

Recommendation 380
H-Canyon Utilization

Background

On October 1, 2010, the NRC staff was directed to begin the orderly closure of Yucca Mountain Activities. The last employee was laid off at the end of FY2010 and the FY 2011 budget provided zero funding for Yucca Mountain. Since that time efforts to identify and construct a geological repository for high-level radioactive waste as required by the Nuclear Waste Policy Act of 1982 have achieved little progress.

At the Savannah River Site EM manages and dispositions nuclear materials that are excess to national security needs, have no DOE programmatic use (surplus nuclear material), and originated as spent nuclear fuel (SNF) from nuclear weapons production and energy research.

EM's mission is to safely and efficiently manage this excess nuclear material and prepare it for disposal in a geological repository. In support of that mission EM has begun the Accelerated Basin De-Inventory program which will empty L Basin (currently estimated to be in FY2034) by processing the material through H Canyon and the Liquid Waste facilities for eventual interim storage.

There remains a possibility that some nuclear material may need to be processed to recover isotopes that have commercial or strategic value. This possibility warrants maintaining H Canyon, the only operating production scale radiologically shielded chemical separations facility, and the associated liquid waste processing facilities at a high state of readiness until a permanent geological repository is available and liquid processing is replaced by direct burial of high-level waste.

Recommendation

The Savannah River Site CAB recommends that the DOE

1. maintain H Canyon and the associated liquid waste processing capability in a high state of readiness and
2. expedite investigation of technologies that provide process capabilities which can be implemented upon completion of the ABD Mission.