"An overriding point: It is never alright to use drinking water supplies for dilution of waste...In the West, whiskey is for drinkin' and water is for fighten' over." Steve F

### **NEW Yucca Mt Nuclear Waste Document for comment:**

Supplement to the U.S. Department of Energy's Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada, Draft Report For Comment (NUREG-2184) is available from the Nuclear Regulatory Commission (NRC) for YOUR comment by October 20, 2015.

Hereafter "Draft SEIS Yucca": http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr2184/

Other NRC Staff documents on Yucca including Safety Evaluation Report: http://www.nrc.gov/waste/hlw-disposal/key-documents.html

AND DOCUMENTS and COMMENT FORM are on REGULATIONS.GOV <a href="http://www.regulations.gov/#!docketDetail;D=NRC-2015-0051">http://www.regulations.gov/#!docketDetail;D=NRC-2015-0051</a>

The number to call for the THURSDAY September 3, 2015 meeting is 888-790-2936.

Passcode: 9708500

**TALKING POINTS** THANK YOU to Nevada Nuclear Waste Task Force for providing the basis for these points

## 1. The SEIS is incomplete and fatally flawed because it does not address the fact that the <u>Waste Inventory Is Now Changed and Uncertain</u>:

This document is a supplement to a larger Environmental Impact Statement (EIS) that the Department of Energy (DOE) submitted to NRC as part of the license application. That EIS is based on assumptions that are no longer valid, including the type of waste, the type of container and the resulting assumptions about total radioactivity, heat load and rate of package failure.

The NRC's Draft SEIS does not recognize that the President, on March 24, 2015, reversed the 1985 decision that commercial and defense high-level radioactive waste would be

# disposed together in a repository. His Executive Memorandum, which has the effect of law states, "In accordance with the Act [NWPA], I find the development of a repository for the disposal of high-level radioactive waste resulting from atomic energy defense activities only is required."

This decision makes uncertain what the waste inventory in a Yucca Mountain repository would be, and to date, the DOE has not clarified the question of whether its EIS and License Application is for a commercial waste or defense waste repository. In either case, the Draft SEIS analysis of impacts on groundwater and groundwater discharges is incorrect because it relies on releases from an unlawful waste inventory in the repository.

2. Scope of document is too narrow, the scenarios used are all bogus (see above) and point of compliance is wrong, in any case.

The Draft SEIS analysis of impacts uses the concentration of contaminants in the groundwater at the regulatory compliance location as a starting point. That location is 11 miles south of, and down the flow path of groundwater from the Yucca Mountain repository location.

This is the point at which the safety of the repository's long term performance must be demonstrated by an analysis that shows the radionuclide dose to an individual at that location does not exceed the regulatory dose limit set by the EPA and NRC...and automatically assumes a "sacrifice zone" encompassing the plume of leakage from Yucca to the 11 mile point NRC has chosen to apply the EPA regulation.

That analysis is done by use of an elaborate computer program known as the Total System Performance Assessment (TSPA) that is intended to account for all the factors, both natural and engineered, including the waste inventory, that affect the waste concentration and individual dose at the regulatory compliance location. Catastrophic events like a volcanic eruption through the repository are "considered" but assigned a probability factor that effectively zero's the impact to nothing.

Until the new mission of the proposed Yucca Mountain repository is established, and the TSPA analysis result is adjusted, the starting point of the Draft SEIS for groundwater and groundwater discharge impacts is unknown, and the Draft SEIS conclusion is incorrectly presumptive and lacks a credible technical basis.

3. Planned Disposal Waste Package Has Become Obsolete:

The starting point for the Draft SEIS analysis of groundwater and groundwater discharge impacts is the concentration of contaminants in the groundwater at the regulatory compliance location, 11 miles south of, and down the groundwater flow path from the Yucca Mountain repository location. The concentrations of radionuclides result from the Total System Performance Assessment (TSPA) computer calculation of the releases from the repository inventory and all the natural and engineered factors that affect concentration and ultimately the radionuclide dose to an individual at the regulatory compliance location. **A key element of the TSPA calculation is its reliance on all commercial spent nuclear fuel assemblies being sealed in standardized disposal waste packages that contain a waste canister known as a Transportation, Aging, and Disposal (TAD) canister. In the 2008 Yucca Mountain SEIS and License Application, the TSPA is based on specifications for the TAD design and performance requirements, but no actual design that meets the specifications and requirements has been completed.** 

Because of evolving storage strategies and implementation by reactor owners, the concept of the TAD as integral to the waste management storage, transportation, and disposal system has become obsolete and DOE has terminated the TAD design and regulatory certification program. Without any known substitute for the TAD concept the characteristics of the important waste package component of the TSPA are unknown.

Until the matter of new design and performance requirements of the disposal waste package are resolved by DOE, and the TSPA analysis result is adjusted, the starting point of the Draft SEIS for groundwater and groundwater discharge impacts is unknown, and the Draft SEIS conclusion is incorrectly presumptive and lacks a credible technical basis.

#### 4. Scope Issues are a False Flag in Major Federal Actions

This Supplemental EIS was initially a task for the Department of Energy ordered by NRC to complete its application for a license for the proposed nuclear repository at Yucca Mt. Then the licensing process was suspended. Later a court ordered NRC to complete the analysis. As such, this final piece (and the litigation of Nevada's contentions) may form the basis of a future decision to approve or deny a license for Yucca.

Such a decision would trigger a 20 + year nuclear waste shipping campaign that would impact 43 states and the majority of major commerce centers in the USA. The waste would travel on truck and trains and impact daily life. These impacts remain INVISIBLE in the Yucca decision. We should focus on the scope of the document since there is a lot to say...but I encourage anyone to bring up the fact that Yucca is NOT a local decision. It is a NATIONAL IMPACT and talk about nuclear transport...tens of millions of people live within ½ mile of the transport corridors.

#### **Timbisha Shoshone – Native American Cultural Issues:**

The SEIS acknowledges that the springs in Death Valley "are of traditional and cultural importance to the Tribe" but does not further elaborate on this subject. The DOE, 2014a reference cited below contains only a single additional line on the subject which is then referenced to one of the Tribe's motions to intervene in the licensing proceeding: "Members of the Tribe have stated that even small amounts of contaminants would be disrespectful to the springs and to the earth (NRC 2009, pp. 28 to 30)."

The NRC SEIS relies on DOE's analysis that the "potential concentrations of contaminants in those springs would be so low that there would be virtually no potential health effects associated with the use of the springs." DOE, 2014a, p. S-21 – see below. NRC's concern is related to potential contamination, and essentially ignores the Native American cultural issues associated with the springs.

#### SELECTED QUOTES FOR NATIVE AMERICAN ISSUES

#### FROM SEIS Page 3-37

Consistent with NRC guidance, the NRC staff considers the minority population in the Death Valley CCD to be a significant environmental justice population (NRC, 2003). As noted in Section 2, the population in Death Valley includes the Timbisha Shoshone Tribe community located on a 314-acre [1.27-km<sub>2</sub>] parcel of land in the Furnace Creek area, which is located within the Death Valley CCD. The Tribe has federally appropriated rights to 92 acre-ft/year [0.113 million m<sub>3</sub>/yr] of surface and groundwater. The springs in the Furnace Creek area, including the Furnace Creek, Texas, Travertine, and Salt Springs, are of traditional and cultural importance to the Tribe (DOE, 2014a).

Page 3-39

#### 3.4.3 NRC Staff Conclusion

The NRC staff acknowledges the sensitivities and cultural practices of the Timbisha Shoshone Tribe concerning the use and purity of springs in the Furnace Creek area. Based on the analysis above, the NRC staff determines that there would be no disproportionately high and adverse human health or environmental effects from uses or discharges of groundwater flowing from the repository on minority or low-income segments of the populations in the Amargosa Valley area and in Death Valley National Park.

#### FROM

DOE. 2014a. "Analysis of Postclosure Groundwater Impacts for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada." RWEP-REP-001-Update. ML14303A399. U.S. Department of Energy.

Page S-21

**S.4.2.2 Impacts to Timbisha Shoshone Tribe** As mentioned in Section S.4.3, the Timbisha Shoshone Tribe considers the waters of the Furnace Creek springs to be of traditional and cultural importance and believes that any effects on the purity of these waters would be detrimental to the Tribe's culture. The analysis DOE included in this document demonstrates that the potential concentrations of contaminants in those springs would be so low that there would be virtually no potential health effects associated with the use of the springs.

#### Page 3-27

Members of the Timbisha Shoshone Tribe reside on a 314-acre parcel of trust land located in the Furnace Creek area of Death Valley. The tribe has federally appropriated rights to 92 acre-feet per year of surface and groundwater in the area (16 U.S.C. 410aaa). The springs in the Furnace Creek area, including the Furnace Creek, Texas, Travertine, and Salt springs, are of traditional and cultural importance to members of the Timbisha Shoshone Tribe, and the purity of water in those springs is important to Tribal spiritual beliefs, culture, and heritage. Members of the Tribe have stated that even small amounts of contaminants would be disrespectful to the springs and to the earth (NRC 2009, pp. 28 to 30).

NRC (U.S. Nuclear Regulatory Commission) 2009. "Timbisha Shoshone Yucca Mountain Oversight Program Non-Profit Corporation's Corrected Motion for Leave to File Its Amended Petition to Intervene as a Full Party, Amended Petition of the Timbisha Shoshone Yucca Mountain Oversight Program Non-Profit Corporation to Intervene as a Full Party, and Affidavit of Joe Kennedy (with Attachments A and B)." Docket No. 63-001. March 5.

#### HOW TO COMMENT

Oral comment by attending meeting (in person, or by phone)

#### THURSDAY Sept 3<sup>rd</sup> @ 3--5 pm (Eastern) –ATTEND:

NRC One White Flint North, 11555 Rockville Pike, First Floor Commission Hearing Room, Rockville MD, NRC Contact Christine Pineda 301-415-6789

CALL-IN Bridge Number: 888-790-2936

Passcode: 9708500

Meeting details here: http://meetings.nrc.gov/pmns/mtg?do=details&Code=20151299

- September 15, 2015: (in person only) Embassy Suites Convention Center, 3600 Paradise Rd., Las Vegas, Nevada 89169. This meeting will start at 7:00 p.m. Pacific Time and continue until 9:00 p.m.
- September 17, 2015: (in person only) Amargosa Community Center, 821 E. Amargosa Farm Road, Amargosa Valley, Nevada 89020. This meeting will start at 7:00 p.m. Pacific Time and continue until 9:00 p.m.
- **October 15, 2015:** Public meeting via conference call, from 2:00 p.m. Eastern Time until 4:00 p.m. (phone number not yet published)

FEDERAL REGISTER NOTICE:

https://www.federalregister.gov/articles/2015/08/21/2015-20638/department-of-energyyucca-mountain-nye-county-nevada#h-12

THANK YOU to Nevada Nuclear Waste Task Force for providing the basis for these points