DEPARTMENT OF ENERGY

Waste Isolation Pilot Plant Disposal Phase Supplemental Environmental Impact Statement

AGENCY: U.S. Department of Energy.

ACTION: Amendment to a Record of Decision.

SUMMARY: The U.S. Department of Energy (DOE) has decided to revise its approach for managing approximately 0.97 metric tons (MT) of plutonium-bearing materials (containing about 0.18 MT of surplus plutonium) that are currently located at the Rocky Flats Environmental Technology Site (RFETS). The Department has decided to repack and transport these materials for direct disposal as transuranic waste (TRUW) at the Waste Isolation Pilot Plant (WIPP) near Carlsbad, New Mexico instead of shipping them to the Savannah River Site (SRS) in South Carolina for storage pending possible disposition. These materials will be repackaged to meet the WIPP waste acceptance criteria (WAC) for TRUW and safeguards termination requirements. DOE has prepared a supplemental analysis for this action pursuant to 10 CFR 1021.314, entitled Supplement Analysis for the Disposal of Certain Rocky Flats Plutonium-Bearing Materials at the Waste Isolation Pilot Plant (WIPP SA) (DOE/EIS–0026–SA–3, November 2002). On the basis of that document, DOE has concluded this action would not result in significant environmental impacts or in impacts significantly different from those analyzed in the Waste Isolation Pilot Plant Disposal Phase Supplemental Environmental Impact Statement (SEIS-II) (DOE–EIS–0026–FS2, September 1997).

ADDRESSES: Copies of the SEIS–II, the WIPP SA, this Amended Record of Decision, and other documents referenced herein, can be obtained by contacting the Center for Environmental Management Information, P.O. Box 23769, Washington, DC 20026–3769, telephone 1–800–736–3282 (in Washington, DC: 202–863–5084).

FOR FURTHER INFORMATION CONTACT: For information concerning the management of plutonium-bearing materials currently stored at Rocky Flats, contact: Dr. W. Eric Huang, Program Manager, Rocky Flats Office (EM–33), Office of Site Closure, Environmental Management, U.S. Department of Energy, 19901 Germantown Road, Germantown, MD 20874, Telephone: 301–903–4630.


SUPPLEMENTARY INFORMATION:

Background

Historically, Rocky Flats has used a material identification system that segregated plutonium-bearing materials by process origin and/or to designate the subsequent process steps for plutonium recovery and recycle. The categorization is known as Item Description Codes (IDCs). In January 1993, these IDCs were grouped into two major categories, Product and Residue, in order to plan and manage the future disposition of the Site’s plutonium-bearing materials. The characterization of plutonium-bearing materials as Product or Residue was based on the average plutonium concentration of each IDC, the relative ease or difficulty of recovery, and/or whether an IDC was traditionally considered Product or Residue. In general, the Product category was comprised of IDCs with average plutonium concentrations greater than 50 percent by weight. However, an IDC could be designated as residue material although some individual items within this IDC exceed 50 percent by weight. Similarly, an IDC could be designated as Product material although some individual items within this IDC are less than 50 percent by weight.

DOE has already decided to dispose of the Residue materials at WIPP as transuranic waste (TRUW). See “Record of Decision on the Management of Certain Plutonium Residues and Scrub Alloy Stored at the Rocky Flats Environmental Technology Site,” 63 FR 66136 (December 1, 1998) and “Amended Record of Decision on Management of Certain Plutonium Residues and Scrub Alloy Stored at the Rocky Flats Environmental Technology Site,” 66 FR 4803 (January 18, 2001). The Product materials were originally part of a set of materials destined to be repackaged and sent to the Savannah River Site (SRS) for storage and possible subsequent disposition. See “Record of Decision on the Storage and Disposition of Weapons-Usable Fissile Materials,” 62 FR 3014 (January 21, 1997) and “Amended Record of Decision on the

1 For waste classification, DOE specifically defines TRUW as waste containing more than 100 nanocuries of alpha emitting transuranic isotopes per gram of waste with half-lives greater than 20 years except as noted in Chapter III of DOE Guide 435.1–1.
Surplus Plutonium Disposition Program,” 67 FR 19432 (April 19, 2002). However, as the Rocky Flats closure plans matured, a more detailed review has been undertaken of the items within the Product oxide IDCs. This evaluation revealed that a significant quantity of the materials in the Product oxide IDCs contained plutonium concentrations comparable to the Residue materials. Additionally, these items contained the same plutonium compounds and many of the same impurities and physical characteristics as the materials in the Residue IDCs. In fact, these low assay oxides from the Product IDCs:

- Originated from the same aqueous recovery processes and/or contain impurities similar to the Wet Residue category; or
- Originated from the same pyrochemical processes and/or contained impurities similar to the Salt Residue category; or
- Originated from the same process lines and/or contained impurities comparable to the Ash Residue category.

DOE has therefore concluded that by reason of their similarity to the materials already slated for disposal at WIPP, an additional approximately 0.97 MT of low assay oxides (containing about 0.18 MT of surplus plutonium) from the Product IDCs should be disposed of in the same fashion after being repackaged to meet the requirements for safeguards termination and the WIPP waste acceptance criteria (WAC).

**Additional NEPA Review**

DOE has prepared a supplement analysis for this proposed action, entitled *Supplement Analysis for the Disposal of Certain Rocky Flats Plutonium-Bearing Materials at the Waste Isolation Pilot Plant* (DOE/EIS–0026–SA–3, November 2002). This supplement analysis was prepared to determine whether the activities associated with repackaging approximately 0.97 MT of plutonium-bearing materials (containing about 0.18 MT of surplus plutonium) from the Product IDCs should be disposed of in the same fashion after being repackaged to meet the requirements for safeguards termination and the WIPP waste acceptance criteria.

**Conclusion**

DOE has determined that repackaging and transporting approximately 0.97 MT of RFETS plutonium-bearing materials (containing about 0.18 MT of surplus plutonium) for direct disposal at the WIPP would not constitute a substantial change in actions previously analyzed. Furthermore, this proposed action would not constitute significant new circumstances or information relevant to environmental concerns and bearing on the previously analyzed action or its impacts. The potential impacts associated with the new action are encompassed within the activities and impacts analyzed under Action Alternative 1 of the SEIS–II. Therefore, DOE does not need to undertake additional NEPA analysis before issuing this amendment.

**Decision**

After consideration of the potential environmental impacts identified in the SEIS–II and the WIPP SA, DOE has decided to dispose of at WIPP approximately 0.97 MT of the plutonium-bearing materials (containing about 0.18 MT of surplus plutonium) currently located at RFETS. These materials would be repackaged to meet the WIPP WAC and safeguards termination requirements.

This Amended Record of Decision is effective upon being made public, in accordance with DOE’s NEPA implementation regulations (10 CFR 1021.315).

Issued in Washington, DC, on November 8, 2002.

Jessie Hill Roberson, Assistant Secretary for Environmental Management.