



Catherine E. Heigel, Director

*Promoting and protecting the health of the public and the environment*

March 1, 2016

Ms. Tracy Williams  
NEPA Compliance Officer  
US Department of Energy  
P.O. Box B  
Aiken, South Carolina 29802

RE: Draft Environmental Assessment  
Acceptance and Disposition of Spent Nuclear Fuel  
Containing U.S.-Origin Highly Enriched Uranium  
from the Federal Republic of Germany  
January 25, 2016 Public Notice

Dear Ms. Williams:

On January 25, 2016 the United States Department of Energy requested comment on a Draft Environmental Assessment for the Acceptance and Disposition of Spent Nuclear Fuel Containing U.S.-Origin Highly Enriched Uranium from the Federal Republic of Germany.

Attached are comments from the South Carolina Department of Health and Environmental Control on the Draft Environmental Assessment.

Please contact me at (803) 898-3138 if you have any questions.

Sincerely,

Shelly Wilson  
Permitting and Federal Facilities Liaison

Comments from the South Carolina Department of  
Health and Environmental Control (DHEC)  
on the

Draft Environmental Assessment for the Acceptance and Disposition of Spent  
Nuclear Fuel Containing U.S.-Origin Highly Enriched Uranium from the Federal  
Republic of Germany

Comment 1

The Savannah River Site (SRS) in South Carolina currently stores more than its fair share of nuclear materials and wastes. Plutonium and spent fuel have been shipped to SRS from around the nation and the world for safeguarding and storage. The largest portion of surplus plutonium in the nation is stored at SRS. Thirty seven million gallons of highly radioactive and toxic liquid waste from the Cold War era are stored in aging and degrading tanks. All of these stockpiles will take significant time and money to disposition. For example, high level waste, which has been accumulating at SRS since the late 1950's, will take at least 16 more years to disposition at a steady funding rate of \$687 million per year (a funding rate at least \$100 million higher than recent years). Without steady funding of \$687 million per year, high level waste treatment completion is delayed at least 7 more years. The proportion of cost and risk from these stockpiles is a significant liability for the nation, and a disproportionate liability for this region.

Although SRS has served national and international security needs, the people of South Carolina and Georgia are continuing to bear the burden of risk and uncertainty from legacy stockpiles of plutonium, spent fuel and high level waste. The overall risk burden over the years has only increased. Should there be an accident, our State will bear the consequences of endangerment to public health, the environment and our economic security.

DOE should not bring any additional spent fuel to SRS unless an equitable level of risk is first reduced. Risk reduction is accomplished by processing the waste/material to reduce the hazard, disposing residuals appropriately and closing the excess SRS storage areas. DOE should commit funding to equitably reduce the current risk burden first to South Carolina and Georgia citizens before considering any additional spent fuel receipt.

Comment 2

DOE has a big challenge ahead to substantially reduce legacy risk-bearing stockpiles in South Carolina (plutonium, spent fuel and high level waste). DOE has worked extensively to bring shipments into South Carolina, but hasn't completed much of the work for risk to leave the State. DOE should complete all work and decisions, in consultation and under a schedule with South Carolina representatives, to disposition these stockpiles and reduce risk.

Comment 3

The Draft Environmental Assessment (EA) notes that Forschungszentrum Julich, an interdisciplinary research center funded by the German government, will bear the costs associated with proposed management of the German spent fuel at SRS. Simply bearing these strict costs is not equitable for South Carolina, where a large burden of high level waste has been

awaiting treatment and disposal since the 1950s. A robust treatment and storage system does not yet exist at SRS. The high level waste tanks are aging, have leak sites and limited storage capacity. Some are sitting in groundwater. Treatment facilities and infrastructure are still being constructed to reduce the risk from existing waste in a timely manner. Additional waste from German spent fuel would cost communities time in getting risk reduced; time is money. An equitable cost arrangement would factor in money needed for optimized, accelerated treatment of existing waste before any additional spent fuel is received at SRS, in addition to money needed for German spent fuel management. The time cost of longer risk burden should not fall to communities around SRS and our nation.

#### Comment 4

Section S.2 of the Summary notes that the capabilities of the SRS Liquid Nuclear Waste Facilities do not exist elsewhere in the United States. The facilities for timely risk reduction of liquid waste do not yet exist at SRS; they are not yet complete. The Salt Waste Processing Facility, a key workhorse facility for the salt portion of waste, is not yet operational. Optimal infrastructure for treatment is still due to be constructed. Additional treatment capacity would be welcome given the significant volume of waste to be treated, currently projected to continue through 2039.

DOE has not funded the Liquid Nuclear Waste Facilities to run at optimal capacities since FY2014, when the budget for liquid waste was reduced by over \$100 million. DOE could have invested earlier in additional or optimized treatment capacities to ensure that waste volumes were being sufficiently reduced through waste treatment. Instead, in a recent February 18, 2016 letter, DOE has asked DHEC to reuse old-style tanks that have already been emptied. The current Liquid Waste System Plan (Revision 19) shows that most risk reduction regulatory milestones past FY16 are in jeopardy of being missed by 2-10 years. Additional spent fuel, which will produce additional high level liquid waste, should not be considered until adequate high level waste treatment facilities exist and operate at rates that support high level waste tank closure and waste treatment completion milestones.

#### Comment 5

Section S.4 of the Summary states that "...any decision by the Participants (signatories to the Statement of Intent) to proceed with the transportation of the spent fuel for acceptance, processing, and disposition depends on compliance with all applicable requirements of United States law...". The SRS is currently out of compliance with its Saltstone Disposal Facility Permit, specifically Special Condition A.1.d.i-iii. In addition the current Liquid Waste System Plan (Revision 19) shows that most risk reduction regulatory milestones past FY16 are in jeopardy of being missed by 2-10 years. These facts do not show compliance with United States law and implementing mechanisms for the liquid waste facilities. SRS should be in compliance with regulatory requirements before considering acceptance of additional spent fuel that would add burden to liquid waste facilities.

#### Comment 6

New waste streams require approval from DHEC before placement in the Saltstone Disposal Facility. Section 3116 of the 2005 National Defense Authorization Act does not allow disposal of high level waste residuals unless covered by a DHEC issued permit.

Comment 7

Additional disposal of radioactive waste in South Carolina from treatment of waste not currently at the site potentially conflicts with several Common Goals and Values agreed upon by SRS representatives, DHEC and the Governors Nuclear Advisory Council. These are:

- Maximize amount of waste ready for disposal in deep geologic repository. Make significant effort to ensure maximum amount of long lived radionuclides are disposed in a deep geologic repository.
- Limit disposal of radioactive waste onsite at SRS so that residual radioactivity is as low as reasonably achievable.
- Ensure DOE's strategy and plans are subject to public involvement and acceptance.