

Statement (Storage and Disposition PEIS) (DOE/EIS-0229, December 1996). That amended ROD canceled the immobilization component of the U.S. surplus plutonium disposition program for surplus weapons-usable¹ (weapons-grade² and non-weapons-grade) plutonium described in the two EISs. The amended ROD selected the alternative of immediate implementation of consolidated long-term storage at the SRS of surplus non-pit plutonium now stored separately at the Rocky Flats Environmental Technology Site (RFETS). DOE has begun shipping the RFETS surplus non-pit plutonium to SRS pursuant to that ROD, and anticipates that the shipping campaign will be completed by late summer of 2003.

The April 19 amended ROD also explained that in response to a Congressional directive set out in Section 3155(c) of The National Defense Authorization Act for Fiscal Year 2002, on February 15, 2002 DOE/NNSA submitted a Report to Congress: Disposition of Surplus Defense Plutonium at Savannah River Site (supplemented by letter on March 5, 2002). That report stated that DOE/NNSA's current disposition strategy involves a MOX-only approach, under which DOE/NNSA would dispose of up to 34 MT of surplus weapons-grade plutonium by converting it to MOX fuel and irradiating it in commercial power reactors. The April 19 ROD noted that implementation of this strategy would allow the successful completion of the September 2000 Agreement Between the Government of the United States and the Government of the Russian Federation Concerning the Management and Disposition of Plutonium Designated as No Longer Required for Defense Purposes and Related Cooperation (U.S.-Russia Agreement). It also stated, however, that DOE was in the process of analyzing the changes to the MOX fuel portion of the surplus plutonium disposition program that would be entailed by such a strategy, including analysis conducted pursuant to NEPA, and that no final decisions regarding the MOX portion of the surplus plutonium disposition program would be made until DOE/NNSA completed this analysis.

DOE has previously prepared a number of NEPA documents regarding

the surplus plutonium disposition program. The Storage and Disposition PEIS evaluated the potential environmental consequences of alternative strategies for the long-term storage of weapons-usable plutonium and highly enriched uranium and the disposition of weapons-usable plutonium that has been or may be declared surplus to national security needs. The ROD for the Storage and Disposition PEIS, issued on January 21, 1997 (62 FR 3014), outlined DOE's decision to pursue a hybrid disposition strategy that allowed for both the immobilization of some (and potentially all) of the surplus plutonium and the fabrication of some of the surplus plutonium into MOX fuel to be irradiated in existing domestic, commercial reactors. Subsequent to issuing the ROD for the Storage and Disposition PEIS, DOE conducted a competitive procurement and in March 1999 selected the team of Duke Cogema Stone & Webster (DCS) to design, construct and operate a potential MOX facility in accordance with U.S. Nuclear Regulatory Commission (NRC) regulations.

The SPD EIS, which tiered from the Storage and Disposition PEIS, evaluated site-specific alternatives for the construction and operation of three facilities to dispose of up to 50 MT³ of surplus plutonium. The ROD for the SPD EIS, issued on January 11, 2000 (65 FR 1608), affirmed DOE's decision to implement a hybrid approach for the safe and secure disposition of up to 50 MT of surplus plutonium. Clean metals and clean oxides were identified as feed for the MOX fuel fabrication facility (MOX facility). Impure metals, plutonium alloys, impure oxides, uranium/plutonium oxides, alloy reactor fuel, and oxide reactor fuel were identified as feed for the immobilization facility. In addition, SRS was selected as the site for construction and operation of the three disposition facilities: the pit disassembly and conversion facility, the MOX facility, and the plutonium conversion and immobilization facility (immobilization facility).

In 2001, the schedule for design, construction and operation of the immobilization facility was delayed due to budgetary constraints. In its February 15, 2002 Report to Congress, DOE/NNSA stated that after evaluating the feasibility of implementing two disposition approaches, it believed that

the best way to make the most progress with available funds while maintaining Russian interest in and commitment to surplus plutonium disposition was to pursue a MOX-only disposition strategy. On April 19, 2002, DOE/NNSA issued an amended ROD revising the earlier decisions announced in the RODs for the Storage and Disposition PEIS and the SPD EIS. With respect to surplus plutonium disposition, the amended ROD announced DOE/NNSA's decision to cancel the immobilization program and conduct additional NEPA analyses, as appropriate, before making any final decisions regarding the MOX portion of the surplus plutonium disposition.

In addition to these various NEPA documents that DOE has prepared, DOE/NNSA notes that the NRC is preparing an EIS for the MOX facility based on an Environmental Report submitted by DCS in support of its application, pursuant to 10 CFR part 70, for an NRC license to possess and use special nuclear material in the MOX facility.

Finally, DOE/NNSA takes note of Division C, Title XXXI, Subtitle E of the recently enacted Bob Stump National Defense Authorization Act for Fiscal Year 2003 (Pub. L. 107-314, December 2, 2002). That Subtitle, entitled "Disposition of Weapons-Usable Plutonium at Savannah River, South Carolina," directs the Secretary to submit to Congress a plan for and series of reports regarding construction and operation of a MOX facility at SRS under a specific timetable. It also directs the Secretary to take certain actions if that schedule is not being met, which depending on the circumstance may include preparation of a corrective action plan, cessation of further transfers of weapons-usable plutonium to SRS until the Secretary certifies that the MOX production objective can be met, removal of weapons-usable plutonium transferred to SRS, and payment of economic assistance to SRS from funds available to the Secretary. In DOE/NNSA's view, enactment of this legislation demonstrates strong congressional interest in seeing DOE/NNSA proceed with the MOX facility as promptly as is reasonably possible, and DOE/NNSA is proceeding accordingly.

II. Changes to the MOX Facility and Program

There are two sets of changes that are relevant to evaluating the environmental impacts of a MOX facility that would be used in the MOX program currently being contemplated as compared with the impacts of the MOX facility evaluated in the SPD EIS. First, entirely independently of the fact that the

¹ Weapons-usable plutonium is plutonium in forms (e.g., metals or oxides) that can be readily converted for use in nuclear weapons. Weapons-grade, fuel-grade, and power-reactor-grade plutonium are all weapons-usable.

² Weapons-grade plutonium is plutonium with an isotopic ratio of plutonium-240 to plutonium-239 of no more than 0.10.

³ This amount (50 MT) accommodates the potential declaration of additional surplus plutonium in the future. To date, 38 MT of weapons-grade plutonium have been declared surplus. Of this amount, approximately 4 MT is already in the form of waste or spent nuclear fuel.