



The Secretary of Energy
Washington, DC 20585

August 11, 2006

The Honorable Richard B. Cheney
President of the Senate
Washington, D.C. 20510

Dear Mr. President:

We are pleased to submit to Congress the enclosed report concerning plutonium storage at our Savannah River Site, located near Aiken, South Carolina. This report was mandated by Congress in section 3183 of the Defense Authorization Act for Fiscal Year 2003 (Public Law 107-314). Section 3183 directed that the Defense Nuclear Facilities Safety Board (Board) conduct a study of the adequacy of facilities at the Savannah River Site for the storage of plutonium, and that it submit to Congress and the Secretary of Energy a report on that study. Congress further mandated in section 3183 that not later than six months after the Board's report is submitted to Congress, and every year thereafter, the Secretary and the Board each submit to Congress a report on the actions taken by the Secretary in response to proposals in the report.

The Board submitted its report, "Plutonium Storage at the Department of Energy's Savannah River Site," both to Congress and the Secretary of Energy by letters dated December 1, 2003. Our first report on the actions being taken at that time by the Department of Energy in response to the eight proposals contained in the Board's December 2003 report was submitted to Congress by letters dated June 16, 2004, and our second report was submitted by letters dated July 11, 2005. Our third report is enclosed.

Since submission of our second report, the Department has: (1) approved the Mission Need for a new Plutonium Disposition Project at the Savannah River Site; (2) initiated work on this new project; (3) begun removing unnecessary combustibles from the K-Area Material Storage facility; and (4) decided to install fire protection systems in the K-Area Material Storage facility.

If you have any further questions or need additional information, please contact me or Ms. Jill L. Sigal, Assistant Secretary for Congressional and Intergovernmental Affairs, at (202) 586-5450.

Sincerely,

A handwritten signature in black ink that reads "Samuel W. Bodman".

Samuel W. Bodman

Enclosure



Printed on recycled paper



The Secretary of Energy
Washington, DC 20585

August 11, 2006

The Honorable J. Dennis Hastert
Speaker of the U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Speaker:

We are pleased to submit to Congress the enclosed report concerning plutonium storage at our Savannah River Site, located near Aiken, South Carolina. This report was mandated by Congress in section 3183 of the Defense Authorization Act for Fiscal Year 2003 (Public Law 107-314). Section 3183 directed that the Defense Nuclear Facilities Safety Board (Board) conduct a study of the adequacy of facilities at the Savannah River Site for the storage of plutonium, and that it submit to Congress and the Secretary of Energy a report on that study. Congress further mandated in section 3183 that not later than six months after the Board's report is submitted to Congress, and every year thereafter, the Secretary and the Board each submit to Congress a report on the actions taken by the Secretary in response to proposals in the report.

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The Secretary of Energy
Washington, DC 20585

August 11, 2006

The Honorable John Warner
Chairman, Committee on Armed Services
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

We are pleased to submit to Congress the enclosed report concerning plutonium storage at our Savannah River Site, located near Aiken, South Carolina. This report was mandated by Congress in section 3183 of the Defense Authorization Act for Fiscal Year 2003 (Public Law 107-314). Section 3183 directed that the Defense Nuclear Facilities Safety Board (Board) conduct a study of the adequacy of facilities at the Savannah River Site for the storage of plutonium, and that it submit to Congress and the Secretary of Energy a report on that study. Congress further mandated in section 3183 that not later than six months after the Board's report is submitted to Congress, and every year thereafter, the Secretary and the Board each submit to Congress a report on the actions taken by the Secretary in response to proposals in the report.

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If you have any further questions or need additional information, please contact me or Ms. Jill L. Sigal, Assistant Secretary for Congressional and Intergovernmental Affairs, at (202) 586-5450.

Sincerely,

A handwritten signature in black ink that reads "Samuel W. Bodman". The signature is written in a cursive, flowing style with a large initial 'S' and 'B'.

Samuel W. Bodman

Enclosure

cc w/enclosure: The Honorable Carl Levin w/enclosure
Ranking Minority Member



The Secretary of Energy
Washington, DC 20585

August 11, 2006

The Honorable Duncan L. Hunter
Chairman, Committee on Armed Services
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

We are pleased to submit to Congress the enclosed report concerning plutonium storage at our Savannah River Site, located near Aiken, South Carolina. This report was mandated by Congress in section 3183 of the Defense Authorization Act for Fiscal Year 2003 (Public Law 107-314). Section 3183 directed that the Defense Nuclear Facilities Safety Board (Board) conduct a study of the adequacy of facilities at the Savannah River Site for the storage of plutonium, and that it submit to Congress and the Secretary of Energy a report on that study. Congress further mandated in section 3183 that not later than six months after the Board's report is submitted to Congress, and every year thereafter, the Secretary and the Board each submit to Congress a report on the actions taken by the Secretary in response to proposals in the report.

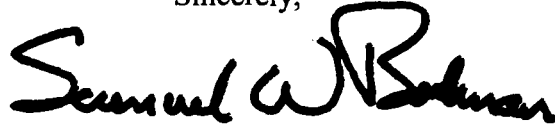
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If you have any further questions or need additional information, please contact me or Ms. Jill L. Sigal, Assistant Secretary for Congressional and Intergovernmental Affairs, at (202) 586-5450.

Sincerely,

A handwritten signature in black ink that reads "Samuel W. Bodman". The signature is written in a cursive style with a large, prominent initial "S".

Samuel W. Bodman

Enclosure

cc w/enclosure: The Honorable Ike Skelton w/enclosure
Ranking Minority Member

**Third Report to Congress
On Actions Taken by the Department of Energy
In Response to the Proposals in the
Defense Nuclear Facilities Safety Board's
December 2003 Report to Congress on
Plutonium Storage at the Savannah River Site**



Department of Energy

June 2006

Report to Congress on Actions Taken by the Department of Energy in Response to the Proposals in the Defense Nuclear Facilities Safety Board's December 2003 Report to Congress on Plutonium Storage at the Savannah River Site

Introduction

Section 3183 of the Defense Authorization Act for Fiscal Year 2003 (Public Law 107-314) directed that the Defense Nuclear Facilities Safety Board (Board) conduct a study of the adequacy of the K-Area Materials Storage (KAMS) facility and related support facilities at the Savannah River Site (SRS), such as Building 235-F, for the storage of defense plutonium and defense plutonium materials. That statute also required that the Board submit to Congress and the Secretary of Energy a report on that study, including any proposals the Board considers appropriate to enhance the safety, reliability, and functionality of KAMS. Congress further mandated in Section 3183 that not later than six months after the Board's report is submitted to Congress, and every year thereafter, the Secretary and the Board each submit to Congress a report on the actions taken by the Secretary in response to the proposals, if any, included in the report.

The Board submitted its report, "Plutonium Storage at the Department of Energy's Savannah River Site," both to Congress and the Secretary by letters dated December 1, 2003. That report presented conclusions of the Board's study, and identified several proposals for enhancing the safety, reliability, and functionality of plutonium storage facilities at SRS.

This report is the third one submitted to Congress by the Secretary of Energy on the actions being taken by the Department of Energy (DOE) in response to the proposals contained in the Board's December 2003 report on plutonium storage at SRS.

Board's Proposals

The Board's December 2003 report contains eight proposals; two on the plutonium disposition program, five on the suitability of facilities (one on KAMS and four on Building 235-F), and one on remote monitoring and retrieval of material. Those proposals are listed below.

Plutonium Disposition Program

- Expedite the development of a complete, well-considered plan for the disposition of all excess plutonium to preclude unnecessary extended storage of plutonium at SRS.
- Conduct a new study of available options for the storage of plutonium at SRS.

Suitability of Facilities

KAMS

- Install fire protection systems and eliminate unnecessary combustibles in KAMS.

Building 235-F

- Establish an acceptable safety basis for stabilization and packaging of plutonium and extended storage of plutonium in the facility.
- Conduct a systematic evaluation of the safety systems to determine needed upgrades.
- Perform a structural analysis assessing seismic adequacy measured by current acceptance criteria. Since the facility has a new extended mission, the structural analysis should be based on ground motion equivalent to that used in the analysis for a new facility at SRS.
- Decontaminate unused process cells.

Remote Monitoring and Retrieval of Material

- Develop and implement validated procedures for the handling and intrasite shipment of plutonium containers, including damaged containers.

Status of Actions Taken by DOE in Response to the Board's Proposals

Plutonium Disposition Program

Board Proposal: Expedite the development of a complete, well-considered plan for the disposition of all excess plutonium to preclude unnecessary extended storage of plutonium at SRS.

DOE Actions: In order to preclude unnecessary extended storage of plutonium at SRS, DOE plans to establish a disposition path for all plutonium at the site. In its June 2005 second annual report to Congress on SRS plutonium storage, the Board stated it believes the majority of the excess plutonium could be dispositioned through use of the MOX facility and that any remainder could be disposed of through the high level waste system.

The Mission Need or Critical Decision-0 (CD-0), for a new Plutonium Disposition Project at SRS for plutonium without an identified disposition path was approved September 6, 2005, by the Deputy Secretary. The CD-0 package was prepared pursuant to DOE Order 413.3, "Program and Project Management for the Acquisition of Capital Assets." This Order describes the disciplined process that DOE uses for managing capital projects and an appropriate National Environmental Policy Act (NEPA) review will be performed as part of the project. The Department's fiscal year 2006 budget includes \$10 million for

conceptual design for the new project, and work has begun. During the coming year, the Department will select a preferred technology alternative for disposing of plutonium not suitable for use as Mixed-Oxide (MOX) fuel and begin the conceptual design. This potential new plutonium disposition capability, together with the planned MOX facility and utilization of the site's existing H-Canyon facilities, would ensure that surplus plutonium stored at SRS has an identified disposition path out of South Carolina.

Board Proposal: Conduct a new study of available options for the storage of plutonium at SRS.

DOE Actions: The Department completed an update of the previous study of SRS plutonium storage in July 2004, and subsequently decided to: (1) utilize only K-Area for storage of plutonium, and for future stabilization and packaging operations; and (2) to deinventory Building 235-F by the end of 2006. K-Area has sufficient capacity to accommodate storage of all DOE's surplus non-pit plutonium, and is considered by both the Department and the Board to be a robust facility that does not require significant upgrades. As a result, in its June 2005 second annual report to Congress on SRS plutonium storage, the Board stated that the study as originally proposed is no longer necessary, but they believe the Department should consider whether a new facility is economically viable. Since the Board stated that the study as originally proposed is no longer necessary, and the economic viability of a new facility is not a safety issue when dealing with plutonium storage, this proposal is considered closed.

Suitability of Facilities

KAMS

Board Proposal: Install fire protection systems and eliminate unnecessary combustibles in KAMS.

DOE Actions: Removal of the cable combustible load in the actuator tower above the KAMS facility has been initiated and will be completed by September 30, 2006, thus eliminating unnecessary combustibles. Additionally, based on its decision to utilize only K-Area for future plutonium storage and stabilization and packaging operations, the Department has decided to install fire suppression equipment in the Neutron Multiplicity Counting Room in KAMS and to install fire detection equipment throughout KAMS at the earliest opportunity.

Building 235-F

Board Proposal: Establish an acceptable safety basis for stabilization and packaging of plutonium and extended storage of plutonium in the facility.

DOE Actions: Based on its decision to utilize only K-Area for storage of plutonium and for future stabilization and packaging operations and to deinventory Building 235-F by the end of 2006, the Department stated in its June 2005 second annual report to Congress on SRS plutonium storage that all Board proposals related to Building 235-F were considered closed. In its June 2005 second annual report to Congress, the Board stated that in light of DOE's decision, the Board's proposals for enhancing the safety and reliability of this facility are no longer applicable to the extended storage mission.

Board Proposal: Conduct a systematic evaluation of the safety systems to determine needed upgrades.

DOE Actions: All proposals related to Building 235-F in the Board's December 2003 report to Congress on plutonium storage at SRS are considered closed, as stated above.

Board Proposal: Perform a structural analysis assessing seismic adequacy measured by current acceptance criteria. Since the facility has a new extended mission, the structural analysis should be based on ground motion equivalent to that used in the analysis for a new facility at SRS.

DOE Actions: All proposals related to Building 235-F in the Board's December 2003 report to Congress on plutonium storage at SRS are considered closed, as stated above.

Board Proposal: Decontaminate unused process cells.

DOE Actions: All proposals related to Building 235-F in the Board's December 2003 report to Congress on plutonium storage at SRS are considered closed, as stated above. (Note that the holdup material in the process cells will be removed or immobilized as part of the decontamination and decommissioning effort that will take place following deinventory of Building 235-F).

Remote Monitoring and Retrieval of Material

Board Proposal: Develop and implement validated procedures for the handling and intrasite shipment of plutonium containers, including damaged containers.

DOE Actions: In its June 2004 first annual report to Congress on SRS plutonium storage, the Board stated that DOE has completed all necessary actions concerning this proposal and this action is considered closed.