

Department of Energy

Savannah River Operations Office P.O. Box A Aiken, South Carolina 29802

DEC 2 8 2007

Ms. Karen Patterson, Chair Savannah River Site Citizens Advisory Board 1103 Conger Drive Aiken, South Carolina 29803

Dear Ms. Patterson:

SUBJECT: Citizens Advisory Board (CAB) Recommendation Number 250 – Vitrified

Plutonium (Pu) Storage Consequences (Your letter, dated 11/28/07)

Thank you for your recommendation on vitrified Pu storage consequences. As noted in your recommendation, Savannah River Site (SRS) has the unique assets and operational experiences relative to plutonium handling and vitrification. The Department of Energy (DOE) is working diligently to implement disposition strategies to ensure that the Pu is safely managed. My responses to the two parts of Recommendation #250 are as follows:

1. Part 1 - By May 19, 2008, DOE provide the safety analysis that provides for both the short-term and potential long-term storage of vitrified plutonium at SRS.

In the Final Supplemental Environmental Impact Statement (SEIS) for the Defense Waste Processing Facility (DWPF) project, onsite storage of canisters of vitrified waste from the tanks in F and H Tank Farm was included. The waste accumulated during the past fifty years of separations activities at SRS includes Pu. The additional Pu expected under the Pu Disposition Program is currently being analyzed for disposition through several alternatives including the Mixed Oxide Fuel (MOX) Fabrication Facility and H Canyon as part of the existing sludge waste processed through DWPF. Canisters containing the Pu will not exceed the current waste acceptance criteria for storage at SRS or for disposal in the federal repository. Supplemental calculations and evaluations are underway to ensure the additional Pu does not invalidate the current assumptions and inputs of the existing Documented Safety Analysis for processing or storage of Pu waste sludge through tanks and DWPF. Any changes to existing safety bases documents will be reviewed by DOE in accordance with 10 CFR 830 and documented in a Safety Evaluation Report. Furthermore, a SEIS will be developed and issued to evaluate the alternative disposition paths of the additional Pu. The tentative schedule for the SEIS is to issue a draft in late summer 2008 with the anticipated final SEIS by the end of 2008.

We will continue to inform the CAB of developments in the Pu Disposition Program and will provide the CAB any safety analyses that are referenced in the SEIS in late summer/early fall of 2008.

2. Part 2 - If the opening of the Yucca Mountain Repository will be delayed beyond 2017 and the long-term storage of vitrified Pu at SRS is inevitable, DOE work with the state of South Carolina and local stakeholders to develop an enforceable agreement with possible monetary consequences or other viable equity scenarios for the extended storage of vitrified Pu at SRS.

DOE is working to build and operate a federal repository where commercial power reactor spent fuel, naval spent fuel and DOE high-level waste will be dispositioned. Extensive site characterization, research and development has been done over the past 20 years. A license application for the repository is planned to be submitted to the Nuclear Regulatory Commission in June of 2008. All DWPF canisters are to be dispositioned in the repository. SRS will start shipping the canisters when the repository is operational. DOE does not have the legal authority to commit to any agreements or monetary consequences as a result of delays to a federal repository.

If you have any questions, please contact me or have your staff contact Terry Spears at (803) 208-6072.

sincerely,

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