just Say No" to Radioactive Waste Transport to Yucca Mountain**

Yucca is geologically unsuitable for nuclear waste burial. It is also Western Shoshone Indian land by the Treaty of Ruby Valley of 1863, and that Tribe doesn't want radioactive waste dumped there. Radioactive waste should not be shipped to and dumped at Yucca. Therefore we oppose any rail route to Yucca. Yucca represents the worst of all possible worlds: a geologically unsuitable site (earthquake and volcanic zone, leaky, above a drinking water supply), located so far West that high-level radioactive waste shipments would have to sometimes travel many thousands of miles to dump wastes there. 45 states plus the District of Columbia are targeted for Yucca bound road, rail, and waterway shipments to Yucca. 75% of reactors are east of the Mississippi River, so the Yucca proposal greatly exacerbates waste transport risks, given the very long distances required to move Eastern wastes to the proposed Western dumpsite. The Yucca Mountain dump and its associated waste transportation scheme is dangerous and should be abandoned once and for all.

Thank you for the opportunity to submit comments on the scope of the DOE's Environmental Impact Statement for the rail line to Yucca Mountain. Please contact Kevin Kamps at the Nuclear Information and Resource Service ([kevin@nirs.org](mailto:kevin@nirs.org) or 301-270-6477) if you have any

questions about these comments.

Sincerely,

Susan Gordon, Director  
Alliance for Nuclear Accountability (ANA)  
1914 N. 34<sup>th</sup> Street, Suite 407  
Seattle, WA 98103

Rochelle Becker, Executive Director  
Alliance for Nuclear Responsibility  
P.O. 1328  
San Luis Obispo, CA 93406-1328

Bobbie Paul, Executive Director  
Atlanta WAND (Women's Action for New  
Directions)  
250 Georgia Ave SE, Suite 202  
Atlanta, GA 30312

Sandra Gavutis, Executive Director  
C-10 Research and Education Foundation  
44 Merrimac St.  
Newburyport, MA 01950

Nicole Hayler  
Chattooga Conservancy  
2368 Pinnacle Drive  
Clayton, GA 30525

Peggy Maze Johnson, Executive Director  
Citizen Alert  
PO Box 17173  
Las Vegas, NV 89114

Lynn Thorp, National Campaigns  
Coordinator  
Clean Water Action  
4455 Connecticut Ave., NW, Suite A300  
Washington, DC 20008

Deb Katz, Executive Director  
Citizens Awareness Network (CAN)  
P.O. Box 83  
Shelburne Falls, MA 01370

Keith Gunter  
Citizens Resistance at Fermi Two  
P.O. Box 463  
Monroe, MI 48161

Michael J. Keegan  
Coalition for a Nuclear Free Great Lakes  
P.O. Box 331  
Monroe, MI 48161

Robbie Sweetser  
Common Sense at the Nuclear Crossroads  
41 Fenner Avenue  
Asheville, NC 28804

Joni Arends, Executive Director  
Concerned Citizens for Nuclear Safety  
107 Cienega Street  
Santa Fe, New Mexico 87501

Alice Hirt  
Don't Waste Michigan  
6677 Summitview  
Holland, MI

Ken Cook, President  
Environmental Working Group  
1436 U St, NW, Suite 100  
Washington, DC 20009

Lisa Crawford, President  
Fernald Residents for Environmental Safety  
& Health, Inc. (FRESH)  
10206 Crosby Road  
Harrison, Ohio 45030

Erich Pica, Director of Domestic Campaigns  
Friends of the Earth  
1717 Massachusetts Ave, NW, Suite 600  
Washington, DC 20036

Jim Riccio, Nuclear Policy Analyst  
Greenpeace  
702 H Street, NW  
Washington, D.C. 20001

Gerald Pollet, Executive Director  
Heart of America Northwest  
1314 NE 56th St #100  
Seattle, Washington 98105

Kathleen Logan Smith, Executive Director  
Missouri Coalition for the Environment  
6267 Delmar Blvd. Ste 2E  
St. Louis, MO 63130

Jim Warren, Executive Director  
NC WARN (North Carolina Waste  
Awareness & Reduction Network)  
PO Box 61051  
Durham, NC 27715-1051

Alice Slater, NY Office Director  
Nuclear Age Peace Foundation  
446 E. 86<sup>th</sup> Street  
New York, NY 10028

Kevin Kamps, Nuclear Waste Specialist  
Nuclear Information and Resource Service  
(NIRS)  
6930 Carroll Ave, Suite 340  
Takoma Park, MD 20912

Ralph Hutchison, Coordinator  
Oak Ridge Environmental Peace Alliance  
(OREPA)  
P O Box 5743  
Oak Ridge, TN 37831

Kevin M. Martin, Executive Director  
Peace Action and the Peace Action  
Education Fund  
1100 Wayne Ave., Suite 1020  
Silver Spring, MD 20910-5643

Will Callaway  
Legislative Director  
Physicians for Social Responsibility  
1875 Connecticut Avenue, NW, Suite 1012  
Washington, D.C. 20009

Vina Colley  
Portsmouth/Piketon Residents for  
Environmental Safety and Security  
P.O. Box 136  
Piketon, OH 45662

Michele Boyd, Legislative Director  
Public Citizen  
215 Pennsylvania Ave, SE  
Washington, DC 20003

Jill ZamEk  
San Luis Obispo Mothers for Peace  
1123 Flora Rd  
Arroyo Grande, CA 93420

Dave Hamilton, Director  
Global Warming and Energy Program  
Sierra Club  
408 C St., N.E.  
Washington, D.C. 20002

Jeremy Maxand, Executive Director  
Snake River Alliance  
PO Box 1731  
Boise, ID 83701

Mary Davis, Director  
Yggdrasil, a project of Earth Island Institute  
2900 Runnymede Way  
Lexington, KY 4050