

107TH CONGRESS
2^D SESSION

S. 2453

To provide for the disposition of weapons-usable plutonium at the Savannah River Site, South Carolina.

IN THE SENATE OF THE UNITED STATES

MAY 2, 2002

Mr. THURMOND (for himself and Mr. ALLARD) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

To provide for the disposition of weapons-usable plutonium at the Savannah River Site, South Carolina.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. FINDINGS.**

4 Congress makes the following findings:

5 (1) In September 2000, the United States and
6 the Russian Federation signed a Plutonium Manage-
7 ment and Disposition Agreement by which each
8 agreed to dispose of 34 metric tons of weapons-
9 grade plutonium.

1 (2) The agreement with Russia is a significant
2 step toward safeguarding nuclear materials and pre-
3 venting their diversion to rogue states and terrorists.

4 (3) The Department of Energy plans to dispose
5 of 34 metric tons of weapons-grade plutonium of the
6 United States before the end of 2019 by converting
7 the plutonium to a mixed-oxide fuel to be used in
8 commercial nuclear power reactors.

9 (4) The Department has formulated a plan for
10 implementing the agreement with Russia through
11 construction of a mixed-oxide fuel fabrication facility
12 and a pit disassembly and conversion facility at the
13 Savannah River Site.

14 (5) The United States and the State of South
15 Carolina have a compelling interest in the safe,
16 proper, and efficient operation of the plutonium dis-
17 position facilities at the Savannah River Site. The
18 MOX facility will also be economically beneficial to
19 the State of South Carolina, and that economic ben-
20 efit will not be fully realized unless the MOX facility
21 is built.

22 (6) The State of South Carolina desires to en-
23 sure that all plutonium transferred to the State of
24 South Carolina is stored safely; that the full benefits
25 of the MOX facility are realized as soon as possible;

1 and, specifically, that all defense plutonium or de-
2 fense plutonium materials transferred to the Savan-
3 nah River Site either be processed or be removed ex-
4 peditiously.

5 **SEC. 2. DEFINITIONS.**

6 (a) **MOX PRODUCTION OBJECTIVE DEFINED.**—The
7 term “MOX production objective” means production at
8 the MOX facility of mixed-oxide fuel from defense pluto-
9 nium and defense plutonium materials at an average rate
10 equivalent to not less than one metric ton of mixed-oxide
11 fuel per year. The average rate shall be determined by
12 measuring production at the MOX facility from the date
13 the facility is declared operational to the Nuclear Regu-
14 latory Commission through the date of assessment.

15 (b) **MOX FACILITY DEFINED.**—The term “MOX fa-
16 cility” means the mixed-oxide fuel fabrication facility at
17 the Savannah River Site, Aiken, South Carolina.

18 (c) **DEFENSE PLUTONIUM AND DEFENSE PLUTO-**
19 **NIUM MATERIALS DEFINED.**—The term “defense pluto-
20 nium or defense plutonium materials” means weapons-us-
21 able plutonium.

22 **SEC. 3. DISPOSITION OF WEAPONS-USABLE PLUTONIUM AT**
23 **SAVANNAH RIVER SITE, SOUTH CAROLINA.**

24 (a) **PLAN FOR CONSTRUCTION AND OPERATION OF**
25 **MOX FACILITY.**—

1 (1) Not later than February 1, 2003, the Sec-
2 retary of Energy shall submit to Congress a plan for
3 the construction and operation of the MOX facility.

4 (2) The plan under paragraph (1) shall
5 include—

6 (A) a schedule for construction and oper-
7 ations so as to achieve, as of January 1, 2009,
8 and thereafter, the MOX production objective,
9 and to produce 1 metric ton of mixed oxide fuel
10 by December 31, 2009, and

11 (B) a schedule of operations of the MOX
12 facility designed so that 34 metric tons of de-
13 fense plutonium and defense plutonium mate-
14 rials at the Savannah River Site will be proc-
15 essed into mixed oxide fuel by January 1, 2019.

16 (3)(A) Not later than February 15 each year,
17 beginning in 2004 and continuing for as long as the
18 MOX facility is in use, the Secretary shall submit to
19 Congress a report on the implementation of the plan
20 required by paragraph (1).

21 (B) Each report under subparagraph (A) for
22 years before 2010 shall include—

23 (i) an assessment of compliance with the
24 schedules included with the plan under para-
25 graph (2); and

1 (ii) a certification by the Secretary whether
2 or not the MOX production objective can be
3 met by January 2009.

4 (C) Each report under subparagraph (A) for
5 years after 2009 shall—

6 (i) address whether the MOX production
7 objective has been met; and

8 (ii) assess progress toward meeting the ob-
9 ligations of the United States under the Pluto-
10 nium Management and Disposition Agreement.

11 (D) For years after 2017, each such report
12 shall also include an assessment of compliance with
13 the MOX production objective and, if not in compli-
14 ance, the plan of the Secretary for achieving one of
15 the following:

16 (i) Compliance with such objective; and

17 (ii) Removal of all remaining defense plu-
18 tonium and defense plutonium materials from
19 the State of South Carolina.

20 (b) CORRECTIVE ACTIONS.—

21 (1) If a report under subsection (a)(3) indicates
22 that construction or operation of the MOX facility is
23 behind the applicable schedule under subsection
24 (a)(2) by 12 months or more, the Secretary shall
25 submit to Congress, not later than August 15 of the

1 year in which such report is submitted, a plan for
2 corrective actions to be implemented by the Sec-
3 retary to ensure that the MOX facility project is ca-
4 pable of meeting the MOX production objective by
5 January 1, 2009.

6 (2) If a plan is submitted under paragraph (1)
7 in any year after 2008, the plan shall include correc-
8 tive actions to be implemented by the Secretary to
9 ensure that the MOX production objective is met.

10 (3) Any plan for corrective actions under para-
11 graph (1) or (2) shall include establish milestones
12 under such plan for achieving compliance with the
13 MOX production objective.

14 (4) If before January 1, 2009, the Secretary
15 determines that there is a substantial and material
16 risk that the MOX production objective will not be
17 achieved by 2009 because of a failure to achieve
18 milestones set forth in the most recent corrective ac-
19 tion plan under this subsection, the Secretary shall
20 suspend further transfers of defense plutonium and
21 defense plutonium materials to be processed by the
22 MOX facility until such risk is addressed and the
23 Secretary certifies that the MOX production objec-
24 tive can be met by 2009.

1 (5) If after January 1, 2009, the Secretary de-
2 termines that the MOX production objective has not
3 been achieved because of a failure to achieve mile-
4 stones set forth in the most recent corrective action
5 plan under this subsection, the Secretary shall sus-
6 pend further transfers of defense plutonium and de-
7 fense plutonium materials to be processed by the
8 MOX facility until the Secretary certifies that the
9 MOX production objective can be met.

10 (6)(A) Upon making a determination under
11 paragraph (4) or (5), the Secretary shall submit to
12 Congress a report on the options for removing from
13 the State of South Carolina an amount of defense
14 plutonium or defense plutonium materials equal to
15 the amount of defense plutonium or defense pluto-
16 nium materials transferred to the State of South
17 Carolina after April 15, 2002.

18 (B) Each report under subparagraph (A) shall
19 include an analysis of each option set forth in the
20 report, including the cost and schedule for imple-
21 mentation of such option, and any requirements
22 under the National Environmental Policy Act of
23 1969 (42 U.S.C. 4321 et seq.) relating to consider-
24 ation or selection of such option.

1 (C) Upon submittal of a report under para-
2 graph (A), the Secretary shall commence any anal-
3 ysis that may be required under the National Envi-
4 ronmental Policy Act of 1969 in order to select
5 among the options set forth in the report.

6 (c) CONTINGENT REQUIREMENT FOR REMOVAL OF
7 PLUTONIUM AND MATERIALS FROM SAVANNAH RIVER
8 SITE.—If the MOX production objective is not achieved
9 as of January 1, 2009, the Secretary shall, consistent with
10 the National Environmental Policy Act of 1969 and other
11 applicable laws, remove from the State of South Carolina,
12 for storage or disposal elsewhere—

13 (1) not later than January 1, 2011, not less
14 than 1 metric ton of defense plutonium or defense
15 plutonium materials; and

16 (2) not later than January 1, 2017, an amount
17 of defense plutonium or defense plutonium materials
18 equal to the amount of defense plutonium or defense
19 plutonium materials transferred to the Savannah
20 River Site between April 15, 2002 and January 1,
21 2017, but not processed by the MOX facility.

22 (d) ECONOMIC AND IMPACT ASSISTANCE.—

23 (1) If the MOX production objective is not
24 achieved as of January 1, 2011, the Secretary shall
25 pay to the State of South Carolina each year begin-

1 ning on or after that date through 2016 for eco-
2 nomic and impact assistance an amount equal to
3 \$1,000,000 per day until the later of—

4 (A) the passage of 100 days in such year;

5 (B) the MOX production objective is
6 achieved in such year; or

7 (C) the Secretary has removed from the
8 State of South Carolina in such year at least 1
9 metric ton of defense plutonium or defense plu-
10 tonium materials.

11 (2)(A) If the MOX production objective is not
12 achieved as of January 1, 2017, the Secretary shall
13 pay to the State of South Carolina each year begin-
14 ning on or after that date through 2024 for eco-
15 nomic and impact assistance an amount equal to
16 \$1,000,000 per day until the later of—

17 (i) the passage of 100 days in such year;

18 (ii) the MOX production objective is
19 achieved in such year; or

20 (iii) the Secretary has removed from the
21 State of South Carolina an amount of defense
22 plutonium or defense plutonium materials equal
23 to the amount of defense plutonium or defense
24 plutonium materials transferred to the Savan-
25 nah River Site between April 15, 2002, and

1 January 1, 2017, but not processed by the
2 MOX facility.

3 (B) Nothing in this paragraph may be con-
4 strued to terminate, supersede, or otherwise affect
5 any other requirements of this section.

6 (3) The Secretary shall make payments, if any,
7 under this subsection, from amounts authorized to
8 be appropriated to the Department of Energy.

9 (4) If the State of South Carolina obtains an
10 injunction that prohibits the Department from tak-
11 ing any action necessary for the Department to meet
12 any deadline specified by this subsection, that dead-
13 line shall be extended for a period of time equal to
14 the period of time during which the injunction is in
15 effect.

16 (e) FAILURE TO COMPLETE PLANNED DISPOSITION
17 PROGRAM.—If on July 1 each year beginning in 2020 and
18 continuing for as long as the MOX facility is in use, less
19 than 34 metric tons of defense plutonium or defense pluto-
20 nium materials have been processed by the MOX facility,
21 the Secretary shall submit to Congress a plan for—

22 (1) completing the processing of 34 metric tons
23 of defense plutonium and defense plutonium mate-
24 rial by the MOX facility; or

1 Record of Decision of the Department for fissile materials
2 disposition.

3 (b) Not later than one year after the date of the en-
4 actment of this Act, the Defense Nuclear Facilities Safety
5 Board shall submit to Congress and the Secretary a report
6 on the study conducted under paragraph (1).

7 (c) The report under paragraph (2) shall—

8 (1) address—

9 (A) the suitability of KAMS, and related
10 support facilities, for monitoring and observing
11 any defense plutonium or defense plutonium
12 materials stored in KAMS;

13 (B) the adequacy of the provisions made
14 by the Department for remote monitoring of
15 such defense plutonium and defense plutonium
16 materials by way of sensors and for handling of
17 retrieval of such defense plutonium and defense
18 plutonium materials; and

19 (C) the adequacy of KAMS should such
20 defense plutonium and defense plutonium mate-
21 rials continue to be stored at KAMS after
22 2019; and

23 (2) include such recommendations as the De-
24 fense Nuclear Facilities Safety Board considers ap-

1 appropriate to enhance the safety, reliability, and
2 functionality of KAMS.

3 (d) Not later than six months after the date on which
4 the report under paragraph (2) is submitted to Congress,
5 and every year thereafter, the Secretary and the Board
6 shall each submit to Congress a report on the actions
7 taken by the Secretary in response to the recommenda-
8 tions, if any, included in the report.

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