

Yucca Mountain Proposed Repository DEIS Written Testimony

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1. Public Must Beware of Risks-- DOE Track Record Poor So Far

As public citizens, we are very cautious about DOE assurances concerning potential accident statistics, and health risks along transportation routes and at the final depository site. We want the Yucca Mountain EIS to contain clear, realistic and honest statistics and information on these issues. The DOE has a very poor track record so far. All previous nuclear weapons and reactor sites were deemed 'safe' before construction and operation. However, I live near the Nevada Nuclear Test Site (NTS), and between four and ten trucks a week are rolling through our community to dump so-called low-level waste to mitigate clean-up problems at other DOE facilities that we were assured at the time would never happen.

I have personally followed those convoys on public roads between Tonapah and Beatty going from 95-100 miles per hour. I could not keep up with them, in the dark, on small roads over mountain passes. Errors and accidents do occur. Trucks from Fernald, Ohio, which pass over the Hoover Dam were found leaking in a public parking lot. Trucks from Lawrence Livermore Laboratories in California were turned back by the Highway Patrol because the driver could not identify what was in them. In a road blockade in 1997, a waste truck found stopped in traffic gave a reading of 179 radioactive units at a seam in the trailer. The driver had no monitoring equipment, protective clothing or gear, and who knows where he stopped for gas or meals along the way. As a private hauler, his next stop after NTS was in southern California to pick up a load of cantaloupe in that same truck.

A truck passing over a bridge in Chicago several years ago emitted a radioactive spill. Rescue Response teams were not prepared to deal with the problem and hosed the spill off the bridge and into the river. There are a whole lot of people downstream from Chicago.

An accident involving radioactive materials in Death Valley National Park last year was not dealt with by Rescue Response trained to handle it for 18 hours. These are just a few incidents that I know of personally, but present enormous hazards to the public and environment.

The DEIS must present clear understandable information about past performance and statistics about risk factors, potential emissions of radioactivity, and designated transportation routes. Decisions about licensing and providing funds to small communities for mitigating accidents will be based on this information.

2. Small Number of DEIS Hearings

This plan sets in motion the greatest potential threat to the health and safety of Americans in the history of the nation. Over 50 million people live within one half mile of proposed transportation routes to Yucca Mountain. Throughout 43 states, 109 cities with populations over 100,000 and thousands of smaller communities will be affected every day, let alone at times of unavoidable accidents and delays. Who can predict where these trucks will have a flat tire or other breakdown and will sit steadily emitting deadly radiation while repairs are made? An accident simple or severe could occur at any point along the millions of miles of proposed shipment pathways. And yet, there is only a handful of hearings in which concerned citizens, Emergency Response personnel and local government and tribal officials can ask questions and voice their concerns.

Every single community needs the opportunity to be fully informed about all potential impacts of this plan, needs the opportunity to evaluate the impacts, both physical and socioeconomic, and community requirements to address them, and needs the opportunity to voice those concerns to the DOE.

3. The Term 'Spent Nuclear Fuel' Is Highly Misleading

The Environmental Impact Statement should use terminology that is not highly misleading to the public. The term 'spent fuel' gives the impression that it is 'used up', less dangerous. In fact, fuel that is removed from nuclear reactors after use is one million times more radioactive than it was before. The average citizen uses this term in balancing the family checkbook. When the family budget is spent, the checkbook balance is zero, not

...3 one million dollars. The appropriate term to be used is 'irradiated' nuclear fuel.

4. Nevada State Laws Prevent Shipment of High-Level Nuclear Waste and Pollution of Ground Water

State law in Nevada makes it a crime to transport high-level nuclear waste across state borders. Laws also list as a felony the pollution of groundwater with a variety of substances, including radioactivity. The draft EIS assumes that pollution of ground water will take place. The only question is how long that will take. Citizens of Nevada will oppose any project which flagrantly violates their right to protect their environmental resources and the lives of future generations. It is my belief that any and all persons knowingly attempting to move this project forward will be personally liable for criminal prosecution for conspiracy to violate this law when radioactive contamination inevitably occurs.

The DEIS does not address this concern, and should do so in depth.

5. Conflicts Between States' Rights and Federal Programs Will Only Fester

Although beyond the purview of an EIS, it must be noted that this project sets the will of the state of Nevada and its citizens on a collision course with dictatorial federal policy. This will only lead to lengthy litigation and conflict far into the future if the project continues to attempt to move forward.

6. Land Acquisition Violates Western Shoshone 1863 Treaty of Ruby Valley

The 230 square miles proposed for withdrawal for this project (and additional lands for proposed rail routes) lie within Western Shoshone Treaty Lands, sovereign territory under Constitutional and International Law. This treaty has already been upheld by the Organization of American States. Litigation will continue in the future in federal and international courts over already existing trespass disputes. No lands should be used for this project, including the current research phase, without explicit Western Shoshone approval.

The DEIS does not adequately address this and other concerns of the Western Shoshone, and should be amended to do so. Many Western Shoshone spoke eloquently at the Crescent Valley hearing and at others, so the information is available.

7. The Proposed Yucca Mountain Repository Does Not Isolate Nuclear Wastes

The reason that we have been given from the beginning of this proposed project for facing the dangers of transporting such deadly materials through communities all over the nation is that such materials will ultimately be safer COMPLETELY AND PERMANENTLY ISOLATED from the biosphere within Yucca Mountain. This DEIS makes it very clear that it is not even remotely possible to isolate this material within Yucca Mountain. The planned man-made barriers, now that the DOE has finally acknowledged the impossibility of containment within existing natural barriers, will only slow down radioactive contamination for a very short time, given the deadly lifespan of this material.

Therefore, why are we even discussing this idea? Your DEIS makes it clear that the goals of the project as initially stated are impossible. The final EIS must prove beyond a doubt that this material can be completely isolated or the plan should be dropped. DOE funds would be better spent containing the materials on site until successful technologies can be fully researched and proven fail-safe.

8. Transportation Casks Do Not Contain Emissions Of Radioactivity

Transportation casks in a brand new and perfect state will emit deadly radiation at dangerous levels under the best of circumstances. We are told that casks that could contain all radiation would be too heavy to move. The obvious solution until this problem is solved is: don't move them. We do not want rolling radiation emitters on our public highways, getting flat tires next to our schools and hospitals, rolling day after day past our homes, fields of produce and ranches that feed the nation. Trucks would have to travel several times a day within close proximity to school cross walks, businesses, etc. The cumulative effects of the constant flow of radioactive vehicles is not addressed at all in this document. This is unacceptable.

9. This DEIS Does Not Address The Entire Dangerous Lifespan of Radioactive Materials Involved

When addressing a problem, especially one of this magnitude, the entire problem must be addressed, not just a part of it. The DIES talks about 100 years and 10,000 years, but this only addresses a portion of the problem, not even the half-life of these elements. The proposal as stated involves sticking this deadly material in the ground, covering it over and making it inaccessible when things do go wrong, and just walking away from it. There is one radioactive element mentioned in the DEIS, Neptunium, which does not even peak in its radioactive releases for 300,000 years.

As a mother, I have tried to instill, as I'm sure we all have, responsibility in our children to clean up their mess, and to consider that responsibility carefully when making a mess in the first place. We do not ask our children to do half of the dishes or to clean half of their room. Did all the motherless children get jobs with the DOE?

This document must address the entire radioactivity caused by the project, 500,000 years. Who is supposed to deal with the rest of it—mutants who may be around the Las Vegas Valley in 10,000 years?

10. A Final Plan For the Facility And Transportation Routes Have Not Even Been Determined Yet

There are several plans put forth in the DIES for the design of this facility. The summary only shows a single block of storage drifts in multiple diagrams. However, in the document itself, plans are suggested for up to eight blocks within the mountain. This is very misleading. If the DOE is not sure of the final design yet, then this discussion is premature. We cannot be expected to analyze a proposal that is incomplete at this time.

The same is true of proposed transportation routes and railways that have yet to be built. It is premature to expect public evaluation when the DOE has yet to make up its own mind. The final EIS must contain clear and complete plans for all aspects of this project. Any additional developments that are not explicitly addressed in this EIS, such as all transportation routes and rail route construction, must go through the entire DEIS review process at whatever point in the future they are fully developed and presented.

The important issue at stake, and the focus of the National Environmental Protection Act, is the survival of life on this planet and its life forms, not expedience for nuclear utilities and governmental departments.

11. Earthquakes Are Barely Addressed in the DEIS

In the third most seismically active place on the North American Continent, the issues of earthquakes and land drift are extremely important. They are glossed over in this DEIS. There are 32 fault lines near Yucca Mt. This DEIS shows tunnels drilled through them, next to them, and with fault lines ending within tunnel structures. The Earth tried to make an obvious point in June of 1992 when over 1.25 million dollars of damage was sustained to the building for the project research at Yucca Mt. Since then hundreds of earthquakes of significant magnitude have occurred in the immediate area. The final EIS must adequately address this important concern.

Recent satellite research indicates that the earth is moving apart in the Yucca Mt. region at the rate of six inches every hundred years, or 50 feet over the 10,000 year lifespan of this project. A whole lot of casks could fall into a 50 foot chasm, or even serious shift and risk breaching with six inches of motion. Recent research that will not be finished for several years indicates hot water flow upward through the mountain. This, combined with earth crust movement, may indicate that Yucca Mt. is actually directly over a magma pocket. This DEIS does not adequately address these concerns at all. Full information must be made available, reviewed by the public after that time, and then considered in its entirety for potential licensing of this facility.

12. Population Studies For The Yucca Mountain Area Already Inadequate

Population projections for health risks and socioeconomic impacts from this project do not go past the year 2001, eight years before the project is even slated to open. This is unacceptable. In fact, projections are actually below the *current* figures for Pahrump, the nearest large community. Las Vegas and Pahrump are the fastest growing communities in the U.S. at this time, with 5,000 per month and 1,000 per month increases respectively. The Amargosa Valley, directly adjacent to the Yucca Mt. Area, is beginning to grow at the same accelerated rate of speed. The EIS must use realistic figures to project land and water use and proximity to

radioactive dangers.

13. DEIS Does Not Adequately Address Rainfall Conditions In The Desert

The Yucca Mountain site for this project was chosen in part for the desert conditions and low average rainfall in the region. However, the DEIS fails to address the fact that often that entire annual rainfall occurs in a very few severe storms with flash flood conditions. The addition of 'raincoats' or drip shields to the casks does not sound like an adequate solution. The final EIS must address the many inches of rain that can occur in this region in a single hour.

14. Cumulative Radioactivity From Proximity And Shared Aquifers With Nevada Test Site

Over 1,000 nuclear bombs have been detonated at the Nevada Test Site, above, below and directly within existing water sources. The cumulative effect of NTS radiation contamination in conjunction with Yucca Mountain contamination on the regional aquifers is not addressed in the DEIS at all. Use of potentially contaminated waters to form concrete barriers is not addressed at all. Excessive pumping of aquifers and how this might affect water flow of contaminate waters to surrounding communities and ranches and farms is not addressed. This must be rectified completely within the final document.

15. The Yucca Mountain Repository Will Already Be Inadequate By The Time It Opens

The Yucca Mt. site is supposed to be able to contain up to 70,000 tons of High-level nuclear waste upon completion (although I still can't figure out from this DEIS which of the proposed designs that is). However, by the time the Repository is scheduled to open in 2010, there will already be enough materials ready for transport from commercial reactors to fill it completely. In addition, the site is supposed to house Navy reactor fuel, irradiated fuel from overseas reactors and other military waste.

Over the 30 year time period it is supposed to take to transport all this material to Yucca Mountain, additional irradiated fuel will be stacking up with no place to go. This plan is not going to remove the problem to one single site for careful monitoring. It is only going to contaminate irreparably a NEW site in the area of the fastest growing population in the United States while the existing sites continue on as before.

16. Rail Transportation of Irradiated Fuel and Rail Route Construction

Although large amounts of irradiated fuel are proposed to be transported by rail to Yucca Mt., the issue of rail hazards is not adequately addressed at all. In my very brief research, I found that 80% of all rail crossings in the United States are unmarked with signals or barriers. Even with the high rate of automotive travel in the U.S., an individual in a car is 30 times more likely to be hit by a train than another automobile. There is a rail accident on average about every 90 minutes in the U.S., and a toxic spill every two weeks. These figures have been rising for the last two years. This presents enormous hazards to the public.

The issue of new route construction is also barely touched. Issues of impact upon ground and surface waters, flood plains, and species habitat are barely addressed. Impacts on communities both Native and non-Native, such as socioeconomic impacts on hunting, agriculture and tourism, emergency response needs, health concerns of frequent and repeated exposure, and transient worker man-camps in rural areas are not presented.

This information is so inadequate in the DEIS that unless it can be completely addressed before the final EIS of this study, a separate or supplementary study should be drafted that presents complete information once it is compiled and analyzed.

Conclusion

For all the reasons stated above and many more, this is a highly flawed plan that will not solve the irradiated fuel storage problem, on either a temporary or permanent basis. What the people of this nation need to hear from the DOE is a realistic and cost effective plan for stopping the production of irradiated fuels; adequately isolating this material from all contact with our biosphere on at least a temporary basis; and researching long term technologies that will permanently isolate or render harmless irradiated fuels for their entire lifespan.