

long-term decisions in the Programmatic Environmental Impact Statement for Storage and Disposition of Weapons-Usable Fissile Materials, for which it issued an NOI on June 21, 1994 (59 FR 31985), and in the Disposition of Surplus Highly Enriched Uranium EIS (60 FR 17344, April 5, 1995) (for which the draft EIS was issued in October 1995 (60 FR 55021, October 27, 1995)).

The NOI for the Interim Management of Nuclear Materials EIS requested public comments and suggestions for DOE to consider in its determination of the scope of that EIS, and announced a public scoping period that ended on May 31, 1994. DOE held scoping meetings in Savannah, Georgia, North Augusta and Columbia, South Carolina, on May 12, 17, and 19, 1994, respectively.

In May 1994, the Manager of the Savannah River Operations Office recommended that the DOE Assistant Secretary for Defense Programs seek alternative methods pursuant to the emergency provisions of 10 CFR 1506.11 to comply with the National Environmental Policy Act (NEPA) to allow stabilization of plutonium solutions stored in F-Canyon and Mark-31 targets stored in the L-Reactor Disassembly Basin.

In June 1994, the DOE Office of Environment, Safety and Health performed an independent evaluation of the SRS request for alternative arrangements for compliance with NEPA. DOE evaluated the SRS request in light of the Office of Environment, Safety and Health's report and determined that the appropriate action would be to accelerate the evaluation of stabilization alternatives for the F-Canyon plutonium solutions by preparing a separate expedited environmental impact statement on this subject. In February 1995, following completion of the F-Canyon Plutonium Solutions EIS and issuance of that Record of Decision, DOE resumed F-Canyon operations to eliminate the risks involved in storing plutonium in solution form.

DOE issued a Draft EIS on the Interim Management of Nuclear Materials for public review and comment on March 17, 1995 (60 FR 14432). DOE has revised the Draft EIS in response to the comments received in letters and electronic messages from individuals, organizations, Federal and state agencies and comments received during public hearings held in Savannah, Georgia (April 11, 1995) and North Augusta, South Carolina (April 13, 1995). On October 20, 1995, EPA published a Notice of Availability of the Final EIS on the Interim Management of

Nuclear Materials in the Federal Register (60 FR 54226), following distribution of approximately 400 copies to government officials and interested groups and individuals.

DOE prepared this Record of Decision in accordance with the regulations of the Council on Environmental Quality for implementing NEPA (40 CFR 1500-1508) and DOE's NEPA Implementing Procedures (10 CFR 1021). This Record of Decision is based on DOE's Final Environmental Impact Statement on the Interim Management of Nuclear Materials, Savannah River Site, Aiken, South Carolina (DOE/EIS-0220).

II. Studies of Vulnerabilities of Storage of Nuclear Materials at SRS

The cessation of processing activities resulted in a large inventory of nuclear materials being caught in various stages of the production cycle (fabrication, irradiation, reprocessing, and isotope recovery). These materials include irradiated and unirradiated reactor fuel, targets, and components; solutions containing dissolved nuclear materials and recovered isotopes in stainless-steel tanks; and product and scrap forms of metals or oxides in containers (cans, drums, etc.) typically used for temporary storage or shipment off the Site.

Between November 1993 and November 1994, DOE completed two nationwide reviews of how nuclear materials are stored at the SRS and other sites: Spent Fuel Working Group Report on Inventory and Storage of the Department's Spent Nuclear Fuel and Other Reactor Irradiated Nuclear Materials and Their Environment, Safety and Health Vulnerabilities, and Plutonium Working Group Report on Environment, Safety and Health Vulnerabilities Associated with the Department's Plutonium Storage. The reviews identified vulnerabilities with the continued storage of several nuclear materials at SRS: corroded spent fuel and targets stored in water-filled basins; tanks with thousands of gallons of acidic solutions containing plutonium, neptunium, americium and curium isotopes stored in the canyon facilities; and packages containing plutonium-bearing materials stored in vaults. The reviews defined vulnerabilities as conditions or weaknesses that might lead to radiation exposure to the public, unnecessary or increased exposure to workers, or release of radioactive materials to the environment.

The Defense Nuclear Facilities Safety Board (DNFSB) is an independent organization established by Congress to provide oversight of DOE. In May 1994, the DNFSB transmitted

Recommendation 94-1 to the Secretary of Energy. In its recommendation, the Board observed that the halt in production of nuclear weapons had frozen the manufacturing pipeline in a state, that for safety reasons, should not be allowed to persist unremediated. The Board concluded from observations and discussions with others that imminent hazards could arise within two to three years unless certain problems are corrected. The Board expressed special concern about specific liquids and solids containing fissile materials and other radioactive substances in spent fuel storage pools, reactor basins, reprocessing canyons, processing lines, and various buildings once used for processing and weapons manufacture. On August 3, 1995, the Chairman of the DNFSB transmitted a staff report to the Assistant Secretary for Environmental Management identifying concerns with leaking containers of corroded spent fuel stored in the Receiving Basin for Offsite Fuel at SRS. The staff report from the Board expressed concerns with DOE having previously identified all of the nuclear materials in the basin as "stable" in the Draft EIS issued for public comment.

III. Categories of Nuclear Materials at the Savannah River Site

DOE used information from the two nationwide reviews on spent fuel and plutonium storage, an SRS site-wide review, and input from the DNFSB to categorize the nuclear materials at SRS as either Stable or Candidates for Stabilization. Stable materials have physical and chemical forms that, combined with their storage configurations, do not currently pose environmental, safety, or health concerns and are not likely to pose a concern over the next 10 years. Candidates for Stabilization are materials that exhibit or could be expected to exhibit over the next 10 years, health, safety or environmental vulnerabilities because of their physical condition, chemical composition, or the manner in which they are stored.

DOE categorized materials containing plutonium-242, neptunium-237 and various isotopes of americium and curium as Programmatic after consultation with national laboratories and other appropriate federal agencies, such as NASA. The bulk of these Programmatic nuclear materials are contained in acidic solutions stored in tanks in the canyon facilities and would otherwise be considered Candidates for Stabilization. Programmatic materials contain special isotopes that could be needed to support DOE programs. In their current forms these materials are