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SENATE

{ REPORT
{ 104-301

EXTENSION OF THE URANIUM MILL TAILINGS RADIATION CONTROL ACT OF 1978

JUNE 27, 1996.—Ordered to be printed

Mr. MURKOWSKI, from the Committee on Energy and Natural
Resources, submitted the following

REPORT

[To accompany H.R. 2967]

The Committee on Energy and Natural Resources, to which was referred the Act (H.R. 2967) to extend the authorization of the Uranium Mill Tailings Radiation Control Act of 1978, and for other purposes, having considered the same, reports favorably thereon without amendment and recommends that the Act do pass.

PURPOSE OF THE MEASURE

The purpose of H.R. 2967 is to reauthorize the Uranium Mill Tailings Radiation Control Act of 1978 (P.L. 95-604, UMTRCA), which authorizes the Department of Energy (DOE) and private parties to remediate the radioactive contamination created by uranium milling activities. The measure changes the expiration date for Title I remediation from the September 30, 1996 to September 30, 1998 and makes several statutory changes to improve the operation of the program.

BACKGROUND AND NEED

The Uranium Mill Tailings Radiation Control Act (P.L. 95-604) was passed in 1978 to remediate the environmental damage created at uranium mill sites. Most of the uranium mill tailings were created as a result of Federal Government activities to secure supplies of uranium and thorium for nuclear weapons during World War II and the Cold War. The milling process takes raw uranium ore from a mine site, crushes the ore, then separates the higher grade uranium from low-grade surrounding rock and other mate-

rials. Uranium mill tailings are the uneconomical remnants of this separation process. Mill tailings are generally sand-like in appearance, and while emitting a very low level of radioactivity, comprise high volumes of material. The primary contaminant is radium, which emits radon gas.

The original Act provided for the cleanup of 22 inactive mill sites, at which nearly all the contamination resulted from activities of the Federal Government's atomic energy programs. UMTRCA also includes provisions for the Federal Government to assist with the cleanup of active mill sites at which uranium and thorium mill tailings are "commingled", that is, tailings have been generated as a result of both commercial (for ultimate end use as fuel rods in commercial nuclear reactors) and Federal Government use (typically, in U.S. strategic defense applications).

Title I sites are those abandoned and inactive sites at which the wastes were generated primarily for Federal activities. The cost of remediation at these sites is divided between the Federal Government (90 percent) and the affected State (10 percent). At Title II sites, the cost is primarily borne by the private firm owning the site, with a proportional Federal payment for the cost of remediating wastes generated for Federal activities. The original Act established 1990 as the completion date for all Title I surface activities. Due to a significant increase in the volume of tailings to be remediated and higher cleanup standards imposed since the 1978 date, both the Department of Energy's costs and time required to complete activities has been lengthened. In 1982, DOE estimated remediation costs would total \$1.7 billion. A December 1995 report by the General Accounting Office (GAO) entitled "Uranium Mill Tailings: Cleanup Continues, But Future Costs Uncertain" indicates that the current totals for remediation costs will be about \$2.3 billion. For Fiscal Year 1996, it is anticipated that DOE will spend close to the \$66 million funding request at Title I sites. For Title II sites, a total of \$42 million in Federal assistance was appropriated in Fiscal Year 1996.

The current authorization for Title I remediation activities expires on September 30, 1996. At present, however, cleanup has been completed at only 18 of the 24 Title I sites. The Department fully expects that surface-cleanup of all Title I sites will be completed by September of 1998. Without the extension provided by this Act, the cleanup at the remaining sites will not be completed. Still unresolved is the disposition of two Title I sites in the State of North Dakota, at which the State is not willing to contribute its 10 percent share of cleanup costs. At this point, DOE does not plan to remediate these sites.

There are also a number of outstanding issues surrounding the future operation of the program. The Environmental Protection Agency (EPA) only released the groundwater remediation standards for Title I sites in January of 1995. As a result, DOE has only recently begun to implement groundwater remediation at Title I sites, the total cost of which will be at least \$147 million. There are also a handful of Title I sites at which tailings were left in place under the EPA's supplemental standards for remediation. The supplemental standards allow for the waiver of environmental cleanup standards in certain circumstances, including those which would

directly produce environmental harm in excess of the resulting health benefits or which have unreasonably high costs relative to the benefits in the event that the tailings do not pose a clear present or future hazard. At the Grand Junction, Colorado site, for example, while over 2 million cubic yards of tailings were remediated, over 1 million cubic yards of material were left in place under the supplemental standards. The majority of the remaining tailings have been used as fill material in road beds and along utility corridors, where their risk to human health is minimized. However, these tailings will certainly be disturbed during future excavations for road or utility repairs. At that point, it may be prudent to dispose of these materials as required under the statute. At present, however, DOE believes it does not have the authority to re-open disposal cells to accept such wastes in the future.

LEGISLATIVE HISTORY

On February 2, 1995, Senator Brown introduced S. 341, a bill to extend the authorization of the Uranium Mill Tailings Radiation Control Act of 1978, and for other purposes. This bill was referred to the Committee on Energy and Natural Resources. Senator Campbell was added as a cosponsor on June 4, 1996.

On February 23, 1996, H.R. 2967 was introduced by Representative Schaefer in the House of Representatives, and referred to the House Committee on Commerce. The Subcommittee on Energy and Power held a hearing on H.R. 2967 on February 28, 1996. The Subcommittee approved the bill with an amendment on March 5, 1996 the Full Committee approved it, as amended, on March 13, 1996. On April 24, 1996 the measure was reported to the House with a written report (H. Rept. 104-536). The House passed the bill, as amended, on May 14, 1996.

H.R. 2967 was received in the Senate and read twice and referred to the Committee on Energy and Natural Resources on May 15, 1996. The measure was considered and ordered reported without amendment during a Committee business meeting on June 19, 1996.

COMMITTEE RECOMMENDATION AND TABULATION OF VOTES

The Senate Committee on Energy and Natural Resources, in open business session on June 19, 1996, by unanimous vote of a quorum present recommends that the Senate pass H.R. 2967 without amendment.

SECTION-BY-SECTION ANALYSIS

Section 1. Reference

This section states that references in the legislation are to be considered references to the Uranium Mill Tailings Radiation Control Act of 1978 (P.L. 95-604), except for the reference in Section 3.

Section 2. Termination, authorization

This section amends the current authorization language in two instances. First, it extends the remedial action authority for the

Department of Energy (DOE) from September 30, 1996 to September 30, 1998. Second, it authorizes DOE to continue the operation of a disposal cell at the Grand Junction Title I site for the continued acceptance of tailings from Title I sites.

DOE's Grand Junction site was initially contaminated with approximately three million cubic yards of mill tailings. The Department has completed remediation of two million cubic yards. The remaining tails have been utilized primarily as roadbed material or as fill in utility corridors, where it poses a low health risk. However, as these tailings are disturbed in the future, provision for disposal must be accommodated. Authorization for post-1998 utilization of the Cheney disposal cell, one of the Grand Junction site disposal cells which has not yet reached its capacity, will allow the Department to continue its remediation of these and other Title I tailings without the need for immediate removal of the remaining tailings. Additionally, the language authorizes DOE to utilize the Cheney cell for disposal of tailings from its Monticello, Utah site.

Section 3. Remedial action at active processing sites

This section amends portions of the Energy Policy Act of 1992 (P.L. 102-4986) which provide for the reimbursement of the Federal Government's share of Title II remediation costs. Since the passage of the Energy Policy Act, it has become apparent that the reimbursement levels provided in that statute will be insufficient to compensate many Title II site owners for the cost of the Federal portion of site remediation. As a result, the legislation increases the maximum allowable reimbursement per dry short ton of mill tailings from \$5.50 to \$6.25. Even this increased rate will not be sufficient to fully reimburse the costs of remediation at some active mining sites, as the cost of remediation varies widely due to various environmental factors. However, some Title II sites have been remediated for less than a \$6.25 per ton cost, and it is expected that DOE will not reimburse Title II site owners for more than the licensee's average per-ton cost of remediating tailings at such sites. Section 3 also increases the overall authorization levels for such reimbursement from \$270 million to \$350 million for active site uranium licensees and from \$40 million to \$65 million for thorium licensees. The combined effect increases the overall program authorization from \$310 million to \$415 million.

Section 4. Remedial action for the disposal of radioactive materials

This section authorizes DOE to eliminate the deed annotation requirement for vicinity properties if the Secretary determines that the affected State has programs in place which will adequately accomplish the notification of prospective purchasers of affected properties.

COST AND BUDGETARY CONSIDERATIONS

The following estimate of costs has been provided by the Congressional Budget Office:

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, June 26, 1996.

Hon. FRANK H. MURKOWSKI,
*Chairman, Committee on Energy and Natural Resources,
U.S. Senate, Washington, DC.*

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for H.R. 2967, an act to extend the authorization of the Uranium Mill Tailings Radiation Control Act of 1978, and for other purposes.

Enactment of H.R. 2967 would not affect direct spending or receipts. Therefore, pay-as-you-go procedures would not apply to the legislation.

If you wish further details on this estimate, we will be pleased to provide them.

Sincerely,

JUNE E. O'NEILL, *Director.*

CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

1. Bill number: H.R. 2967.
2. Bill title: An act to extend the authorization of the Uranium Mill Tailings Radiation Control Act of 1978, and for other purposes.
3. Bill status: As ordered reported by the Senate Committee on Energy and Natural Resources on June 19, 1996.
4. Bill purpose: The Uranium Mill Tailings Radiation Control Act (UMTRCA) authorizes the Department of Energy (DOE) to undertake remedial cleanup actions at inactive uranium millings sites across the country. In addition, UMTRCAA authorizes DOE to reimburse private operators of active uranium or thorium processing sites for a portion of the costs to decontaminate, decommission, and reclaim such sites. The amount of reimbursement is tied to the amount of mill tailings at each site attributable to the sale of nuclear materials to the federal government.

H.R. 2967 would increase the authorization of appropriations for remedial actions at active uranium and thorium processing sites from \$310 million to \$415 million. The legislation would also change the formula used to calculate reimbursements due to eligible operators of uranium and thorium processing sites. Section 3 would increase the ceiling on such reimbursements from \$5.50 per ton of mill tailings to \$6.25 per ton. Hence, H.R. 2976 could increase the reimbursement payments to some operators of active sites.

H.R. 2967 also would extend the authorization to continue remediation activities at inactive processing sites through 1998.

5. Estimated cost to the Federal Government: H.R. 2967 would increase the authorization of appropriations for reimbursing eligible parties for conducting remedial actions at active uranium and thorium processing sites from \$310 million to \$415 million. Since the program's inception in 1994, the Congress has appropriated about \$42 million annually for this activity. CBO estimates that continuing to fund the program at this level would be sufficient to meet the claims for reimbursements from eligible parties over the next several years. CBO also estimates that extending the author-

ization to continue remediation activities at inactive processing sites would cost \$69 million over the 1997–2000 period, assuming appropriations of \$43 million in 1997 and \$26 million in 1998. As shown in the following table, we estimate spending totaling \$412 million over the 1996–2000 period for the combination of active and inactive sites. Of this amount, \$69 million would be attributable to the authorizations in this legislation. Additional amounts would be spent after 2000 for reimbursing the costs of cleanup at active sites.

[By fiscal year, in millions of dollars]

	1996	1997	1998	1999	2000
Spending under current law:					
Estimated authorization level ¹	108	42	42	42	42
Estimated outlays	121	83	55	42	42
Proposed changes:					
Estimated authorization level		43	26		
Estimated outlays		19	27	18	5
Estimated spending under H.R. 2967:					
Estimated authorization level ¹	108	85	68	42	42
Estimated outlays	121	102	82	60	47

¹ The 1996 level is the amount appropriated for that year.

The costs of H.R. 2967 fall within budget function 270.

6. Basis of estimate: For purposes of this estimate, we assume that of the amounts authorized, sufficient sums will be appropriated over the 1997–2000 period to reimburse eligible parties. In order to be eligible for reimbursement under UMTRCA, site operators must have incurred cleanup costs before December 31, 2002, or have placed cleanup funds in escrow prior to that date. Based on information from the Department of Energy, we estimate that continued funding of this program at its current level of \$42 million annually would be sufficient to meet anticipated claims for active processing sites. If appropriations were to continue at the \$42 million annual level, as shown in the table above, the existing program authorization of \$310 million would not be exceeded until 2001.

Under current law, remediation activities at inactive uranium processing sites are authorized only until the end of 1996. Based on information from the Department of Energy, we estimate that the surface remediation program could be completed with two additional years of appropriations, as authorized by H.R. 2967.

7. Pay-as-you-go considerations: None.

8. Estimated impact on State, local, and tribal governments: The act contains no intergovernmental mandates as defined in Public Law 104–4 and would not impose direct costs on state, local, or tribal governments. The act would extend the authorization of UMTRCA, which authorizes DOE to undertake remedial cleanup actions at 24 inactive uranium millings sites, mostly in Western states. Under current law, DOE's authority to perform cleanup actions other than groundwater restoration at these sites will expire on September 30, 1996.

In order to perform a remedial action at an inactive site, DOE is required to enter into a cooperative agreement with the state in which the site is located. By law, each agreement must contain the requirement that the state pay 10 percent of the cost of the reme-

dial action. DOE estimates that states that choose to participate will pay about \$4 million over fiscal years 1997 through 2000, at which time surface remediation should be completed.

9. Estimated impact on the private sector: H.R. 2967 would impose no new private-sector mandates as defined in Public Law 104-4.

10. Previous CBO estimate: On April 5, 1996, CBO prepared a cost estimate for H.R. 2967 as ordered reported by the House Committee on Commerce on March 13, 1996. The two versions of H.R. 2967 are identical, as are the estimated costs.

11. Estimate prepared by: Federal cost estimate: Kim Cawley; State and Local government impact: Pepper Santalucia; Private-sector impact: Jean Wooster.

12. Estimate approved by: Robert A. Sunshine, for Paul N. Van de Water, Assistant Director for Budget Analysis.

REGULATORY IMPACT EVALUATION

In compliance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact which would be incurred in carrying out H.R. 2967. The bill is not a regulatory measure in the sense of imposing Government-established standards or significant economic responsibilities on private individuals and businesses. The bill extends the authorization for an ongoing Federal cleanup program conducted by the DOE and provides additional compensation to businesses of the cost of the Federal portion of site remediation.

No personal information would be collected in administering the program. Therefore, there would be no impact on personal privacy.

Little, if any additional paperwork would result from the enactment of H.R. 2967.

EXECUTIVE COMMUNICATIONS

The Committee on Energy and Natural Resources received no formal legislative reports from the DOE or other Executive agency. If any executive communications become available, the Chairman will request that they be printed in the Congressional Record for the advice of the Senate.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill H.R. 2967, as ordered reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

URANIUM MILL TAILINGS RADIATION CONTROL ACT OF 1978

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TITLE I—REMEDIAL ACTION PROGRAM

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ACQUISITION AND DISPOSITION OF LANDS AND MATERIALS

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SEC. 104. (d) In the case of each processing site designated under this title other than a site designated on Indian land, the State shall take such action as may be necessary, and pursuant to regulations of the Secretary under this subsection, to assure that any person who purchases such a processing site after the removal of radioactive materials from such site shall be notified in an appropriate manner prior to such purchase, of the nature and extent of residual radioactive materials removed from the site, including notice of the date when such action took place, and the condition of such site after such action. If the State is the owner of such site, the State shall so notify any prospective purchaser before entering into a contract, option, or other arrangement to sell or otherwise dispose of such site. The Secretary shall issue appropriate rules and regulations to require notice in the local land records of the residual radioactive materials which were located at any processing site and notice of the nature and extent of residual radioactive materials removed from the site, including notice of the date when such action took place. *For purposes of this subsection, the term "site" does not include any property described in section 101(6)(B) which is in a State which the Secretary has certified has a program which would achieve the purposes of this subsection.*

* * * * *

REMEDIAL ACTION

SEC. 108. (a)(1) The Secretary or such person as he may designate shall select and perform remedial actions at designated processing sites and disposal sites in accordance with the general standards prescribed by the Administrator pursuant to section 275 a. of the Atomic Energy Act of 1954. The State shall participate fully in the selection and performance of a remedial action for which it pays part of the cost. Such remedial action shall be selected and performed with the concurrence of the Commission and in consultation, as appropriate, with the Indian tribe and the Secretary of the Interior. *Residual radioactive material from a processing site designated under this title may be disposed of at a facility licensed under title II under the administrative and technical requirements of such title. Disposal of such material at such a site in accordance with such requirements shall be considered to have been done in accordance with the administrative and technical requirements of this title.*

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TERMINATION; AUTHORIZATION

SEC. 112. [(a) The authority of the Secretary to perform remedial action under this title shall terminate on September 30, 1996, except that the authority of the Secretary to perform groundwater restoration activities under this title is without limitation.]

(a)(1) The authority of the Secretary to perform remedial action under this title shall terminate on September 30, 1998, except that—

(A) the authority of the Secretary to perform groundwater restoration activities under this title is without limitation, and

(B) the Secretary may continue operation of this disposal site in Mesa County, Colorado (known as the Cheney disposal cell) for receiving and disposing of residual radioactive material from processing sites and of byproduct material from property in the vicinity of the uranium milling site located in Monticello, Utah, until the Cheney disposal cell has been filled to the capacity for which it was designed, or September 30, 2023, whichever comes first.

(2) For purposes of this subsection, the term “byproduct material” has the meaning given that term in section 11e.(2) of the Atomic Energy Act of 1954 (42 U.S.C. 2014(e)(2)).

* * * * *

ACTIVE OPERATIONS; LIABILITY FOR REMEDIAL ACTION

SEC. 115. (a) No amount may be expended under this title with respect to any site licensed by the Commission under the Atomic Energy Act of 1954 or by a State as permitted under section 274 of such Act at which production of any uranium product from ores (other than from residual radioactive materials) takes place. This subsection does not prohibit the disposal of residual radioactive material from a processing site under this title at a site licensed under title II or the expenditure of funds under this title for such disposal.

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THE ENERGY POLICY ACT OF 1992

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TITLE X—REMEDIAL ACTION AND URANIUM REVITALIZATION

Subtitle A—Remedial Action at Active Processing Sites

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SEC. 1001. REMEDIAL ACTION PROGRAM.

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(b) REIMBURSEMENT.—

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(2) AMOUNT.—

(A) TO INDIVIDUAL ACTIVE SITE URANIUM LICENSEES.—

The amount of reimbursement paid to any licensee under paragraph (1) shall be determined by the Secretary in accordance with regulations issued pursuant to section 1002 and, for uranium mill tailings only, shall not exceed an amount equal to ~~【\$5.50】~~ \$6.25 multiplied by the dry short tons of byproduct material located on the date of the enactment of this Act at the site of the activities of such licensee

described in subsection (a), and generated as an incident of sales to the United States.

(B) TO ALL ACTIVE SITE URANIUM LICENSEES.—Payments made under paragraph (1) to active site uranium licensees shall not in the aggregate exceed **【\$270,000,000】** *\$350,000,000*.

(C) TO THORIUM LICENSEES.—Payments made under paragraph (1) to the licensee of the active thorium site shall not exceed **【\$40,000,000】** *\$65,000,000*, and may only be made for off-site disposal.

(D) INFLATION ESCALATION INDEX.—The amounts in subparagraphs (A), (B), and (C) of this paragraph shall be increased annually based upon an inflation index. The Secretary shall determine the appropriate index to apply.

(E) ADDITIONAL REIMBURSEMENT.—

(i) DETERMINATION OF EXCESS.—The Secretary shall determine as of July 31, 2005, whether the amount authorized to be appropriated pursuant to section 1003, when considered with the **【\$5.50】** *\$6.25* per dry short ton limit on reimbursement, exceeds the amount reimbursable to the licensees under subsection (b)(2).

(ii) IN THE EVENT OF EXCESS.—If the Secretary determines under clause (i) that there is an excess, the Secretary may allow reimbursement in excess of **【\$5.50】** *\$6.25* per dry short ton on a prorated basis at such sites where the costs reimbursable under subsection (b)(1) exceed the *\$5.50* per dry short ton limitation described in paragraph (2) of such subsection.

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SEC. 1003. AUTHORIZATION OF APPROPRIATIONS.

(a) IN GENERAL.—There is authorized to be appropriated **【\$310,000,000】** *\$415,000,000* to carry out this subtitle. The aggregate amount authorized in the preceding sentence shall be increased annually as provided in section 1001, based upon an inflation index to be determined by the Secretary.

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