Appendix A

Notice of Intent

Federal Register

DEPARTMENT OF ENERGY

Notice of Intent to Prepare an Environmental Impact Statement on Management of Certain Plutonium Residues and Scrub Alloy Stored at the Rocky Flats Environmental Technology Site

AGENCY: Department of Energy.
ACTION. Notice of Intent.

SUMMARY: The Department of Energy. (DOE) announces its intent to prepare an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA), in accordance with the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA and the DOE NEPA implementing regulations. This EIS will evaluate the potential environmental impacts associated with reasonable management alternatives for certain plutonium residues and all scrub alloy currently being stored at the Rocky Flats Environmental Technology Site In Golden, Colorado. The residues and scrub alloy are materials that were generated during the separation and purification of plutonium, or during the manufacture of plutonium-bearing components for nuclear weapons. Due to the risk they present, DOE previously decided to stabilize and repackage the plutonium residues at the Rocky Flats Site for safe interim storage as discussed in the Solid Residue Treatment, Repackaging, and Storage Environmental Assessment/Finding of No Significant Impact. The activities analyzed In this EIS would be in addition to certain activities described in the Solid Residue Environmental Assessment by subjecting a portion of those residues to further treatment to prepare them for disposal or other disposition. This EIS will also analyze management activities for scrub alloy. This notice describes the proposed scope of the EIS and requests that members of the public submit comments regarding the scope of the EIS. Comments may be submitted in writing at the public scoping period and orally during public scoping meetings as described below.

DATES: The public scoping period begins with the publication of this notice and will continue until December 19, 1996. Written comments postmarked by that date will be considered In preparation of the EIS. Comments postmarked after that date will be considered to the extent practicable.

Public Scoping meetings will be held at the locations and times specified below. This information will also be announced in local public notices before the planned meetings.

Meeting.- Rocky Flats Environmental Technology Site.

Date: Tuesday, December 3, 1996.

Time: 6:30 PM to 9:30 PM.

Location: Rocky Flats Environmental Technology Site, Building 060 (Outside the West Gate), State Highway 93, Golden, Colorado 80402.

Contact for the Golden Meeting: Mr. Mike Konczal, Telephone: (303) 966- 5993.

Meeting: Savannah River Site.

Date: Thursday, December 12, 1996.

Time: 6:30 PM to 9:30 PM.

Location: North Augusta Community Center, 101 Brookside Drive, North Augusta, South Carolina 29841, (803) 441-4290.

Contact for the North Augusta Meeting: Mr. Andrew R. Grainger, Telephone: 1-800-242-8269.

ADDRESSES: Written comments on the scope of the Rocky Flats Plutonium Residues and Scrub Alloy EIS, including issues to be addressed, questions about the plutonium residues, and/or requests for copies of the draft EIS should be sent to the following address: Mr. Charles R. Head, Office of Nuclear Material and Facility Stabilization (EM-60), United States Department of Energy, I 000 Independence Avenue, S.W., Washington, D.C. 20585, Telephone: 202-586-9441, Facsimile: 202-586- 5256.

Members of the public who request a copy of the draft EIS should specify whether they would like a copy of the entire draft EIS (which will consist of multiple bound volumes), or if they would prefer a copy of the Summary of the draft EIS (which will be a bri2f single volume).

FOR FURTHER INFORMATION CONTACT: For further information on the Rocky Flats Plutonium Residues and Scrub Alloy EIS, please contact Mr. Charles R. Head at the address specified above under the heading ADDRESSES.

For general information on the DOE NEPA review process, please contact: Ms. Carol Borgstrom, Director, Office of NEPA Policy and Assistance (EH-42), U.S. Department of Energy, 1000 Independence Avenue, S.W., Washington, D.C. 20585, Telephone: 202-586-4600 or leave a message at 800-472-2756.

Addresses of reading rooms where additional Rocky Flats Plutonium Residues and Scrub Alloy EIS information Is available are listed below in the section entitled "Public Scoping Process".

SUPPLEMENTARY INFORMATION: DOE announces Its intent to prepare an Environmental Impact Statement pursuant to the National Environmental Policy Act (NEPA) (42 U.S.C. 5 432 1, *et seq.),* in accordance with the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA (40 CFR Parts 1500-1508) and the DOE NEPA implementing regulations (IO CFR Part 102 1) to evaluate reasonable alternatives for management of certain plutonium residues and all of the scrub alloy at the Rocky Flats Site in Golden, Colorado. Plutonium residues and scrub alloy are materials that were generated while processing plutonium during the manufacture of components for nuclear weapons. The management alternatives to be analyzed include treatment of these materials to enable them to be disposed of as waste or, for some surplus weapons-usable material, otherwise dispositioned.

Purpose and Need

Stabilization activities to mitigate the risks associated with the current storage condition of plutonium residues (e.g., deteriorating and overpressurized storage containers, and ignitability concerns) are in progress at the Rocky Flats Site based on the decisions resulting from the Solid Residue Treatment, Repackaging, and Storage

Environmental Assessment/Finding of No Significant Impact, issued in April 1996 (DOE/EA- 1 120, the "Solid Residue Environmental Assessment'). The Solid Residue Environmental Assessment addressed the potential environmental impacts associated with stabilizing the entire 106,600 kg inventory of Rocky Flats Site plutonium residues to allow its safe interim storage until the final disposition of the residues could be decided upon and implemented. However, due to the need for expeditious action to resolve problems with storage of the plutonium residues at Rocky Flats, the Solid Residues Environmental Assessment did not address disposal or other disposition of the residues after these materials were stabilized. Decisions regarding treatment of these materials for purposes other than stabilization, i.e., disposal or other disposition,[1] will require the evaluation of several treatment technologies and thus were considered to require a lengthier and more complex evaluation process than could be completed in time to meet the more immediate need to make and implement stabilization decisions.

DOE has determined that, even after stabilization, approximately 42,300 kg of the total of about 106,600 kg of plutonium residues currently in storage at Rocky Flats would remain in forms that, although not directly weapons usable, would contain sufficiently high concentrations of plutonium so as to not meet the safeguards termination I requirements for disposal.[2] Because of the plutonium concentration and the relative ease with which plutonium could be recovered from the residues, such residues could be attractive to terrorist organizations as a source of plutonium (about 2,600 kg could be separated from the Rocky Flats residues and scrub alloy) for use in nuclear weapons or other terrorist devices. Diluting these materials could reduce the plutonium concentrations sufficiently to meet disposal requirements but, for many samples of the residues, probably would yield an extremely large waste volume that would be very costly to transport and dispose of. Therefore, in addition to dilution, alternatives need to be considered, such as treatments that would either bind the plutonium in a matrix from which it would be difficult to extract, or treatments that would separate the plutonium from the remaining constituents of the residues and scrub alloy. Any separated plutonium would not be used for nuclear weapons purposes, but would be safely stored in secure facilities with other similar materials, pending disposition (see footnote 1). Whenever feasible, DOE would offer such storage facilities to be placed under International Atomic Energy Agency (IAEA) safeguards. For the other 64,300 kg of plutonium-bearing residues currently in storage at the Rocky Flats Site, the activities discussed in the Solid Residue Environmental Assessment will meet the transuranic waste disposal and safeguards termination requirements and will not be addressed in this EIS.

This EIS will evaluate reasonable management alternatives for the approximately 42,300 kg of plutonium residues discussed above, including treatment of the material to a form and concentration that is suitable for disposal or other disposition. Evaluation of these alternatives at this time will facilitate planning for disposal or other disposition, and allow any additional treatment to be integrated with the on- going stabilization process so that handling the material can be minimized (i.e., by avoiding potential double handling). Minimizing such handling would reduce the worker risk associated with achieving a material form suitable for disposal or other disposition.

In addition to the residues discussed above, approximately 700 kg of scrub alloy (predominately a magnesium/aluminum/americium/plutonium metal mixture) currently in storage at the Rocky Flats Site, containing about 200 kg of plutonium, also needs treatment before being suitable for disposal or other disposition. Due to similarities in the issues related to the management of the scrub alloy and the plutonium residues, management alternatives for the scrub alloy will also be analyzed in this EIS.

The entire inventory of plutonium residues currently stored at Rocky Flats is included in the Draft Waste Management Programmatic Environmental Impact Statement (WMPEIS) under the assumption that it may be managed as transuranic waste. The WMPEIS analyzes storage and treatment configurations (i.e., centralized, regionalized and decentralized treatment and storage) for transuranic wastes, including the Rocky Flats plutonium residues. The analysis of alternatives In this EIS will take into account the analyses of alternatives in the WMPEIS and the decisions made In any Records of Decisions that may result from those analyses.

Background

Plutonium residues and scrub alloy were generated by processes used to recover and purify plutonium and manufacture components for nuclear weapons. Approximately 125,000 kilograms (kg) of residues (containing about 5,800 kg of plutonium) and approximately 700 kg of scrub alloy (containing about 200 kg of plutonium) are currently stored at various DOE sites. Of these totals, approximately 106,600 kg of the residues (containing about 3,000 kg of plutonium), and nearly all of the scrub alloy are stored in various types of containers in six former plutonium production facilities at the Rocky Flats Site. The remaining approximately 18,400 kg of plutonium residues are stored at the Savannah River Site in South Carolina, the Hanford Site in Washington, Los Alamos National Laboratory in New Mexico, and Lawrence Livermore National Laboratory in California. About 6 kg of scrub alloy are stored at the Savannah River Site. Stabilization activities for the approximately 18,400 kg of plutonium residues and 6 kg of scrub alloy not located at the Rocky

[1] After treatment, the Rocky Flats residues and scrub alloy could be disposed of as transuranic wastes or, depending on the treatment, could be transformed or chemically altered so as to concentrate the plutonium for other disposition (see below). "Transuianic" refers to elements, such as plutonium, that have an atomic number greater than that of uranium. The disposal of transuranic waste at the Waste isolation Pilot Plant (WIPP) is being analyzed In the Draft Waste Isolation Pilot Plant Disposal Phase Supplemental Environmental Impact Statement. DOE is developing WIPP, near Carlsbad, New Mexico. as a potential disposal facility for transuranic wastes. DOE is evaluating the disposition of weapons-usable plutonium, which would be relevant if the residue or scrub alloy materials were treated to separate the plutonium from other constituents. Such potential uses include using the plutonium In mixed oxide fuel for power reactors. immobilization, and disposal in a deep borehole.

As a result of the potential for disposal of these materials at WIPP, "disposal requirements" for the residues and scrub alloy refers to the Planning Basis Waste Acceptance Criteria for WIPP (or alternative treatment level, depending on decision in the Record of Decision for the WIPP SEIS ID, and any other requirements that must be met to allow disposal, such as safeguards termination requirements. Requirements for other disposition will be developed as part of detailed NEPA analyses that will be tiered from the Storage and "position of Weapons-Usable Fissile Materials Programmatic Environmental impact Statement (draft issued by DOE in February 1996; also see item 6 under "Related NEPA Documentation" in this Notice).

[2] Materials that could be used to fuel nuclear weapons (e.g., Uranium-235 or Plutonium-239) are required to be placed under a system of controls and protections to ensure that they are not misused or lost. This system of controls and protections is referred to as "safeguards." In general, wastes that contain large enough concentrations of nuclear weapons-usable materials cannot be disposed of unless actions (such as reducing the concentration of nuclear weapons usable materials, or immobilizing such materials so that they would be exceptionally difficult to recover) are taken that make it no longer necessary to "safeguard" them. The requirements that define the state into which such wastes must be converted in order for them no longer to require "safeguards" are referred to as "safeguards termination requirements".

Flats Site are analyzed in NEPA reviews that have already been completed or are currently underway. These reviews are listed and summarized in the section of this notice titled "Related NEPA Documentation." The final approximately 5 kg of plutonium residues are located at several DOE sites. each having an inventory of less than I kg. Treatment options for these plutonium residues have been identified or are in the process of being defined by the managements of the installations at which these residues are stored. The plutonium residues at the Rocky Flats Site that require treatment beyond stabilization prior to disposal or other disposition consist of four categories: ash, salts, wet residues, and direct repackage residues. The residues are grouped into these categories due to chemical similarities or similarities in the manner in which they could be managed. All these residue categories and scrub alloy will be discussed in this EIS and are briefly described below. The approximate quantities in each category requiring treatment beyond stabilization to prepare them to meet the requirements for disposal or other disposition are noted.[3]

1. Ash Residues. The ash residue category consists of approximately 28,000 kg of material containing approximately 1, I 00 kg of plutonium in three basic groups. Examples from each group are: (a) Incinerator ash, firebrick heels and fines, and soot; (b) pulverized sand, slag and crucible; and (c) graphite fines. Approximately 71 percent of the ash residue inventory (-19,900 kg) would require treatment beyond stabilization for disposal in WIPP or other disposition.

2. Salt Residues. The salt residue category consists of about 16,000 kg of material containing approximately 1,000 kg of plutonium and can be further sub- divided into three groups:
electrorefining salts, molten salt extraction salts, and direct oxide reduction salts. These salts consist primarily of sodium chloride, potassium chloride and magnesium chloride. Approximately 93 percent of the salt residue inventory (-14,900 kg) would require treatment beyond stabilization for disposal in WIPP or other disposition.

3. Wet Residues. The wet residues consist of approximately 17,000 kg of material containing approximately 600 kg of plutonium and are made up of a disparate assembly of materials, such as wet (aqueous and organic contaminated) combustibles, plutonium fluorides, high efficiency particulate air filter media, sludges and Raschig (glass) rings. Approximately 26 percent of the wet residue inventory (-4,400 kg) would require treatment beyond stabilization for disposal in WIPP or other disposition.

4. Direct Repackage Residues. The direct repackage residue category consists of about 39,000 kg of material, containing about 300 kg of plutonium, and comprises those plutonium residues that are considered to be stable and do not require stabilization for storage. These residues consist of materials such as paper, rags, cloth, plastic, personal protective equipment, and gaskets. Approximately 8 percent of the direct repackage residue (-3. 1 00 kg) would require treatment for disposal in WIPP.

5. Scrub Alloy. Scrub alloy is predominately a magnesium/aluminum/ americium/plutonium metal mixture that was created as an interim step in plutonium recovery. The entire Rocky Flats scrub alloy inventory of approximately 700 kg, containing approximately 200 kg of plutonium, will require treatment to put it in a form that would meet the requirements for disposal in WIPP or other disposition.

Preliminary Alternatives

Discussed below are the preliminary alternatives identified for management of certain Rocky Flats Site plutonium residues (approximately 42,300 kg) and scrub alloy (approximately 700 kg), including transportation to reasonable treatment sites and treatment to prepare them for disposal or other disposition. DOE welcomes comments on these or other reasonable alternatives and on the identification of a preferred alternative.

Alternative I -No Action: The No Action alternative consists of ongoing residue storage activities, and activities addressed in the Solid Residue Treatment, Repackaging, and Storage Environmental Assessment/Finding of No Significant Impact, plus the on-site storage of the scrub alloy inventory in its current form. Under the No Action alternative, stabilization, repackaging, and monitoring of the entire plutonium residue inventory for safe interim storage would continue. Interim storage would be in containers and under conditions appropriate for a period of approximately 20 years, with approximately 64,300 kg of the residues prepared for waste disposal. The other 42,300 kg of plutonium residues and the scrub alloy would remain in a form that is not suitable for disposal as waste, or other disposition.

Alternative 2-On-Site Treatment: This alternative would involve treatment at the Rocky Flats Site, as discussed below:

a. Treatment Without Plutonium Separation-This alternative includes treating the plutonium residues or scrub alloy to prepare the material for disposal as waste without removal of the plutonium. This treatment alternative would use techniques such as immobilization, (e.g., ceramification or vitrification), or dilution by blending with other matrix materials (e.g., blending the salt residues with depleted uranium oxide or additional salt). The resulting waste form would meet the planning basis waste acceptance criteria for disposal in WIPP. The material would no longer be attractive as a potential source of plutonium since it would be in a physical and chemical form from which it would be difficult to recover the plutonium, or the resulting material would have too low a concentration of plutonium. However, the dilution approach would result in substantially greater amounts of transuranic waste.

b. Treatment With Plutonium Separation—Plutonium separation would consist of removing the plutonium from the residue or scrub alloy. Plutonium separation would generate two distinct forms of material; a treated waste form and a plutonium metal or oxide. The treated waste would meet the planning basis waste acceptance criteria for disposal in WIPP. The plutonium metal or oxide would be in a form that would be suitable for disposition in accordance with the decisions resulting from the Storage and Disposition of Weapons-Usable Fissile Materials Programmatic EIS. The Rocky Flats Plutonium Residues and Scrub Alloy EIS will include analysis of any actions needed to manage separated plutonium until the decisions resulting from the Storage and Disposition of Weapons-Usable Fissile Materials Programmatic EIS are implemented. Under this treatment alternative, there would be no need to dilute the plutonium-bearing materials to allow them to meet transuranic waste disposal requirements, although other types of waste would be produced that are more easily disposed of. [4] The recovered

[3] As noted previously in this Notice. a total of approximately 106,600 kg of plutonium residues is currently in storage at Rocky Flats. Of this total, approximately 6,6W kg is in a residue category designated "Classified Shapes" that does not require treatment beyond that analyzed in the Solid Residue Environmental Assessment. This leaves approximately I 00.000 kg of residues in the four listed categories, 42,300 kg of which will need additional treatment beyond that analyzed in the Solid Residue Environmental Assessment. The scrub alloy is not a plutonium residue, and thus is not included in the 100,000 kg residue total

[4] Both low-level radioactive and hazardous wastes could be generated as a result of such treatment. Any hazardous wastes would be sent to a licensed

plutonium could not be used for nuclear explosive purposes under the DOE Secretarial policy established in December 1994.5

Alternative 3-Off-Site Treatment: Under this alternative, the plutonium residues or scrub alloy would be treated off-site using various treatment technologies, with or without plutonium separation, as discussed under Alternative 2 above. The plutonium residues might require pre- treatment at Rocky Flats to modify the material composition and physical packaging so that the material would be in a condition suitable for transportation. Potential locations for off-site treatment include: the Savannah River Site, the Los Alamos National Laboratory (LANL), and the Lawrence Livermore National Laboratory (LLNL). The Savannah River Site has the capability to treat most residues and all scrub alloy efficiently. LANL and LLNL each have facilities that could treat only part of the salt residues (about 13,400 kg), but at much slower rates than treatment at the Savannah River Site. The cost of treatment at LANL and LLNL Is expected to be slightly higher than the cost of treatment at the Savannah River Site. None of these facilities, including the Rocky Flats Site, currently is capable of treating all of the ash residues. Further, treatment at LANL and LLNL may be difficult to accommodate in light of the other missions of those sites. Taking account of all these circumstances, the Savannah River Site appears to be a more likely offsite location for treating the Rocky Flats plutonium residues and scrub alloy than LANL or LLNL. Nevertheless, DOE cannot rule out the possibility that further analysis or changing circumstances might provide reasons to treat some of these materials at LANL or LLNL.

Any plutonium that might be separated under the "Treatment With Plutonium Separation" option would be placed in storage pending implementation of decisions made after completion of the Storage and Disposition of Weapons-Usable Fissile Materials Programmatic EIS. As specified for Alternative 2.b above, the Rocky Flats Plutonium Residues and Scrub Alloy EIS will include analysis of any actions needed to manage separated plutonium until the decisions made after completion of the Storage and Disposition of Weapons-Usable Fissile Materials Programmatic EIS are Implemented.

commercial treatment, storage and disposal facility. Any low-level radioactive wastes would be disposed of along with other low-level radioactive wastes generated at the Rocky Flats Site.

5 Such plutonium would be stabilized, packaged for storage (under DOE safe storage criteria suitable for 50 years) and would be stored at Rocky Flats pending implementation of storage and disposition decisions. While In storage, the plutonium metal/ oxide would remain safe and in a secured facility.

Public Scoping Process

To ensure that the full range of issues related to the Rocky Flats Plutonium Residues and Scrub Alloy EIS is addressed, comments on the proposed scope of the EIS are invited from all interested parties during the scoping period. Written comments should be directed to Mr. Charles R. Head at the address indicated above under the heading ADDRESSES. Agencies, organizations, and the general public are also invited to present oral comments at the public scoping meetings to be held at the times and dates listed in the DATES section above.

Written and oral comments will be given equal consideration. Individuals desiring to speak at a public scoping meeting (or meetings) should pre- register by telephoning or writing the contact person(s) designated for the meeting as specified above in the DATES section of this Notice. Pre-registration should occur at least four days before the designated meeting. Persons who register at the meeting will be called on to speak as time permits, after the pre-re istered speakers.

To ensure that everyone has an adequate opportunity to speak, each speaker at a scoping meeting will be allotted five minutes. Depending on the number of persons who request an opportunity to speak, more time may be allowed for speakers representing several parties or organizations. Persons wishing to speak on behalf of organizations should identify the organization in their request. Written comments also will be accepted at the meetings, and speakers at scoping meetings are encouraged to provide written versions of their oral comments for the record.

DOE will record and prepare transcripts of the oral comments received during the public scoping meetings. Interested persons will be able to review the transcripts, written comments, reference material, related NEPA documents, and background information during normal business hours at the following locations:

U.S. Department of Energy, Freedom of Information Room, Room IE-190, Forrestal Building, 1000 Independence Avenue, S.W., Washington, D.C. 20585, Telephone: 202-586-6020

U.S. Department of Energy, Public Reading Room, Gregg Graniteville Library, 171 University Parkway, Aiken, South Carolina 29801, Telephone: 803-641-3465

County Library, 2002 Bull Street, Savannah, Georgia 31299-430, Telephone: 912-234-5127

County Library, 404 King Street, Charleston, South Carolina 29403, Telephone: 803-723-1645

Rocky Flats Citizens Advisory Board, Public Reading Room, 9035 Wadsworth Avenue, Suite 2250, Westminster, Colorado 8002 1, Telephone: 303-420-7855

Standley Lake Public Reading Room, 8485 Kipling Street, Arvada, Colorado 80005, Telephone: 303-456-0806

U.S. Department of Energy, Golden Field Office, Public Reading Room, 14869 Denver West Parkway, Golden, Colorado 80401, Telephone: 303-275- 4742

U.S. EPA Superfund Records Center, 999 18th Street, 5th Floor, Denver, Colorado 80202-2405, Telephone: 303-312-6473

Colorado Department of Public Health and Environment, Information Center, 4300 Cherry Creek Drive South, Denver, Colorado 80222, Telephone: 303-692-2037

Rocky Flats Public Reading Room, Front Range Community College Library, 3645 West 112th Avenue, Westminster, Colorado 80030, Telephone: 303-469-4435

Albuquerque Operations Office, National Atomic Museum, 20358 Wyoming Blvd. S.E., Kirtland Air Force Base, P.O. Box 5400, Albuquerque, New Mexico 87185- 5400, Telephone: 505-845-4378

Los Alamos Community Reading Room, 1450 Central, Suite 101, Los Alamos, New Mexico 87544, Telephone: 505- 665-2127

Lawrence Livermore National Laboratory, East Gate Visitors Center, Greenville Road, Livermore, California 94550, Telephone: 5 1 0- 424-4026

Oakland Operations Office, U.S. Department of Energy, Public Reading Room, EIC, Bth Floor, 1301 Clay Street, Oakland, California 94612- 5208, Telephone: 510-637-1762

DOE plans to issue the draft EIS In the Spring of 1997. DOE will announce availability of the draft in the Federal Register and other media, and will provide the public, organizations, and agencies with an opportunity to submit comments. These comments will be considered and addressed in the final EIS, scheduled for issuance in the Fall ofl997.

Preliminary Issues: DOE has preliminarily identified the

environmental issues listed below for analysis in the Rocky Flats Plutonium Residues and Scrub Alloy EIS. This list is presented to facilitate discussion concerning the scope of the EIS and is not intended to exclude consideration of other pertinent Issues that may be suggested during the scoping period or to predetermine the scope of the EIS. DOE invites comments on these and any other issues relevant to the analysis in the EIS. The environmental issues identified by DOE are as follows:

1. Public and Occupational Safety and Health: The potential radiological and non-radiological Impacts of the management alternatives for the plutonium residues and scrub alloy, including projected effects on workers and the public from routine operations and potential accidents at the Rocky Flats Site, Savannah River Site, Los Alamos National Laboratory, and Lawrence Livermore National Laboratory, and along transportation routes from the Rocky Flats Site to the other sites.

2. Environmental Media: Potential impacts on soil, water, and the air.

3. Sensitive Environmental Resources: Potential impacts on plants, animals, and habitat, including impacts to flood plains, wetlands, and threatened and endangered species and their habitat.

4. Resource Consumption: Potential impacts from consumption of natural resources and energy, including water, natural gas, and electricity.

5. Socioeconomic: Potential impacts on local communities, including labor force employment and support services.

6. Environmental justice: Potential for disproportionately high and adverse impacts of DOE activities on minority and low-income populations.

7. Cultural Resources: Potential impacts on cultural resources, such as historic, archaeological, scientific, or culturally important sites.

8. Regulatory Compliance: The impacts of the alternatives on compliance of the Rocky Flats Site, Savannah River Site, Los Alamos National Laboratory, and Lawrence Livermore National Laboratory with applicable Federal and state laws and regulations.

9. Cumulative Impacts: The impacts of these alternatives in conjunction with other past, present and reasonably foreseeable future actions regardless of agency (Federal or non-federal) or persons undertaking such other actions. 10. Potential Irreversible and Irretrievable Commitment of Resources: The potential irreversible and irretrievable commitment of resources that would be involved in each alternative.

I 1. Non-Proliferation and International Plutonium-processing Policy: The potential impacts to international policy regarding the non- proliferation of nuclear weapons and processing of plutonium that would be involved with the alternatives involving separation of plutonium.

Related NEPA Documentation: Documents that have been or are being prepared that may relate to the scope of the Rocky Flats Plutonium Residues and Scrub Alloy EIS include the following:

*12. Solid Residue Treatment, Repackaging, and Storage Environmental Assessment (DOE/EA-*II 20) and Finding of No Significant Impact, issued April 1996. This Environmental Assessment addressed the stabilization of the plutonium residue inventory currently at the Rocky Flats Site. The actions being implemented based on the Environmental Assessment are included in the No Action alternative of the Rocky Flats Plutonium Residues and Scrub Alloy Environmental Impact Statement.

13. Rocky Flats Site-%!de Environmental Impact Statement Notice of Intent (59 FR 4001 1. August 5, 1994). This Notice announced DOE's intention to prepare a site-wide EIS for the Rocky Flats Environmental Technology Site. In a Federal Register Notice dated July 17, 1996, DOE deferred completion of the Site-wide EIS pending the completion of a new cleanup agreement (since completed) with the Environmental Protection Agency and the State of Colorado and decisions that may result from issuance of the WM PEIS (see item 5, below).

14. Interim Storage of Plutonium at the Rocky Flats Environmental Technology Site Environmental Impact Statement Notice of Intent (61 FR 37247, July 17, 1996). This Notice announced DOE's intention to prepare an environmental impact statement to evaluate the alternatives for providing safe interim storage of approximately 10 metric tons of plutonium at the Rocky Flats Environmental Technology Site pending implementation of decisions based on the Storage of Disposition of Weapons-Usable Fissile Materials Programmatic EIS. Any plutonium that would be separated through the treatment at Rocky Flats of residues and scrub alloy would be stored in accordance with decisions that may. result from the analysis in the Interim Storage of Plutonium at the Rocky Flats Environmental Technology Site EIS, pending implementation of decisions based on the Storage and Disposition of Weapons-Usable Fissile Materials Programmatic EIS.

*15. Draft Waste Isolation Pilot Plant Disposal Phase Supplemental Environmental Impact Statement (DOE/*EIS-0026-S2). This is the second supplemental EIS for WIPP, a DOE research and development project that is proposed for the disposal of transuranic wastes. The Department's proposed action is to dispose of transuranic waste at the facility. The Notice of Intent for the second supplemental EIS was issued on August 23, 1995 (60 FR 43779). The Rocky Flats plutonium residues (including transportation to WIPP) are considered in the scope of the supplemental EIS. The draft supplemental EIS is scheduled to be issued in late 1996 and the final supplemental EIS and Record of Decision are scheduled to be issued in the Summer of 1997. The Rocky Flats Plutonium Residues and Scrub Alloy EIS will be prepared in coordination with the WIPP supplemental EIS.

16. Draft Waste Management Programmatic Environmental Impact Statement (WMPEIS) (DOE/EIS-0200-D, August 1995). The WMPEIS considers alternative approaches for consolidating the management of the Department of Energy's low-level, low-level mixed, hazardous, transuranic, and high-level waste. Records of Decision based on the WMPEIS are scheduled to be issued starting in 1997 and will be made by waste type. The Rocky Flats Phutonium Residues and Scrub Alloy EIS will be prepared in coordination with the WMPEIS and applicable records of decision that may be issued before completion of this EIS.

17. Draft Storage and Disposition of Weapons-Usable Fissile Materials Programmatic Environmental Impact Statement (DOE/EIS-0229-D, February 1996). This Programmatic EIS analyzes the potential environmental impacts associated with approaches to storage and disposition of the Department's weapons-usable fissile materials, including plutonium. Under the No Action alternative, Rocky Flats plutonium metals and oxides, including any plutonium metals or oxides generated as part of plutonium residue treatment, would remain at Rocky Flats. Under all other alternatives, stabilized weapons-usable Rocky Flats material would be transferred to another DOE site. The treatment alternatives discussed in this Notice of Intent that involve separation of plutonium would generate weapons-usable plutonium metals and oxides that would be stored and dispositioned according to decisions made based on the Storage and Disposition of Weapons-Usable Fissile Materials Programmatic EIS. The final Storage and Disposition of

Weapons-Usable Fissile Material Programmatic EIS is scheduled to be issued in late 1996.

18. Final Environmental Impact Statement for Continued Operation of Lawrence Livermore National Laboratory (DOE/EIS-0 1 57, August 1992, the "LLNL Site-wide EIS"). This document analyzes the potential environmental impacts of a proposed action to continue operation of Lawrence Livermore National Laboratory and Sandia National Laboratories, Livermore. The LLNL site-wide EIS also analyzes the potential environmental impacts associated with a no-action alternative involving continuing operations at FY 1992 funding levels without further growth, an alternative to modify operations to reduce adverse environmental impacts of operations or facilities, and a shutdown and decommissioning alternative. The Record of Decision for the LLNL Site-wide EIS (58 FR 6268, January 27, 1993) announced that DOE had decided to continue the operation of LLNL and Sandia National Laboratories, Livermore, including near- term (within 5 to 10 years) proposed projects. This action included current operations plus programmatic enhancements and facility modifications required to support the research and development rnissions established for the Laboratories by Congress and the President. The alternatives to be analyzed in the Rocky Flats Plutonium Residues and Scrub Alloy EIS that would involve treatment of a portion of the Rocky Flats plutonium residues at LLNL will represent activities beyond those considered in the LLNL Site-wide EIS.

19. *Los Alamos National Laboratory Site-wide EIS Notice of Intent* (60 FR 92:25697-8, May 12, 1995). This notice announced DOE's intention to prepare a Site-wide EIS to address operations and planned activities at the Los Alamos National Laboratory foreseen in the next 5 to 10 years. DOE anticipates that this EIS will provide an analysis of all activities at LANL and all DOE land management activities related to operations at LANL. The draft LANL Site-wide EIS is scheduled to be issued in mid- 1997. The alternatives to be analyzed in the Rocky Flats Plutonium Residues and Scrub Alloy EIS that would involve treatment of a portion of the Rocky Flats plutonium residues at LANL will be prepared in coordination with the analyses being performed for the LANL Site-wide EIS.

20. Plutonium Finishing Plant Stabilization Environmental Impact Statement (DOE/EIS-0244, May 1996). This EIS addressed the potential environmental impacts associated with alternative technological processes at the Hanford Site for stabilizing plutonium-bearing materials, including plutonium residues. In the Record of Decision for this EIS (61 FR 36352, July 10, 1996), DOE decided that the plutonium residues having a low plutonium content (less than 50 weight percent) and meeting criteria established by DOE will be immobilized at the Plutonium Finishing Plant through a cementation process and stored pending disposal. This EIS provided the NEPA analyses required for management of the plutonium residues currently stored at the Hanford Site.

2 *1. Interim Management of Nuclear Materials at the Savannah River Site Environmental Impact Statement (DOE/* EIS-0220, the IMNM EIS). The IMNM EIS addressed the potential environmental impacts associated with alternatives that the Department could implement to stabilize a variety of nuclear materials that are at the Savannah River Site for improved safety or to convert them to another form to support the Department's programs. This analysis also included an evaluation of the alternatives for the treatment of approximately 1,000 kg of plutonium residues and approximately 6 kg of scrub alloy (discussed in IMNM EIS Section 2.3.3, "Plutonium and Uranium Stored in Vaults"), some of which originated at Rocky Flats Site and is currently in storage at the Savannah River Site. Three Records of Decision have been issued for the IMNM EIS (60 FR 65300, December 19, 1995; 61 FR 6633, February 21, 1996; and 61 FR 48474, September 13, 1996), each covering different materials. The decision regarding the plutonium residues and scrub alloy, specified in the first Record of Decision, was to process these materials through the canyon facilities to a form that meets the DOE storage criteria (DOE-STD-3013-94) and to store the plutonium at the Savannah River site.

Issued in Washington, D.C. on this 15th day of Novernber, 1996.

Peter N. Brush,

Acting Assistant Secretary, Environment, SafetyandHealth.

[FR Doc. 96-29650 Filed 11-15-96; 12:52 PM]

BILUNG CODE 645"1-P

Appendix A

Notice of Availability

DEPARTMENT OF ENERGY

Draft Environmental Impact Statement on Management of Certain Plutonium Residues and Scrub Alloy Stored at the Rocky Flats Environmental Technology Site

AGENCY: Department of Energy.
ACTION: Notice of availability.

SUMMARY'. The Department of Energy (DOE) announces the availability of the Draft Environmental impact Statement on Management of Certain Plutonium Residues and Scrub Alloy Stared at the Rocky Flats Environmental Technology Site (draft EIS) for public review and comment. The Department has prepared this draft EIS pursuant to the National Environmental Policy Act (NEPA) (42 U.S.C. § 4321, et *seq.),* in accordance with the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA (40 CFR parts 1500-1508) and the DOE TN'EPA implementing regulations (10 CFR part 1021). The draft EIS analyzes reasonable alternative means of processing certain plutonium residues and all of the scrub alloy currently stored at the Rocky Flats Site near Golden, Colorado to a form suitable for disposal or other disposition. Plutonium residues and scrub alloy are materials that were generated during the manufacture of components for nuclear weapons. DOE will bold three public hearings during the comment period, which ends January .1i. I 998.

ADDRECSES: Requests for copies of the draft EIS should be directed to: Center for Environmental Management Information, P.O. Box 23769, Washington, D.C. 20025-3769, 1-800- 736--3282 or in Washington. D.C., 202- 863-5084. Copies of the draft EIS are also available for public review at the locations listed at the end of this Notice.

Written comments an the draft EIS should be mailed to: Mr. Chules R. Head, U.S. Department of Energy. Office of Environmental Management (EM--60), 1000 Independence Avenue, SW. Room 5B--085. Washington. DC 20585--0001. Comments may also be submitted to RFPR.EISCEM.DOE.GOV by E-mail.

FOR FURTHER INFORMANON CONTACT: For further information about the draft EIS and about plutonium residues and scrub alloy, contact- Mr. Charles Head at the above address or call (202) 586--5151.

For information on the DOE NEPA process, contact: Carol M. Borgstrom, Director, Office of NEPA Policy and Assistance, U.S. Department of Energy, 1000 Independence Avenue, SW, Washington, DC 20585--0001, (202) 586- 4600 or leave a message at 1-800-472- 2756.

DATES: The comment period ends on January 5, ig98. Comments postmarked after that date will be considered to the extent practicable. DOE will hold public hearings as follows:

Golden, Colorado-December 10, 1997 Los Alamos, New Mexico--December 11,1997

Augusta, Georgia-December 16, 1997 Further details on the hearings are provided under SUPPLEMENTAL INFORMATION.

SUPPLEMENTARY INFORMATION' Background

On November i9. 199S. DOE published a Notice of Intent (NOI) in the Federal Register (61 FR 58856) to prepare an EIS on the management of certain plutonium residues and scrub alloy stored at the Rocky Flats Environmental Technology Site. The plutonium residues and scrub alloy were generated as intermediate products or products resulting from the manufacture of components for nuclear

weapons. Now that nuclear weapons manufacturing and processing activities

at Rocky Flats have ceased, the plutonium residues and all o the scrub alloy currently stored at the Rocky Flats Site to address health and safety concerns raised by the Defense Nuclear Facilities Safety Board in its Recommendation 94-i. and to prepare these materials for offsite disposal or other disposition, while supporting site closure and limiting worker exposure and waste production. The proposed action is to process the plutonium residues and scrub allay in preparation for disposal or other disposition.

The materials addressed in this draft EIS include approximately 40% of the 106,600 kg (235,000 lb) existing inventory of Rocky Flats plutonium residues, and also the entire inventory of Rocky Flats scrub alloy. The covered material consists of 42.200 kg (93,000 lb) of plutonium residues (containing 2,600 kg (5,730 lb) of plutonium) and 700 kg (1,540 lb) of scrub alloy [containing 200 kg (440 lb) of plutonium]. The remaining Rocky Flats plutonium re idue3 will meet the requirements for disposal after being processed as discussed in DOE's Solid Residues Environmental Assessment (DOEIEA-1120, April 1996), and are not addressed in the draft EIS.

Alternatives Considered

The draft EIS evaluates reasonable processing alternatives that could be applied in the 1998-2004 time frame. Three alternatives are analyzed for each residue category and the scrub alloy:

Alternative I-No Action
Alternative 2-Procewing without Plutonium Separation
Alternative 3-Frocessing with Plutonium Separation

Any plutonium separated from the plutonium residues and scrub alloy as a result of the proposed action would be placed into safe and secure storage pending disposition by immobilization or conversion to mixed-oxide fuel in accordance with decisions to be made under DOE's Surplus Plutonium Disposition Environmental Impact Statement (62 FR 28009, May 22, 1997). The processing technology options for each material category analyzed in the draft EIS include those that can be accomplished at Rocky Flats, and those for plutonium separation only that can be accomplished offsite at the Savannah River Site, near Aiken, South Carolina, and/or at Los Alamos National Laboratory in Los Alamos, New Mexico.

Invitation To Comment

The public is invited to submit written and oral comments on any or all portions of the draft ETS. DOE especially welcomes comments on the following topics: the technical adequacy of the document. the alternatives that DOE should select upon completion of the document-, and the criteria that DOE should use in making these selections.

Public Hearings and Procedures

DOE will hold three public hearings according to the schedule provided at the end of this section. The hearing format will provide for collection of written and oral comments and will enable the public to discuss issues and concerns with DOE staff. Participants who wish to speak at the hearings are asked to register in advance by calling toll-ftee- 1-800-736-3282. Requests to speak that have not been submitted prior to the hearings we be handled in the order in which they are received during the meetings. DOE's responses to comments received during the public comment period will be presented in the final EIS.

An independent facilitator will open the hearings by explaining the format to be followed. The hearings will be conducted in a manner that is intended to foster a cordial, open and mutually beneficial dialog between the participants and the DOE representatives. In the interests of achieving this goal, DOE representatives may ask clarifying questions regarding statements made at the hearings, will answer questions from the public, and may comment on statements made by other hearing participants.

To ensure that everyone has an adequate opportunity to speak, each speaker at a public hearing will be allotted 5 minutes. Depending on the number of persons who request an opportunity to speak, more time may be allowed for speakers representing several parties or organizations. Persons wishing to speak on behalf of organizations should identify the organization in their request Written comments will also be accepted at the hearings, and speakers at public hearings are encouraged to provide written versions of their oral comment for the record.

DOE will take notes and prepare a summary f the oral comment received during the public hearings.

Schedule of Public Hearings

December 10, 1997-Roci-v Flats Environmental Technology Site, 4ear Golden, CO

6:00-9:00 pm mountain time. Rocky Flats Environmental Technology Site, Building 060 (outside of the West Gate of @he Rocky Flats Environmental Technology Site), State Highway 93, Golden, CO 8(r4o2. Contact: Michael Konczal. 303-966-7095.

December 11, 1997-tns Alamos, NM 6:00-9:00 pm mountain time, Los Alamos Area Office, 528--35th Street, Roams 100/129, Los Alamos, NM 87544. Contact.-Bob Promell, 505--665-4411.

December 16, 1997-A ugusta, Georgia 6:00-9:00 pm eastern time. Ramada Plaza Hotel, Grove Room, 640 Broad Street, Augusta, CA 30901. Contact: Drew Grainger, $07-725-1523.

Public Reading Rooms where the draft EIS is available-

U.S. Department of Energy. Freedom of Information Room, Room IF,190. Forrestal Building, 1000 Independence Avenue, SW, Washington, DC 20585. Telephone 202-585--6020.

Lawrence Livermore National Laboratory, East Gate Visitors Center, Greenville Road, Livermore, CA 94550. Telephone 5ID-424-4026.

California State University. NorOuidge/Oviatt Library, 18111 Nordhoff Street, Northridge, CA 91330. Telephone 818--677-2274.

U.S. Depart3nent of Energy, Oakland Operations Office, Public Reading Room, Energy Information Center, 8th Floor, 1301 Clay Street, Oakland. CA 94612. Telephone 510--63'7-1762.

Simi Valley Public Library, 2629 Tapa Canyon Road, Simi Valley, CA 93063. Telephone 805-525-2384.

Platt Brand Public Librwy, 23600 Victory Boulevard. Woodland I-lills, CA 91367. Telephone 818--887-0160.

Standley Lake Public Reading Room, 8485 Kipling Street, Arvada, CO 80005. Telephone 303-456-0806.

University of Colorado Libraries, Government Publications, Campus Box 184. Boulder. CO 80309. Telephone 303-492-1411.

U.S. EPA Superfund Records Center. 999 18th Street. 5th Floor Denver, CO 80202. Telephone 303-312-6473.

Colorado Department of Public Health and Environment, Information Center, 4300 Cherry Creek Drive South. Denver, CO 80222. Telephone 303--692-2037.

Colorado State University, Document Department, The Libraries, Fort Collins, CO 80523. Telephone 970-491-1101.

U.S. Department of Energy. Golden Field Office, Public Reading Room,

14869 Denver West Parkway. Golden, CO 80401. Telephone 303-275-4742. Colorado School of Mines, Arthur Lakes Library, 1400 Illinois Street. Golden, CO ao4oi. Telephone 303-273- 3000.

Rocky Flats Citizens Advisory Board, Public Reading Room, 9035 Wadsworth Avenue, Suite 2250, Westminster, CO 80021. Telephone 303-420--7855.

Rocky Flats Public Reading Room, Front Range Community College Library, 3645 West 112th Avenue, Westininster, CO 80030. Telephone 303-459-4435.

Pullen Public Library. 100 Decatur Street, SE, Atlanta, GA 30303. Telephone 40"51-2185.

Georgia Institute of Technology, Bobby Dodd Way, Atlanta. GA 30332. Telephone 404--894-4519.

Reese Ubrary-Augusta College, 2500 Walton Way, Augusta, GA 30904. Telephone 706-737-1744.

Chatham Effingham Library. 2002 Bull Street, Savannah, GA 314la9. Telephone 912-234-5127.

Argonne National Laboratory, Technical Library, P.O. Box 2528, Idaho Falls, ID 83403. Telephone 208-533- 7341.

University of Illinois at Chicago, U.S. Department of Energy, Public Document Room, 3rd Floor, 801 S. Morgan Street, Chicago, EL 60607. Telephone 312-996- 2738.

East St. Louis Public Library, 405 North 9& Street, East St. Louis, IL 62201. Telephone 618-747-7260.

Lincoln Public Library. 326 South 7th Street, Springfield, IL 62701. Telephone 217-753-4900.

Salina Public Library, 301 West Elm. Salina, KS 67401. Telephone 785--825- 4524.

Washburn Law Library, 1700 College, Topeka. KS 66621. Telephone 913-231- 1010.

U.S. Department of Energy, Environmental Information Center, 175 Freedom Boulevard, Kevil, KY 42053. Telephone 502-462-2550.

Paducah Public Library, 555 Washington Street, Paducah, KY 42001. Telephone 502-442-2510.

Mid Continent Public Library, Blue Ridge Branch, 9253 Blue Ridge Boulevard, Kansas City, MO 64138. Telephone 816-761-3382.

St. Louis Public Library, 1301 Olive Street, St. Louis, MO 63103. Telephone 314-241-2288.

Scenic Regional Library, 308 Hawthorn Drive, Union. MO 63084. Telephone 314-583-3224.

Albuquerque Operations Office, National Atomic Museum, 20358 Wyoming Boulevard SE, Kirtland Air Force Base, Albuquerque, KM 67185. Telephone 505-845-4378.

U.S. Department of Energy, Technical Vocation Institute, Main Campus Library, 525 Buena Vista SE, Albuquerque, KM 87106. Telephone 505-845-4378.

U.S. Department of Energy, FOIA Reading Room, 4700 Morris NE, Albuquerque. KM 6711 1. Telephone 505-224-5731.

Los Almost Community Reading Room. 1350 Central, Suite 101, Los Almost, NM 67544. Telephone 505- 665-2127.

New Mexico State Library, 325 Don Gaper, Santa Fe, NM 87503. Telephone 505--827-3800.

U.S. Department of Energy. Public Reading Room, Gregg Graniteville Library, 171 University Parkway. Aiken, SC 29801. Telephone 803--641-3465.

County Library, 404 King Street, Charleston, SC 29403. Telephone 803- 723-1645.

South Carolina State Library, 1500 Senate Street, Columbia, SC 29211. Telephone 803-734-8666.

Orangeburg County Free Library. 510 Louis Street, NE, Orangeburg, SC 291 IS. Telephone 803-531-4636.

Lawson.McGhee Public Library, 500 West Church Avenue, Knoxville, TN 37902. Telephone 615-544-5750.

Nashville Public Library, 225 Polk Avenue, Nashville, TN 37203. Telephone 615-862-5800.

U.S. Department of Energy, Public Reading Room, Oak Ridge Operations Office, 55 Jefferson Circle, Room 1123, Oak Ridge, TN 37831. Telephone 615- 576-1216.

Issued in Washington, D.C., November 20. 1997.

David G. Huzienga,

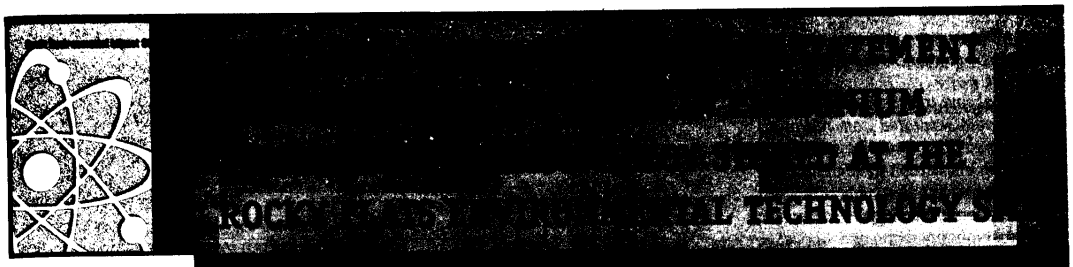
ActinSDeputyAssistant SecretaryforNuclea@ Material and Facility Stabilization, Office of Environmental Management.

[FR Doc. 97-30957 Filed 11-2"7; 8:45 ami

IULJUNG CODE 6450-M-P

Appendix A

Factsheet

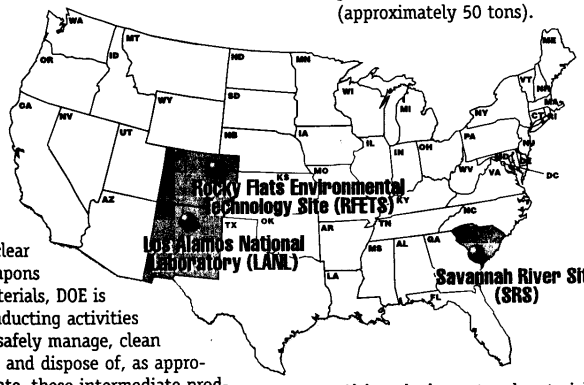


The National Environmental Policy Act of 1969 (NEPA) requires the preparation of an Environmental Impact Statement (EIS) for major Federal actions that may significantly affect the quality of the environment. An Environmental Impact Statement looks at both the short-term and long-term effects of the proposed actions.

The Department of Energy has prepared a *Draft Environmental Impact Statement on Management of Certain Plutonium Residues and Scrub Alloy Stored at the Rocky Flats Environmental Technology Site*. This document analyzes alternatives for processing these plutonium bearing materials to address health and safety issues raised by the Defense Nuclear Facilities Safety Board, and to prepare the materials for disposal or other disposition. Some alternatives would involve transporting some of the plutonium residues and scrub alloy to the Savannah River Site in South Carolina and/or to the Los Alamos National Laboratory in New Mexico during the 1998-2004 timeframe.

Background

During the Cold War era, the Department of Energy (DOE) and its predecessor agencies produced materials for use in nuclear weapons. During these manufacturing and production activities, several intermediate products were generated, some of which remain in storage at various DOE sites. Now that the Cold War is over and the United States has ceased production of nuclear weapons materials, DOE is conducting activities to safely manage, clean up, and dispose of, as appropriate, these intermediate products and byproducts.



Sites where certain Rocky Flats plutonium residues and scrub alloy could be processed

Among the intermediate products requiring proper management and preparation for disposal or other disposition are the plutonium residues and scrub alloy currently stored at the Rocky Flats Environmental Technology Site (Rocky Flats), located near Golden, Colorado. Approximately 42,200 kilograms (kg) of plutonium residues (containing 2,600 kg of plutonium) and 700 kg of scrub alloy (containing 200 kg of plutonium) require processing prior to disposal as transuranic waste at the Waste Isolation Pilot Plant, located in Carlsbad, New Mexico, or other disposition to address health and safety issues raised by the Defense Nuclear Facilities Safety Board in their Recommendation 94-1. This is equivalent to about 95,000 pounds of plutonium residues and scrub alloy (approximately 50 tons).

Although these stored materials are not directly usable in nuclear weapons, they remain a potential target for theft as a source of plutonium for use in nuclear weapons or other devices. Processing is also required to convert these materials into a form that is suitable for disposal or other disposition.

Management Alternatives Analyzed in the Draft EIS

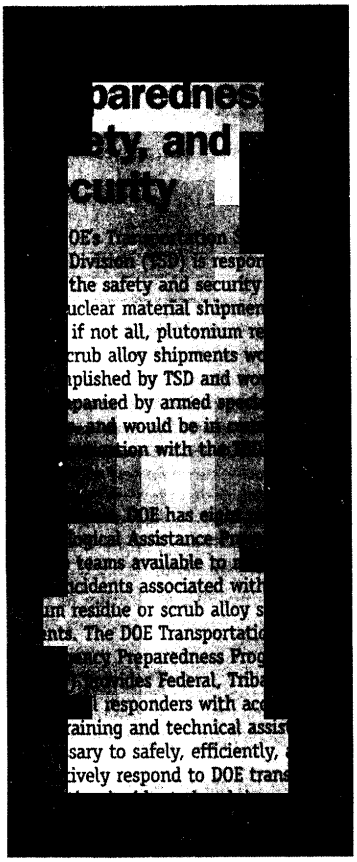
The processing alternatives evaluated for the various types of plutonium residues and the scrub alloy include:

- **No action**—*continue current stabilization activities at Rocky Flats for continued onsite storage. However, the residues and scrub alloy may be left in a form that is unsuitable for disposal or other disposition.*
- **Processing without separating the plutonium from the residues and scrub alloy**—*includes immobilization and dilution technologies, with all processing taking place at Rocky Flats. The materials would then be suitable for disposal at the Waste Isolation Pilot Plant.*
- **Processing with separation of the plutonium from the residues and scrub alloy**—*includes various plutonium separation techniques. Onsite processing is evaluated at Rocky Flats for most of the residues and scrub alloy; offsite processing is evaluated at the Savannah River Site and at Los Alamos National Laboratory for certain types of*

(Alternatives continued on page 2)

Alternatives
(continued from page 1)

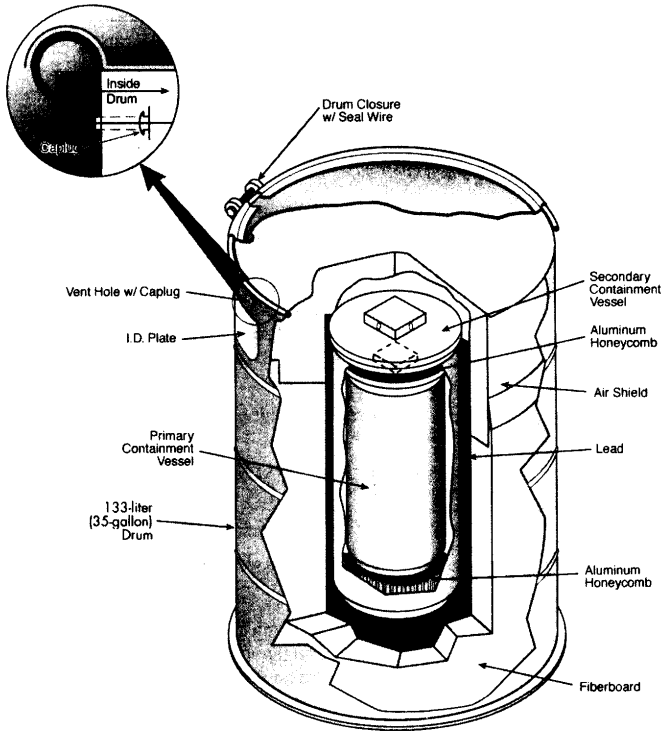
residues and the scrub alloy. Any plutonium separated from residues and scrub alloy would be stored pending disposition in compliance with decisions to be made after completion of the Surplus Plutonium Disposition Environmental Impact Statement described in a Notice of Intent issued in the Federal Register on May 22, 1997 (62 FR 28009). During storage, any separated plutonium would be protected through use of the same safeguards and security measures being used to protect the much larger amount of plutonium already in DOE's inventory. In accordance with existing DOE policy, any plutonium separated under this EIS would not be used in nuclear weapons.



Containment and Shipment of Plutonium Residues and Scrub Alloy

The alternatives evaluated in the EIS include possible shipments from Rocky Flats to the Savannah River Site and/or the Los Alamos National Laboratory from approximately 1998 to 2004. Offsite shipments of plutonium residues and scrub alloy would be made using "Type B" containers, which are authorized by DOE and used in accordance with Department of Transportation regulations. Type B containers have been designed to minimize the possibility of dispersal, radiation, and criticality, and are tested under normal and accident conditions.

Prior to shipment, preprocessing and repackaging will occur at Rocky Flats. Under all of the alternatives evaluated in the Draft EIS, the maximum number of shipments to the Savannah River Site between 1998-2004 would be 208. The maximum number of shipments to the Los Alamos National Laboratory would be 62 during the 1998-2004 timeframe. Under the "preferred alternative" identified in the Draft EIS, the number of shipments would be significantly lower (up to 39 highway shipments could be made to the Savannah River Site, and up to 13 highway shipments could be made to the Los Alamos National Laboratory during the 1998-2004 timeframe).



A typical Type B container for shipments of plutonium residues and scrub alloy

Characteristics of Plutonium Residues and Scrub Alloy

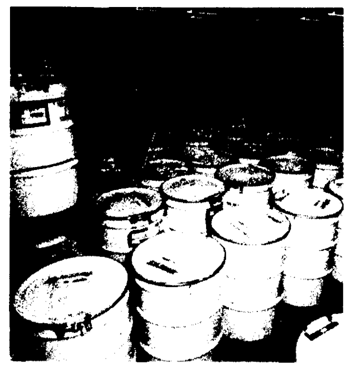
Plutonium residues and scrub alloy are "plutonium-bearing" materials. Plutonium residues are primarily in the form of salts, ash, sludge, and contamination on rags, glass, and metal pieces. Scrub alloy is a metal mixture created as an interim step in plutonium recovery, and is primarily composed of magnesium, aluminum, americium, and plutonium.

Residues from processing

Packaged residues

Plutonium is a solid, heavy metal that is not readily dispersed in the air. It is not very water soluble or highly chemically reactive. Plutonium's physical characteristics allow for little absorption into the human body through ingestion or skin exposure. The most significant potential exposure is by inhalation of plutonium compounds. Once inhaled, plutonium particles stick to the lung tissue. Then the alpha radiation from the plutonium can cause lung cancer.

The overall human health risk to the public from plutonium during transportation is very low. The preprocessing/repackaging safeguards undertaken prior to shipment and the multiple layers of containment provided by containers severely limit the potential for inhalation.



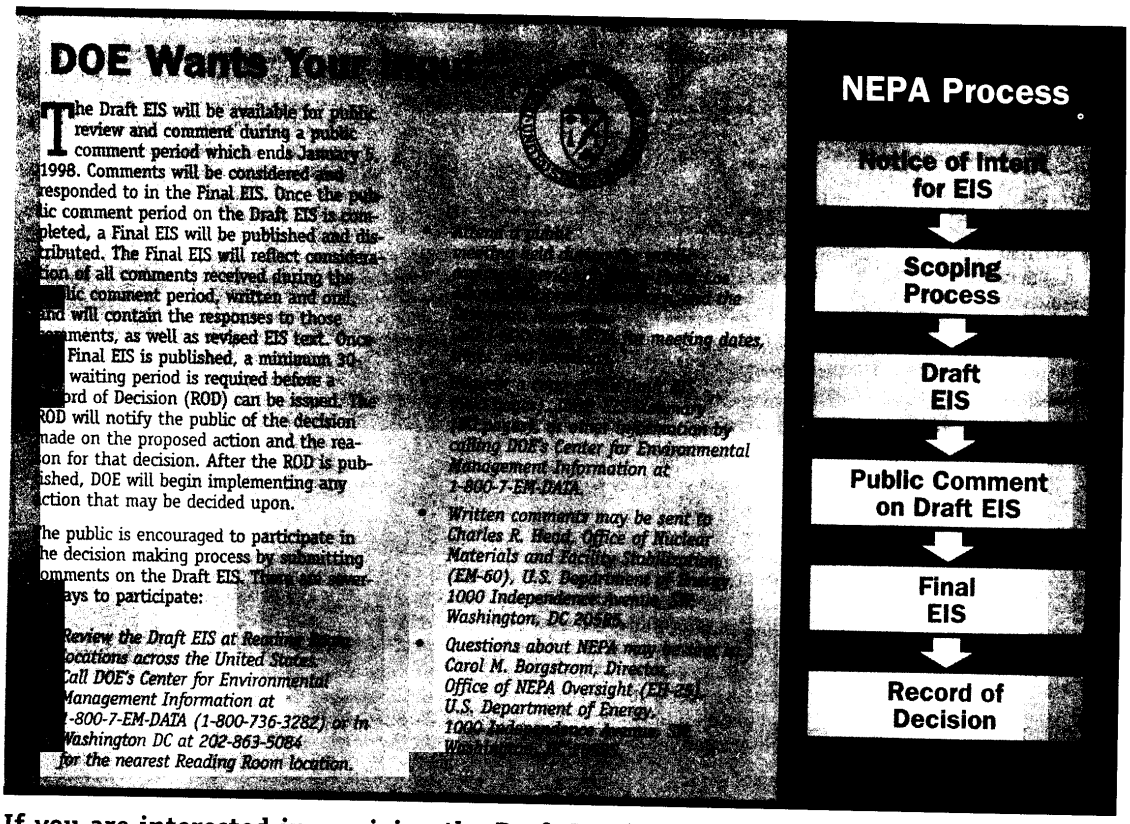
Drums in storage

Safe Transporta[illegible]

DOE has safely transported radioactive [illegible] to the Savannah [illegible] over 40 years. Over the past 25 years, [illegible] using the [illegible] mately 70 shipments of plutonium [illegible] specially used to [illegible] scrub alloy have been safely transported from [illegible] components.

Safe Secure Trailer System

The Safe Secure Trailer System uses [illegible] designed, 18-wheel tractor[illegible] ious deterrents to prevent unauthorized removal [illegible] cargo. The Trailer [illegible] has enhanced [illegible] transit safety [illegible] standards sig[illegible] applied to similar [illegible] employs specially [illegible] conducts periodic [illegible] ing transport operati[illegible] approved procedures.



If you are interested in receiving the Draft EIS (available now) or the Final EIS when it is issued, please fill out the form below.

☐ Draft Summary Only
(one volume, approximately 80 pages)

☐ Draft Full EIS
(three volumes, approximately 900 pages)

☐ Final Summary Only

☐ Final Full EIS

☐ Record of Decision
(one volume, approximately 50 pages)

NAME:

ORGANIZATION:

ADDRESS:

CITY: STATE: ZIP:

Please fax this form to:
Charles R. Head
202-586-5393

Mail to:
Charles R. Head
U.S. Department of Energy, EM-60
1000 Independence Avenue, SW
Washington, DC 20585

For more information:
Center for Environmental Management Information
1-800-7-EM-DATA (1-800-736-3282) or in Washington DC at 202-863-5084

Appendix A

Public Reading Rooms

PUBLIC READING ROOMS

A complete copy of the Final EIS may be reviewed at any of the Public Reading Rooms and Libraries Listed below.

Simi Valley Public Library
2629 Tapo Canyon Road
Simi Valley, CA 93063

Lawrence Livermore National Laboratory
East Gate Visitors Center
Greenville Road
Livermore, CA 94550

CSU Northridge/Oviatt Library
18111 Nordhoff Street
Northridge, CA 91330

U.S. Department of Energy
Oakland Operations Office
1301 Clay Street
Room EIC, 8th Floor
Oakland, CA 94612

Platt Brand Public Library
23600 Victory Boulevard
Woodland Hills, CA 91367

U.S. Department of Energy
Golden Field Office
Public Reading Room
14869 Denver West Parkway
Golden, CO 80401

U.S. EPA
Superfund Records Center
999 18th Street, Floor 5
Denver, CO 80202

Rocky Flats Citizens Advisory Board
Public Reading Room
9035 Wadsworth Avenue, Ste. 2250
Westminster, CO 80021

Standley Lake Public Reading Room
8485 Kipling Street
Arvada, CO 80005

Rocky Flats Public Reading Room
Front Range Community College Library
3645 W. 112th Avenue
Westminster, CO 80030

University of Colorado Libraries
Government Publications
Campus Box 184
Boulder, CO 80309

Colorado Department of Public Health
4300 Cherry Creek Drive South
Denver, CO 80222

Colorado State University
Document Department
The Libraries
Fort Collins, CO 80523

Colorado School of Mines
Arthur Lakes Library
1400 Illinois Street
P.O. Box 4029
Golden, CO 80401

Colorado State University
Library Documents Department
Ft. Collins, CO 80523

U.S. Department of Energy
1000 Independence Avenue SW
FOI Room, 1E-190, Forrestal Bldg.
Washington, DC 20585

Pullen Public Library
100 Decatur Street SE
Atlanta, GA 30303

Chatham Effingham Library
2002 Bull Street
Savannah, GA 31499

Reese Library
Augusta College
2500 Walton Way
Augusta, GA 30904

Georgia Institute of Technology
Bobby Dodd Way
Atlanta, GA 30332

Argonne National Laboratory
Technical Library
P.O. Box 2528
Idaho Falls, ID 83403

University of Illinois at Chicago
U.S. DOE Public Documents Room
801 S. Morgan Street, 3rd Floor
Chicago, IL 60607

East St. Louis Public Library
Dr. Ram Chauhan
405 North 9th Street
East St. Louis, IL 62201

Lincoln Library
Reference Department
326 South 7th Street
Springfield, IL 62701

Salina Public Library
Marc Boucher, Reference Librarian
301 West Elm
Salina, KS 67401

Washburn Law Library
1700 College
Topeka, KS 66621

Paducah Public Library
555 Washington Street
Paducah, KY 42001

U.S. DOE
Environmental Information Center
175 Freedom Boulevard
Kevil, KY 42053

Mid Continent Public Library
Blue Ridge Branch
9253 Blue Ridge Boulevard
Kansas City, MO 64138

St. Louis Public Library
1301 Olive Street
St. Louis, MO 63103
Scenic Regional Library
308 Hawthorn Drive
Union, MO 63084

Los Alamos Community Reading Room
1350 Central Avenue, Suite 101
Los Alamos, NM 87544

U.S. DOE Albuquerque Operations Office
National Atomic Museum
20358 Wyoming Boulevard SE
Kirtland Air Force Base
P.O. Box 5400
Albuquerque, NM 87185

U.S. Department of Energy
FOIA Reading Room
4700 Morris NE
Albuquerque, NM 87111

U.S. Department of Energy
Technical Vocational Institute
Main Campus Library
525 Buena Vista SE
Albuquerque, NM 87106

New Mexico State Library
325 Don Gasper
Santa Fe, NM 87503

U.S. Department of Energy
Gregg Graniteville Library
171 University Parkway
Aiken, SC 29801

County Library
404 King Street
Charleston, SC 29403

South Carolina State Library
1500 Senate Street
P.O. Box 11469

Orangeburg County Free Library
510 Louis Street NE
P.O. Box 1367
Orangeburg, SC 29116

Lawson McGhee Public Library
500 West Church Avenue
Knoxville, TN 37902

Nashville Public Library
225 Polk Avenue
Nashville, TN 37203

DOE Public Reading Room
Oak Ridge Operations Office
55 Jefferson Circle, Room 1123
Oak Ridge, TN 37831

Appendix A

Contractor Disclosure Statement

NEPA DISCLOSURE STATEMENT FOR PREPARATION OF EIS ON MANAGEMENT OF CERTAIN PLUTONIUM RESIDUES AND SCRUB ALLOYS STORED AT ROCKY FLATS

CEQ Regulations at 40 CFR 1506.5(c), which have been adopted by the DOE (10 CFR 1021), require contractors who will prepare an EIS to execute a disclosure specifying that they have no financial or other interest in the outcome of the project. The term "financial interest or other interest in the outcome of the project "for the purposes of this disclosure is defined in the March 23, 1981 guidance "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations," 46 FR 18026-18038 at Question 17a and b.

"Financial or other interest in the outcome of the project "includes" any financial benefit such as a promise of future construction or design work in the project, as well as indirect benefits the contractor is aware of (e.g., if the project would aid proposals sponsored by the firm's other clients)." 46 FR 18026-18038 at 18031.

In accordance with these requirements, the offeror and any proposed subcontractors hereby certify as follows: (check either (a) or (b) to assure consideration of your proposal).

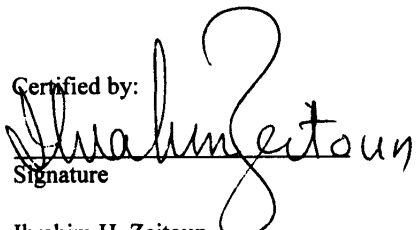
(a) __✓__ Offeror and any proposed subcontractor have no financial interest in the outcome of the project.

(b) _____ Offeror and any proposed subcontractor have the following financial or other interest in the outcome of the project and hereby agree to divest themselves of such interest prior to award of this contract.

Financial or Other Interests:

1.
2.
3.

Certified by:



Signature

Ibrahim H. Zeitoun
Name

Project Manager and Vice President

April 17, 1997
Date

Science Applications International Corporation