announcing the designation of Processing and Storage for Vitrification in the Defense Waste Processing Facility as the preferred alternative for stabilizing the other aluminum-clad targets. DOE will issue a subsequent Record of Decision on the Mark-16 and Mark-22 fuels and the other aluminumclad targets no sooner than thirty (30) days from the availability of this notice. FOR FURTHER INFORMATION CONTACT: For further information on the interim management of nuclear materials at the SRS or to receive a copy of the Final EIS, the Facility Utilization Strategy Study, or this Record of Decision contact: Andrew R. Grainger, NEPA Compliance Officer, U.S. Department of Energy, Savannah River Operations Office, P.O. Box 5031, Aiken, South Carolina 29804-5031, (800) 242-8259, Internet: andrew.grainger@srs.gov.

For further information on the DOE National Environmental Policy Act (NEPA) process, contact: Carol M. Borgstrom, Director, Office of NEPA Policy and Assistance, EH–42, U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585, (202) 586–4600, or leave a message at (800) 472–2756.

## SUPPLEMENTARY INFORMATION:

## I. Background

The U.S. Atomic Energy Commission, a predecessor agency of the Department of Energy (DOE), established the Savannah River Site in the early 1950's. The SRS occupies approximately 800 square kilometers (300 square miles) adjacent to the Savannah River, mostly in Aiken and Barnwell Counties of South Carolina, about 40 kilometers (25 miles) southeast of Augusta, Georgia, and about 32 kilometers (20 miles) south of Aiken, South Carolina. The SRS mission for the past 40 years has been the production of special radioactive isotopes to support national programs. The primary mission was the production of strategic isotopes (plutonium-239 and tritium) used in the development and production of nuclear weapons for national defense. The Site produced other special isotopes (e.g., californium-252, plutonium-238, americium-241) to support research in nuclear medicine, space exploration, and commercial applications. To produce the isotopes, DOE fabricated selected materials into metal targets and irradiated them in the SRS nuclear reactors. After irradiation and cooling, the targets and reactor fuel were dissolved in acid and the special isotopes were chemically separated and converted to a solid form, either an oxide powder or a metal. The oxide or

metal was fabricated into a usable form at the SRS or at other DOE sites. The final form of the material depended on the application (nuclear weapon component, encapsulated medical source, power source, etc.).

Due to the large scale chemical separation capabilities at the SRS, materials containing significant quantities of plutonium-239, uranium-235, and other special isotopes were shipped to the Site for processing and recovery. The materials were in a wide variety of physical shapes and forms, including (1) small encapsulated plutonium sources returned after use by national laboratories and domestic universities; (2) cans or drums of scrap metals and oxides from weapons manufacturing operations at other DOE sites; (3) irradiated metal fuel rods, tubes, plates, or assemblies from experimental DOE reactors, university research reactors, and foreign research reactors; and (4) cans, bottles, or drums containing residues or samples used in laboratory experiments at other DOE sites. All the materials were stored until they could be dissolved and processed in the chemical separations facilities (F-Canyon or H-Canyon). The small sources, scrap metals, oxides, residues, and samples were typically stored in cans, bottles, or drums in safeguarded concrete vaults. The irradiated fuel and targets were stored under water in metal racks or buckets. The offsite materials were typically processed in conjunction with the materials produced at the SRS.

In March 1992, DOE suspended chemical processing operations in the Fand H-Canyon facilities to address a safety concern regarding the capacity of the F- and H-Canyon ventilation systems to withstand an earthquake. That concern, involving the potential failure of the canyon exhaust stack liner in the event of a severe earthquake, was addressed through the preparation of appropriate response procedures, training, and response drills. However, in April 1992, before operation of the Fand H-Canyons could resume, the Secretary of Energy directed that the SRS phase out defense-related chemical separations activities in these facilities. World events in the late 1980's and early 1990's resulted in the end of the Cold War and a reduction in the demand for new material for nuclear weapons. As a result, DOE stopped operating the SRS reactors to produce strategic isotopes. After the Secretarial decision in April 1992, DOE did not process nuclear materials at the SRS chemical separations facilities to recover special isotopes, with the exception of scrap materials containing plutonium-238. DOE continued the

processing of plutonium-238 for use as a thermal power source by the National Aeronautics and Space Administration (NASA) in exploratory space missions.

By September 1992, SRS had developed plans to phase out chemical reprocessing. The plans included actions for removing the material that remained in the canyons, spent fuel basins, and storage vaults as a result of the suspension of chemical separation activities in March 1992. In February 1993 the Site requested approval from DOE to restart F-Canyon after the completion of operational readiness reviews conducted as part of the response to the March 1992 safety concern. The SRS made this startup request in light of the Secretary's direction to accelerate the transition of F-Area reprocessing facilities to a standby condition and because all contemplated actions were typical of ongoing or previous facility operations.

During this same time period, DOE was developing new requirements for the performance of operational readiness reviews prior to the startup (or restart) of nuclear facilities. Under these requirements, facilities had to be able to demonstrate the capability to perform satisfactorily in relation to a broad range of topics associated with the safe operation of a nuclear facility. DOE promulgated these requirements in DOE Order 5480.31, "Startup and Restart of Nuclear Facilities", which it issued in September 1993. DOE decided that the SRS should apply these requirements to the F and H-Canyons and, in November 1993, determined that the Site should hold the proposed F-Canyon (and FB-Line) restart in abeyance until it had completed a restart review in accordance with the new Order. In part due to stakeholder concerns, DOE decided in January 1994 that absent an emergency condition, there should be no further material processed in the canyons (beyond processing of plutonium-238 for NASA) before completion of an environmental impact statement.

On March 17, 1994, DOE published a Notice of Intent (NOI) (59 FR 12588) to prepare an environmental impact statement on the interim management of nuclear materials at the SRS. The proposed DOE interim management actions are to stabilize those nuclear materials at the SRS that represent a health or safety concern for the public, workers, and the environment and to convert certain materials to a usable form to support DOE program needs. These interim actions are necessary while DOE makes and implements longterm decisions on the disposition of nuclear materials. DOE is addressing