

### Plutonium Disposition

In early January, the U.S. Department of Energy announced a final decision to proceed with its effort to fabricate 33 metric tons of surplus weapons plutonium into commercial fuel and to convert another 17 metric tons into ceramic waste for immediate disposal. The announcement means that a contractor team led by Duke Energy, Cogema, and Stone & Webster can begin site-specific work for building three major plutonium processing facilities at the department's Savannah River Site in South Carolina.

The program still awaits progress by Russia on a similar disposal program. The DOE estimates that the cost of the U.S. program will run \$1 billion or more. Russia's current weakened financial situation makes a similar expenditure by that nation problematical. The DOE is working to help Russia secure financing, but no clear progress has been made to date. The DOE has indicated that it will not authorize final construction of plutonium processing facilities unless and until Russia is ready to act as well.

### DOE Picks Nevada Test Site and Hanford for LLW Disposal

The U.S. Department of Energy has designated the Nevada Test Site (NTS) and the Hanford Reservation as the preferred regional disposal sites for its low-level and mixed waste from other DOE sites. In making the announcement, the DOE said it was fulfilling a commitment made in its programmatic environmental impact statement (EIS), which called for the department to centralize disposal of its low-level and mixed waste at two or three sites in its complex. Hanford and the NTS were chosen from six candidate sites named in the programmatic EIS; the other sites included Idaho National Engineering and Environmental Laboratory, Los Alamos National Laboratory, the Savannah River Site, and the Oak Ridge Reservation. Hanford and the NTS were chosen because these sites are currently accepting LLW from other sites and have available mixed waste facilities.

The DOE did not say how much additional waste would be placed at NTS and Hanford as a result of the decision. And it added that the decision does

not limit use of commercial disposal facilities for government waste. The DOE estimates that it will have to dispose of one million cubic meters of LLW and 176 000 cubic meters of mixed waste over the next 20 years.

### **DOE Metal Recycling Program Placed on Hold**

The U.S. Department of Energy's metal recycling program at Oak Ridge, Tenn., has been placed on hold, following actions by critics of the program and by the U.S. Nuclear Regulatory Commission, including the NRC's December decision to halt a contract with Science Applications International Corp. (SAIC) over a possible conflict of interest. SAIC simultaneously handles regulatory compliance issues for BNFL Inc., a DOE contractor working on the cleanup/recycling project. In January, Energy Secretary Bill Richardson announced that he was blocking commercial release of volumetrically contaminated nickel from the Oak Ridge site to allow time for the DOE to evaluate alternatives and for the NRC to decide on national treatment standards. This decision initially covers some 6000 tons of contaminated nickel at Oak Ridge, but could also affect approximately 10 000 tons of additional

volumetrically contaminated metal at other DOE sites.

### **National Research Council Recommendations on INEEL Waste; EIS Published**

In mid-December, the National Research Council released its recommendations on treatment and final disposition of high-level waste currently being stored at the Idaho National Engineering and Environmental Laboratory (INEEL). The recommendations cover proposed technologies for treating 4200 cubic meters of solid mixed HLW and 1.4 million gallons of liquid mixed transuranic waste (also referred to as sodium-bearing waste).

Key recommendations of the report include:

- Improve characterization of the chemical, physical, and radiological properties for both the HLW calcine and the liquid sodium-bearing waste before preferred treatment alternatives are selected.
- Solidify sodium-bearing waste as soon as practicable, using a technology other than calcination.
- Maintain interim storage of the HLW calcine until such time as the DOE determines where the material can be sent and what disposal forms are acceptable, and develops an improved transportation plan for shipment to a disposal site.

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In related news, in January the DOE published its Draft Environmental Impact Statement (DEIS) on disposition of the INEEL HLW. This statement will be used, along with other data and input, as the basis for making decisions on: whether to continue operating the New Waste Calcining Facility; how to treat the liquid waste and then empty and close the liquid waste storage tanks; and whether to treat the calcined waste onsite or offsite. Public hearings were planned for February. The comment period on the DEIS expires March 20.

## LLW Updates

- The South Carolina Nuclear Waste Task Force has recommended that the state's governor, Jim Hodges (D), begin negotiations to enter the Northeast Compact for low-level waste disposal, under certain conditions. South Carolina is the home of the Barnwell LLW burial site, the nation's only LLW disposal site that is open to LLW generators from all states (with the exception of North Carolina). The task force had been set up to chart a future course for the Barnwell site, access to which the governor has pledged to limit or reduce.

The task force said joining the Northeast Compact (which would be renamed the Atlantic Compact) would be beneficial for South Carolina

because the compact currently has only two member states, Connecticut and New Jersey, and thus the amount of waste being shipped to Barnwell would be reduced. In addition, it would ensure that the Barnwell site has enough capacity to provide disposal for the state's own current and future LLW.

- The 14-member Southeast Compact Commission has voted to demand that North Carolina return \$79.9 million in startup money it received from the commission and to pay a \$10-million fine for not building an LLW disposal site that it had agreed to build. The commission also threatened to take North Carolina to court if the state rejects the sanctions.

Eight southeastern states had created the compact in 1984 to share responsibility for the disposal of LLW. In 1986, North Carolina was chosen to develop a site to replace the older Barnwell, S.C., disposal site. The project, however, never got beyond the planning stage, and the state angered South Carolina by choosing a potential site near the South Carolina border. In return, South Carolina pulled out of the compact in 1995 and opened the Barnwell site to all generators except those from North Carolina.

North Carolina withdrew from the compact last July and claims that the commission has no authority to impose sanctions. ■