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NOV 15 2002

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Dear Dr. Fliegal:

Enclosed please find two copies of the U.S. Department of Energy's 2002 Status Report on Reimbursements to Licensees of Active Uranium and Thorium Processing Sites under Title X of the Energy Policy Act of 1992. The report summarizes key activities performed by the Department under the Title X Reimbursement Program during fiscal year 2002.

If you should have any questions on the report, please contact me at (301) 903-7222, or Gil Maldonado of the Department's Albuquerque Operations Office at (505) 845-4035.

Sincerely,

David E. Mathes, Leader  
Albuquerque/Nevada Team  
Small Sites Closure Office  
Office of Site Closure

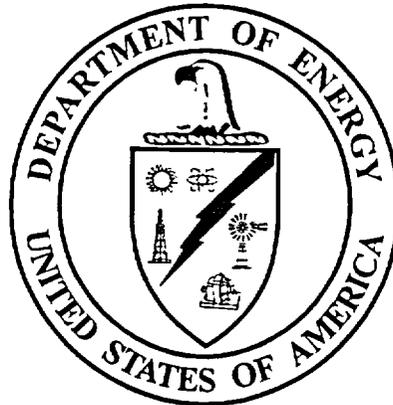
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# United States Department of Energy



## FISCAL YEAR 2002 STATUS REPORT

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### REIMBURSEMENTS TO LICENSEES OF ACTIVE URANIUM AND THORIUM PROCESSING SITES

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TITLE X OF THE ENERGY POLICY ACT OF 1992

NOVEMBER 2002

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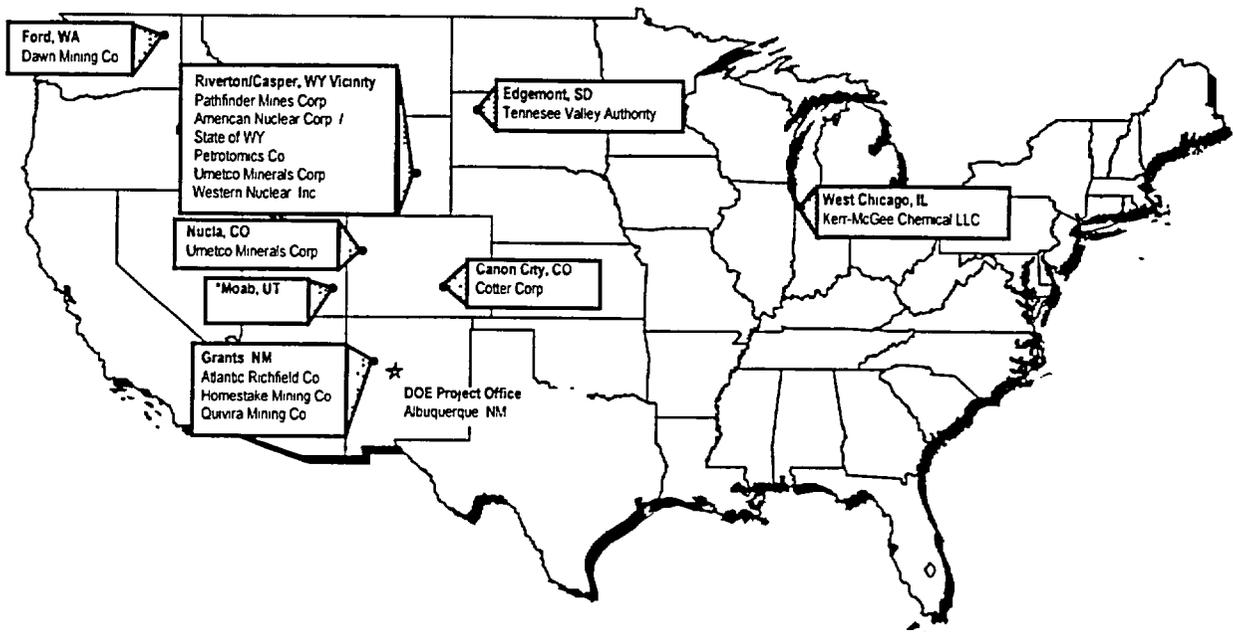
# 1. PREFACE

This U.S. Department of Energy (DOE) status report summarizes DOE activities for Fiscal Year (FY) 2002 on reimbursements to licensees of active uranium and thorium processing sites under Title X of the Energy Policy Act of 1992 (Title X). Congress authorized DOE to reimburse certain licensees (**Exhibit 1**) for costs of decontamination, decommissioning, reclamation, and other remedial action incurred to clean up mill tailings and other byproduct material generated as an incident of uranium or thorium sales to the Federal Government.

This report presents an overview of key activities performed by DOE under Title X during FY 2002. **Appendix A** of this report provides historical background on the Title X program.

## Exhibit 1.

### Eligible Licensees and Site Locations



\*The Moab mill site, formerly owned by Atlas Corp., is no longer eligible for Title X reimbursement pursuant to Public Law 106-398, which transferred responsibility for clean up of the site to DOE. DOE completed the final reimbursement for the Moab mill site in FY 2002.

## 2. LEGISLATIVE UPDATE

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Public Law 107-222, enacted on August 21, 2002, increased the Federal Government's total reimbursement authority for the thorium site (Kerr-McGee Chemical LLC-West Chicago mill site) by \$225 million (from \$140 million to \$365 million) for an aggregate authorized reimbursement amount to uranium and thorium licensees of \$715 million. The law also established a thorium reimbursement schedule not to exceed \$90 million in FY 2002, \$55 million in FY 2003, and \$20 million per year for FY 2004 through 2007, subject to the availability of appropriations. **Appendix B** contains a copy of Title X of the Energy Policy Act, as amended by Public Laws 104-259, 105-388, 106-317, and 107-222.

## 3. FY 2002 MAJOR ACTIVITIES

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DOE conducted the following activities in FY 2002:

- completed the final review of claims received in FY 2001 and the preliminary review of claims received in FY 2002;
- accepted claim submissions for payment in FY 2003 totaling \$158 million before review and application of the Federal reimbursement ratios;
- made reimbursements totaling \$17.9 million on approved claim amounts received in FY 2001 and the thorium licensee's FY 2000 unpaid approved claim balance; and
- adjusted the reimbursement ceilings for inflation, amounts paid, and the increases authorized by Public Law 107-222.

These activities are discussed below. Tables summarizing the licensees' individual approved claim amounts and payments for FY 1994 through FY 2002 are in **Appendix C**.

### 3.1 Review Results for Claims Received in FY 2001

From May 2001 through March 2002, DOE and the Defense Contract Audit Agency (DCAA) reviewed claims submitted by eleven active uranium licensees in FY 2001. DOE did not review claims from the thorium licensee in FY 2001 because reimbursements to that licensee were completed in 2001 under the then-existing thorium reimbursement authority of \$140 million, as adjusted for inflation.

Licensees' claims totaled \$26.8 million before review and application of the Federal reimbursement ratios. Of this amount, DOE approved \$26.2 million; disallowed \$0.9 million because the claimed costs did not meet the reimbursement criteria in 10 CFR Part 765; and increased three claims by a combined total of \$0.3 million due to accounting errors.

After application of the Federal reimbursement ratios, the Federal-share of all approved claims was \$8.7 million (includes amounts that exceeded the per dry short ton limit on reimbursement), as shown in **Appendix C, Exhibit C-1**. This amount does not include the portion of the approved claim (\$1.2 million) for the Moab Mill Reclamation Trust that was paid in FY 2001.

### 3.2 Claims Received in FY 2002

DOE issued a Federal Register Notice on January 7, 2002, (67 FR 718) establishing May 1, 2002, as the closing date for the acceptance of claims in FY 2002. Nine uranium licensees and the thorium licensee submitted claims totaling \$158 million before application of the Federal reimbursement ratios, with individual claims ranging from \$0.5 million to \$124 million. DOE is scheduled to make payments on these claims by May 1, 2003, subject to the availability of appropriations.

### 3.3 FY 2002 Payments

DOE made two sets of payments in FY 2002 totaling \$17.9 million. In April 2002, DOE paid thirteen uranium licensees \$8.3 million on their approved FY 2001 claims and prior year unpaid approved claim balances. That included the final payment on the Moab Mill Reclamation Trust's FY 2001 approved claim amount, which was paid to the beneficiaries of the Trust (i.e., the U.S. Nuclear Regulatory Commission and the State of Utah) because the Trust had transferred all financial assets, including outstanding Title X claims, to the beneficiaries. Because all approved claims of the former licensees have been paid, that payment was the final reimbursement under Title X for work done at the Moab mill site. DOE assumed responsibility for the site in 2001 pursuant to Public Law 106-398.

In September 2002, DOE paid the thorium licensee \$9.6 million from the remaining FY 2002 funds on its FY 2000 approved unpaid claim balance pursuant to Public Law 107-222. A summary of each licensee's FY 2002 reimbursement status is included in **Appendix C, Exhibit C-1. Exhibit 2** shows the application of the Title X FY 2001 and FY 2002 appropriations.

#### **Exhibit 2. Application of FY 2001 and FY 2002 Appropriations**

	Expenditures	Appropriations
FY 2001 Appropriations		\$72,000,000
Government Rescission	(\$158,000)	
First FY 2001 Reimbursements (12/00)	(\$29,923,029)	
Second FY 2001 Reimbursements (4/01)	(\$20,605,308)	
Reimbursements to Moab Mill Reclamation Trust (5/01)	(\$1,183,955)	
DCAA Audit Support (FY 2001 and 2002)	(\$150,000)	
FY 2002 Appropriations		\$1,000,000
DOE Funding Adjustment of FY 2001 Uncosted Balances	(\$3,000,000)	
FY 2002 Uranium Reimbursements (4/02)	(\$8,337,051)	
FY 2002 Thorium Reimbursement (9/02)	(\$9,592,656)	
DCAA Audit Support (Reserved for FY 03)	(\$50,001)	
Totals	(\$73,000,000)	\$73,000,000
Ending FY 2002 Balance		\$0.00
FY 2003 President's Budget Request		\$1,000,000

### 3.4 Adjustment of Reimbursement Ceilings

Exhibit 3 shows the annual adjustments to the per dry short ton limit on reimbursement to individual uranium licensees and the aggregate reimbursement ceilings for uranium and thorium licensees for inflation, amounts paid, and any statutory increases. The adjusted per dry short ton limit for individual uranium licensees and the adjusted remaining reimbursement ceilings for all uranium and thorium licensees as of October 2002 were:

- Individual Uranium Per Dry Short Ton Limit = \$7.80
- Total Remaining Uranium Reimbursement Ceilings = \$190,176,733.23
- Remaining Thorium Reimbursement Ceiling = \$215,407,343.69

More information on the inflation adjustment procedures is in **Appendix A**.

**Exhibit 3. Total Annual Reimbursements and Adjustments of Reimbursement Ceilings**

	CPI-U	Uranium Licensees	Thorium Licensee	Totals	<sup>1</sup> Uranium Preliminary Dry Short Ton Limit	Uranium Statutory Dry Short Ton Limit
Original Ceiling		\$270,000,000.00	\$40,000,000.00	\$310,000,000.00	\$4.78	\$5.50
1994 Inflation Adjustments	1.03	\$278,100,000.00	\$41,200,000.00	\$319,300,000.00	\$4.92	\$5.67
FY 1994 Payments		(\$33,368,448.46)	(\$7,000,351.53)	(\$40,368,799.99)		
Ceiling after FY 1994 Payments		\$244,731,551.54	\$34,199,648.47	\$278,931,200.01		
1995 Inflation Adjustments	1.027	\$251,339,303.41	\$35,123,038.98	\$286,462,342.39	\$5.05	\$5.82
FY 1995 Payments		(\$30,213,035.89)	(\$11,478,964.10)	(\$41,691,999.99)		
Ceiling after FY 1995 Payments		\$221,126,267.52	\$23,644,074.88	\$244,770,342.40		
1996 Inflation Adjustments	1.028	\$227,317,803.01	\$24,306,108.98	\$251,623,911.99	\$5.19	\$5.98
FY 1996 Payments		(\$32,282,901.63)	(\$9,567,098.37)	(\$41,850,000.00)		
Ceiling after FY 1996 Payments		\$195,034,901.38	\$14,739,010.61	\$209,773,911.99		
1997 Inflation Adjustments	1.03	\$200,885,948.42	\$15,181,180.93	\$216,067,129.35	\$5.35	\$6.16
P.L. 104-259 Ceiling Increase		\$80,000,000.00	\$25,000,000.00	\$105,000,000.00	\$0.75	<sup>2</sup> \$0.75
FY 1997 Payments		(\$22,058,321.76)	(\$11,886,678.24)	(\$33,945,000.00)		
Ceiling after FY 1997 Payments		\$258,827,626.66	\$28,294,502.69	\$287,122,129.35	\$6.10	\$6.91
1998 Inflation Adjustments	1.023	\$264,780,662.05	\$28,945,276.25	\$293,725,938.30	\$6.24	\$7.07
FY 1998 Payments		(\$25,756,993.96)	(\$14,143,006.04)	(\$39,900,000.00)		
Ceiling after FY 1998 Payments		\$239,023,668.09	\$14,802,270.21	\$253,825,938.30		
1999 Inflation Adjustments	1.016	\$242,848,046.79	\$15,039,106.53	\$257,887,153.32		\$7.18
P.L. 105-388 Ceiling Increase		\$0	\$75,000,000.00	\$75,000,000.00		
FY 1999 Payments		(\$14,482,267.59)	(\$15,417,732.41)	(\$29,900,000.00)		
Ceiling after FY 1999 Payments		\$228,365,779.20	\$74,621,374.12	\$302,987,153.32		

**Title X FY 2002 Status Report**

	CPI-U	Uranium Licensees	Thorium Licensee	Totals	<sup>1</sup> Uranium Preliminary Dry Short Ton Limit	Uranium Statutory Dry Short Ton Limit
2000 Inflation Adjustments	1.022	\$233,389,826.36	\$76,263,044.35	\$309,652,870.71		\$7.34
FY 2000 Payments		(\$26,242,375.50)	(\$45,657,624.50)	(\$71,900,000.00)		
<b>Ceiling after FY 2000 Payments</b>		\$207,147,450.86	\$30,605,419.85	\$237,752,870.71		
1 <sup>st</sup> FY 2001 Payments		(\$9,807,070.94)	(\$20,115,958.04)	(\$29,923,028.98)		
<b>Ceiling after 1<sup>st</sup> FY 2001 Payments</b>		\$197,340,379.92	\$10,489,461.81	\$207,829,841.73		
2001 Inflation Adjustments	1.034	\$204,049,952.84	\$10,846,103.51	\$214,896,056.35		\$7.59
2 <sup>nd</sup> FY 2001 Payments <sup>3</sup>		(\$10,943,159.14)	(\$10,846,103.51)	(\$21,789,262.65)		
<b>Ceiling after 2<sup>nd</sup> FY 2001 Payments</b>		\$193,106,793.70	\$0	\$193,106,793.70		
2002 Inflation Adjustments	1.028	\$198,513,783.92	\$0	\$198,513,783.92		\$7.80
P.L. 107-222 Ceiling Increase		\$0	\$225,000,000.00	\$225,000,000.00		
FY 2002 Payments		(\$8,337,050.69)	(\$9,592,656.31)	(\$17,929,707.00)		
<b>→ Ceiling after FY 2002 Payments</b>		\$190,176,733.23	\$215,407,343.69	\$405,584,076.92		
<b>Total Inflation Adjustments through September 2002</b>		\$53,668,358.79	\$6,113,516.74	\$59,781,875.53		
<b>Total Payments through September 2002</b>		\$213,491,625.56	\$155,706,173.05	\$369,197,798.61		
<b>Total Statutory Reimbursement Ceilings (excluding inflation adjustments)</b>		\$350,000,000.00	\$365,000,000.00	\$715,000,000.00		

<sup>1</sup>DOE discontinued the application of the preliminary per dry short ton limit in 1998 because of the increased reimbursement amounts authorized by Public Law 104-259.

<sup>2</sup>Public Law 104-259 increased the statutory per dry short ton limit from \$5.50 to \$6.25, as adjusted annually for inflation.

<sup>3</sup>Includes an accelerated payment of \$1,183,954.92 to the Moab Mill Reclamation Trust on its approved FY 2001 claim.

## 4. REIMBURSEMENT SUMMARY

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**Exhibit 4** summarizes the total amounts claimed, adjusted, disallowed, and reimbursed for FY 1994 through FY 2002, and **Exhibit 5** presents the total reimbursements made to individual licensees during FY 1994 through FY 2002.

During FY 1994 through FY 2002, licensees submitted \$1,084 million in total claims (including claims submitted in FY 2002), before review and application of the Federal reimbursement ratios. Of this amount, DOE made a net negative adjustment of \$0.5 million due to accounting errors identified upon submission; disallowed \$41.6 million because the costs did not meet the 10 CFR Part 765 reimbursement criteria; and approved \$884.3 million (does not include claims submitted in FY 2002), of which the Federal share was \$407.9 million after application of the Federal reimbursement ratios. Through FY 2002, reimbursements to all uranium and thorium licensees totaled \$369.2 million.

The remedial action status of the fourteen Title X sites is summarized in **Appendix D** and **Exhibit 5**. As of October 2002:

- Eleven sites were continuing remedial activities and incurring costs eligible for Title X reimbursement.
- Two sites (ARCO-Bluewater mill site and TVA-Edgemont mill site) have been completed, and the disposal cells transferred to DOE for long-term surveillance and maintenance. All eligible Title X costs have been reimbursed to ARCO; Some TVA costs exceed the dry short ton limit and therefore TVA is still eligible for Title X reimbursement.
- One site (Moab mill site) was transferred to DOE for remedial action under Public Law 106-398. Therefore, the site is no longer eligible for Title X reimbursement.

**Exhibit 4. Summary of Annual Claims, Approved Amounts, and Payments**

	Total Amounts Claimed	Total Adjustments	Total Disallowed Costs	Total Approved Claim Amounts	Federal Share Of Total Approved Claim Amounts	Payments Issued
FY 1994	\$311,601,045.21	\$355,343.70	(\$26,893,563.99)	\$285,062,824.92	\$124,943,773.57	\$40,368,799.99
FY 1995	\$134,673,942.68	(\$172.57)	(\$5,061,580.19)	\$129,612,189.92	\$54,788,386.70	\$41,691,999.99
FY 1996	\$80,810,538.68	\$242,189.00	(\$2,985,967.10)	\$78,066,760.58	\$36,662,672.15	\$41,850,000.00
FY 1997	\$94,430,446.77	\$1,951.00	(\$3,002,072.92)	\$91,430,324.85	\$47,938,974.10	\$33,945,000.00
FY 1998	\$77,327,077.55	\$192.00	(\$1,316,724.59)	\$76,010,544.96	\$35,244,051.75	\$39,900,000.00
FY 1999	\$100,650,696.83	(\$1,435,855.00)	(\$270,748.52)	\$98,944,093.31	\$49,400,985.21	\$29,900,000.00
FY 2000	\$100,003,702.33	\$35,052.00	(\$1,089,705.00)	\$98,949,049.33	\$49,054,132.39	\$71,900,000.00
FY 2001	\$26,847,968.69 <sup>1</sup>	\$266,502.97	(\$937,297.61)	\$26,177,174.05	\$9,849,727.19 <sup>2</sup>	\$51,712,291.63 <sup>2</sup>
FY 2002	\$157,752,789.90	TBD <sup>3</sup>	TBD	TBD	TBD	\$17,929,707.00
Total	\$1,084,098,208.64	(\$534,796.90)	(\$41,557,659.92)	\$884,252,961.92	\$407,882,703.06	\$369,197,798.61

<sup>1</sup>The value reported in the Title X 2001 Status Report (\$26,795,128.12) was changed to \$26,847,968.69 to correct a mathematical error which understated the reported value by \$45,273.25 and to include an additional claim amount of \$7,567.32 submitted by the State of Wyoming

<sup>2</sup>Includes the accelerated payment of \$1,183,954.92 to the Moab Mill Reclamation Trust on its approved claim submitted in FY 2001.

<sup>3</sup>To Be Determined (TBD) pending the completion of DOE's review of claims submitted in FY 2002.

**Exhibit 5. Total Reimbursements to Individual Licensees Through FY 2002**

Licensee	Total Payments FY 1994 through FY 2002
<i>Title X Liability Completed</i>	
Atlantic Richfield Company Bluewater Mill Site Grants, NM	\$32,305,902.36
Moab Mill Site Moab, UT	\$5,908,653.53 (Atlas) \$2,994,444.74 (Moab Mill Reclamation Trust) \$791,091.74 (Trust Beneficiaries: Utah/NRC)
<i>Cleanup Completed But Still Eligible For Title X Reimbursement</i>	
Tennessee Valley Authority Edgemont Mill Site Edgemont, SD	\$12,678,945.05
<i>Cleanup Ongoing/Incurring Costs Eligible For Title X Reimbursement</i>	
American Nuclear Corporation/State of WY Gas Hills Mill Site Gas Hills Uranium Mining District, WY	\$820,406.91(ANC) \$1,223,850.46 (WY)
Cotter Corporation Canon City Mill Site Canon City, CO	\$2,457,764.73
Dawn Mining Company Ford Mill Site Ford, WA	\$3,399,335.74
Homestake Mining Company Grants Mill Site Grants, NM	\$37,030,107.00
Kerr-McGee Chemical LLC West Chicago Mill Site West Chicago, IL	\$155,706,173.05
Pathfinder Mines Corporation Lucky Mc Mill Site Riverton, WY	\$8,411,361.23
Petrotomics Company Shirley Basin Mill Site Shirley Basin, WY	\$2,636,456.58
Rio Algom Mining LLC (formerly Quivira) Ambrosia Lake Mill Site Grants, NM	\$15,292,212.09
Umetco Minerals Corporation Uravan Mill Site Uravan, CO	\$44,481,640.43
Umetco Minerals Corporation East Gas Hills Mill Site Gas Hills Uranium Mining District, WY	\$14,767,850.06
Western Nuclear, Incorporated Split Rock Mill Site Jeffrey City, WY	\$28,291,602.91
<b>Total</b>	<b>\$369,197,798.61</b>

## 5. PLANNED FY 2003 ACTIVITIES

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DOE plans the following activities in FY 2003:

- Complete the review of claims submitted in FY 2002.
- Make payments on approved claim amounts by May 1, 2003.
- Accept and process new claims for reimbursement.
- Adjust the per dry short ton limit and total remaining reimbursement limits for inflation.
- Issue correcting amendment to the Title X procedural regulations (10 CFR Part 765) to reflect legislative amendments and make other technical clarifications.

### **For Further Information Contact:**

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## **APPENDIX A.**

# **STATUTORY AND REGULATORY OVERVIEW**

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This appendix outlines the historical basis, legislation, and regulations for reimbursing licensees of active uranium and thorium processing sites for cleanup costs associated with byproduct material generated as an incident of uranium and thorium sales to the Federal Government. Key milestones are listed in Exhibit A-1.

### **A.1 Historical Background**

From 1942 through 1970, the U.S. Army Manhattan Engineer District and the Atomic Energy Commission entered into several contracts with commercially operated mills to purchase uranium concentrate in support of U.S. defense programs. Because of the limited knowledge of the radiological hazards created by the resulting mill process wastes, such as tailings (a mildly radioactive sand-like material generated by the crushing, grinding, and milling of uranium ore-bearing rock), these contracts lacked provisions for managing and remediating these wastes.

By the early 1970's, studies of the environmental impacts of uranium mill tailings revealed that there were potentially significant health risks associated with continued exposure to radon and other decay products of uranium. As a result, Congress enacted the Uranium Mill Tailings Radiation Control Act (UMTRCA) in 1978 to establish standards for the management and reclamation of mill tailings and other process wastes. Title I of UMTRCA authorizes the Department of Energy (DOE) to remediate "inactive" processing sites. Inactive processing sites are those that were no longer licensed under the Atomic Energy Act as of January 1, 1978. The Federal Government paid 90 percent of the cleanup costs at these sites and the affected States paid 10 percent. Title II of UMTRCA established a program authorizing the Nuclear Regulatory Commission to regulate byproduct material at "active" processing sites (i.e., those with active licenses under the Atomic Energy Act on or after January 1, 1978) to ensure sound management of tailings throughout the production, reclamation, and disposal phases.

UMTRCA did not provide for Federal assistance to licensees of active uranium processing sites, including those that sold material under contract to the Atomic Energy Commission and its predecessor agencies. In 1979, the General Accounting Office reported to Congress that Federal assistance should be provided to these active licensees to defray a portion of the cost of remediating Federal-related byproduct material at their sites.

**Exhibit A-1**

**Key Milestones**

November 8, 1978	Uranium Mill Tailings Radiation Control Act is enacted
October 24, 1992	Energy Policy Act is enacted
August 9, 1993	Proposed Title X rule is issued (58 FR 42450)
May 23, 1994	Final Title X rule is promulgated under 10 CFR Part 765 (59 FR 26714)
October 9, 1996	Public Law 104-259 is enacted
November 13, 1998	Public Law 105-388 is enacted
October 19, 2000	Public Law 106-317 is enacted
August 21, 2002	Public Law 107-222 is enacted

**A.2 Summary of Legislative and Regulatory Requirements**

**A.2.1 Legislative**

Title X, as amended by Public Laws 104-259, 105-388, 106-317, and 107-222, directed DOE to do the following:

- Issue regulations governing the reimbursement process.
- Reimburse, at least annually, licensees of active uranium and thorium processing sites for costs incurred to remediate Federal-related byproduct material. Under the original Act, reimbursements to individual uranium licensees were limited to an amount not to exceed \$5.50 multiplied by the dry short tons of Federal-related byproduct material; total reimbursement to all active uranium licensees was limited to \$270 million; reimbursement to the thorium licensee was limited to \$40 million; and total reimbursement to all licensees was limited to \$310 million. These ceilings were subsequently increased by Public Laws 104-259, 105-388, and 107-222. The per dry short ton limit for uranium licensees was increased to \$6.25, and the total authorized reimbursement for uranium and thorium licensees was increased to \$350 million and \$365 million, respectively, for an aggregate amount of \$715 million. Funding for the Title X reimbursements is to be provided through the Uranium Enrichment Decontamination and Decommissioning Fund established under Title XI of the Energy Policy Act of 1992.
- Adjust the reimbursement ceilings annually for inflation.
- Reimburse licensees in accordance with a reclamation plan submitted by each licensee and approved by the Department for costs of remedial action incurred after December 31, 2007.
- Determine by December 31, 2008, if excess funding authority is available to reimburse individual uranium licensees whose costs exceeded the statutory per dry short ton limit and make a decision if that excess authority should be made available to those licensees.

## A.2.2 Regulatory

DOE issued the proposed rule for implementing Title X on August 9, 1993, (58 FR 42450). After conducting a public hearing on September 14, 1993, and considering public comments, the Department promulgated a final rule on May 23, 1994, under 10 CFR Part 765 (59 FR 26714). In conjunction with the final rule, DOE issued supplementary guidance titled "*Guidance for the Preparation of Reimbursement Claims under Title X of the Energy Policy Act of 1992.*" This guidance addresses regulatory and accounting requirements, standards, and concepts that apply to the processes of documenting and filing claims for reimbursement. Major elements of 10 CFR Part 765 are highlighted below.

### *Establishment of Eligible Licensees and Tailings Quantities*

Thirteen active uranium licensees and one active thorium licensee (located in seven states: Colorado, Illinois, New Mexico, South Dakota, Utah, Washington, and Wyoming) were identified by DOE as having generated Federal-related byproduct material and, therefore, qualifying for reimbursement under Title X (**Exhibit A-2**). A study conducted by DOE in 1982, titled "*Commingled Uranium Tailings Study, Volume II: Technical Report,*" served as the basis for determining the Federal-related tailings quantities at these sites. Total tailings quantities were obtained from the Department's "*Integrated Data Base for 1992: U.S. Spent Fuel and Radioactive Waste Inventories, Projections, and Characteristics.*" These tailings quantities were updated by DOE for some sites based on more recent or previously unavailable records. The Department's final determination on the tailings quantities at eligible sites on the date Title X was enacted is presented in **Exhibit A-2**. These quantities served as the basis for determining the Federal reimbursement ratio at all sites and the per dry short ton limit for individual uranium sites.

### *Establishment of Preliminary Per Dry Short Ton Limit on Reimbursement*

From 1994 through 1997, DOE established a preliminary per dry short ton limit of \$4.78, as adjusted for inflation, for reimbursement to licensees of eligible uranium processing sites. This was necessary because the original \$270 million statutory ceiling would not have supported the original maximum allowable reimbursement of \$5.50 per dry short ton, as established by Title X, if remedial action costs at all of the eligible uranium processing sites had reached or approached this per dry short ton limit (i.e., \$270 million divided by the total amount of Federal-related tailings at all eligible uranium processing sites, 56.521 million dry short tons, equals \$4.78). As stated in the January 19, 1999, Federal Register Notice (64 FR 2887), DOE discontinued the application of the preliminary per dry short ton limit on reimbursement in 1998 based on the ceiling increases authorized by Public Law 105-388.

### *Determination of Reimbursable Costs and the Federal Reimbursement Ratio*

Consistent with Title X, "reimbursable" costs are limited to those costs that were necessary to comply with UMTRCA or, where appropriate, Agreement State requirements. **Exhibit A-3** provides examples of reimbursable and non-reimbursable costs. Additional examples and more in-depth discussion on reimbursable costs can be found in the May 23, 1994, final rule and the *Guidance for Preparation of Reimbursement Claims under Title X of the Energy Policy Act*,

*Revision I.* Because Federal-related and commercial tailings are commingled at most processing sites, it is virtually impossible to associate specific costs to specific tailings. Therefore, DOE adopted a percentage approach (known as the Federal reimbursement ratio) in which the Federal cost share is determined by multiplying the total cost of remedial action by the percentage of Federal-related tailings to total tailings located at each site on October 24, 1992. A licensee requesting an alternative approach must have demonstrated to DOE's satisfaction that the alternative approach was more accurate than the percentage approach based on the amount of tailings quantities. No alternative demonstrations were approved and all the Federal reimbursement ratios are based on the percentage of tailings quantities. As shown in Exhibit A-2, Federal reimbursement ratios range from 0.115 to 0.813.

### *Claim Submission and Processing Procedures*

Following each annual appropriation of reimbursement funds by Congress, DOE issues a Federal Register Notice announcing the acceptance of claims for that fiscal year. To be eligible for reimbursement, licensees must submit their claims in writing to DOE by the announced closing date. In preparing their claims, licensees must abide by generally accepted accounting principles. Each claim must include a summary of the costs of remedial action being claimed and the technical and financial documentation available to support the claim. Licensees must cross-reference each claimed activity to the type of supporting documentation (e.g., invoice) and to the appropriate section of their reclamation plan or other regulatory authorization which demonstrates that the activity was necessary to comply with UMTRCA or Agreement State requirements. Copies of invoices, payroll records, receipts, and/or other financial records supporting the claim must be made available by the licensee for subsequent DOE auditing.

Upon receipt of a claim package from a licensee, DOE performs a preliminary review of the documentation submitted. This primarily involves determining whether the claim contains all the appropriate information as discussed above. To the extent possible, the preliminary review also assesses whether the claimed costs were necessary to comply with UMTRCA or Agreement State requirements. After the preliminary review is completed, DOE and the Defense Contract Audit Agency conduct formal financial and technical reviews of the licensee's claim to verify its accuracy and legitimacy. DOE also may rely, in part, on findings from prior years' reviews and audits for further assurance regarding a licensee's claim. The audits usually are performed at the licensee's site and are based on generally accepted government auditing standards.

After completion of the review process, DOE provides the licensee with a decision as to claim amounts approved and disallowed. If a licensee disagrees with a decision and the difference cannot be resolved at the program office level, the licensee has the option to file an appeal with the Department's Office of Hearings and Appeals.

All reimbursements approved by DOE in a given year are processed at the same time to ensure an equitable distribution of available appropriations (i.e., payments are not made on a first-come-first-serve basis). Reimbursements are limited to the total approved claim amount multiplied by the licensee's Federal reimbursement ratio and must not exceed the reimbursement limits authorized by Title X. When funds are insufficient to reimburse all claims in full, reimbursements are made on a prorated basis. Remaining unpaid approved claim amounts are

then carried over to subsequent fiscal years until paid in full. Claim submission and processing procedures are outlined in **Exhibit A-4**.

***Inflation Adjustment Procedures***

DOE makes the inflation adjustments to the aggregate amounts authorized to uranium licensees and the thorium licensee, and to all individual uranium and thorium licensees by multiplying the ceilings for the preceding calendar year, less amounts paid during that year, by the Consumer Price Index for all urban consumers (CPI-U) for the preceding calendar year. **Exhibit 3** illustrates this calculation. For example, the maximum reimbursement limit for all uranium licensees at the beginning of 1993 was \$270,000,000. The CPI-U for calendar year 1993 was 1.030, and DOE did not issue any reimbursements in calendar year 1993. Therefore, the inflation-adjusted value of the reimbursement limit at the beginning of 1994 was \$278,100,000 [i.e.,  $(\$270,000,000 - \$0) \times 1.03 = \$278,100,000$ ]. In December 1994, DOE issued reimbursements totaling \$33,368,448 to uranium licensees. Therefore, the remaining reimbursement limit at the end of 1994 was \$244,731,552 [i.e.,  $\$278,100,000 - \$33,368,448 = \$244,731,552$ ]. The remaining reimbursement limit at the end of each year has been adjusted for inflation in each subsequent year using the same methodology.

The individual remaining reimbursement limit for each uranium licensee is calculated by multiplying a licensee's amount of Federal-related dry short tons of tailings by the inflation-adjusted statutory per dry short ton limit and subtracting the total reimbursements to date for that licensee.

$$\begin{aligned} \text{Individual Uranium Remaining Reimbursement Limit} = & (\text{Individual Federal} \\ & \text{Related Dry Short Tons of Tailings} \times \text{Inflation Adjusted Statutory Per Dry Short} \\ & \text{Ton Limit}) - \text{Cumulative Amount of Reimbursements Paid to Individual} \\ & \text{Uranium Licensee} \end{aligned}$$

Similarly, the statutory per dry short ton limit on reimbursements to individual uranium licensees is adjusted for inflation each year by multiplying the per dry short ton value for the preceding year by the CPI-U for the preceding calendar year. For example, the statutory per dry short ton limit of \$5.980858 in FY 1996 (prior to increase authorized by Public law 104-259) was derived by multiplying the statutory per dry short ton limit for 1995, \$5.817955, by the CPI-U of 1.028 for the calendar year 1995.

**Exhibit A-2****Tailings Quantities and Federal Reimbursement Ratios**

	Federal Related Tailings (millions dry short tons)	Total Tailings (millions dry short tons)	Federal Reimbursement Ratio
<b>American Nuclear Corporation/State of WY</b> Gas Hills Mill Site Gas Hills Uranium Mining District, WY	2.202	6.0	.367
<b>Atlantic Richfield Company</b> Bluewater Mill Site Grants, NM	8.837	23.9	.370
<b>Atlas/Moab Mill Reclamation Trust</b> Moab Mill Site Moab, UT	5.946	10.6	.561
<b>Cotter Corporation</b> Canon City Mill Site Canon City, CO	0.315	2.2	.143
<b>Dawn Mining Company</b> Ford Mill Site Ford, WA	1.171	3.1	.378
<b>Homestake Mining Company</b> Grants Mill Site Grants, NM	11.411	22.3	.512
<b>Pathfinder Mines Corporation</b> Lucky Mc Mill Site Riverton, WY	2.842	11.7	.243
<b>Petrotomics Company</b> Shirley Basin Mill Site Shirley Basin, WY	0.725	6.3	.115
<b>Rio Algom Mining LLC</b> Ambrosia Lake Mill Site Grants, NM	10.017	33.2	.302
<b>Tennessee Valley Authority</b> Edgemont Mill Site Edgemont, SD	1.625	2.0	.813
<b>Umetco Minerals Corporation</b> Uravan Mill Site Uravan, CO	5.701	10.5	.543
<b>Umetco Minerals Corporation</b> East Gas Hills Mill Site Gas Hills Uranium Mining District, WY	2.103	8.0	.263
<b>Western Nuclear, Incorporated</b> Split Rock Mill Site Jeffrey City, WY	3.626	8.2	.442
<b>Kerr-McGee Chemical LLC</b> West Chicago Mill Site West Chicago, IL	0.032	0.058	.552

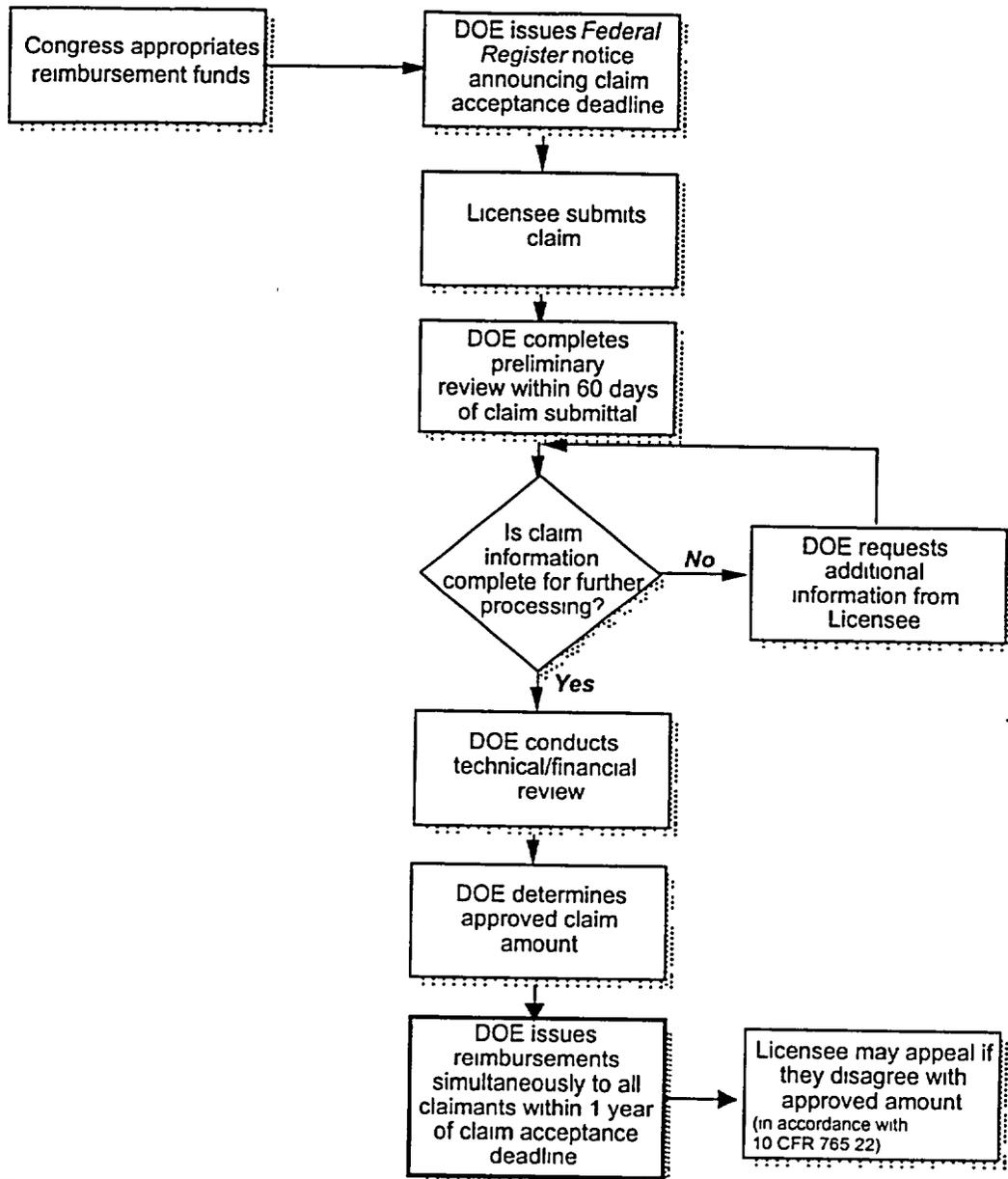
**Exhibit A-3**

**Examples of Reimbursable and Non-Reimbursable Costs**

Reimbursable	Non-Reimbursable
➤ Ground water remediation	➤ Charges for fully depreciated equipment
➤ Disposal of process wastes	➤ Costs of commuting between residence and work site
➤ Removal actions	➤ Lunch allowances
➤ Mill equipment decommissioning	➤ Entertainment expenses
➤ Monitoring	➤ Employee bonuses
➤ Administrative expenses for remediation	➤ Costs of operating equipment for non-reclamation purposes
➤ Treatment of contaminated soils	➤ Environmental fines
➤ Air pollution studies	➤ Legal fees not directly related to reclamation of Title X site
➤ Long-term surveillance and maintenance fees	➤ Lobbying-related costs

Exhibit A-4

Annual Reimbursement Process

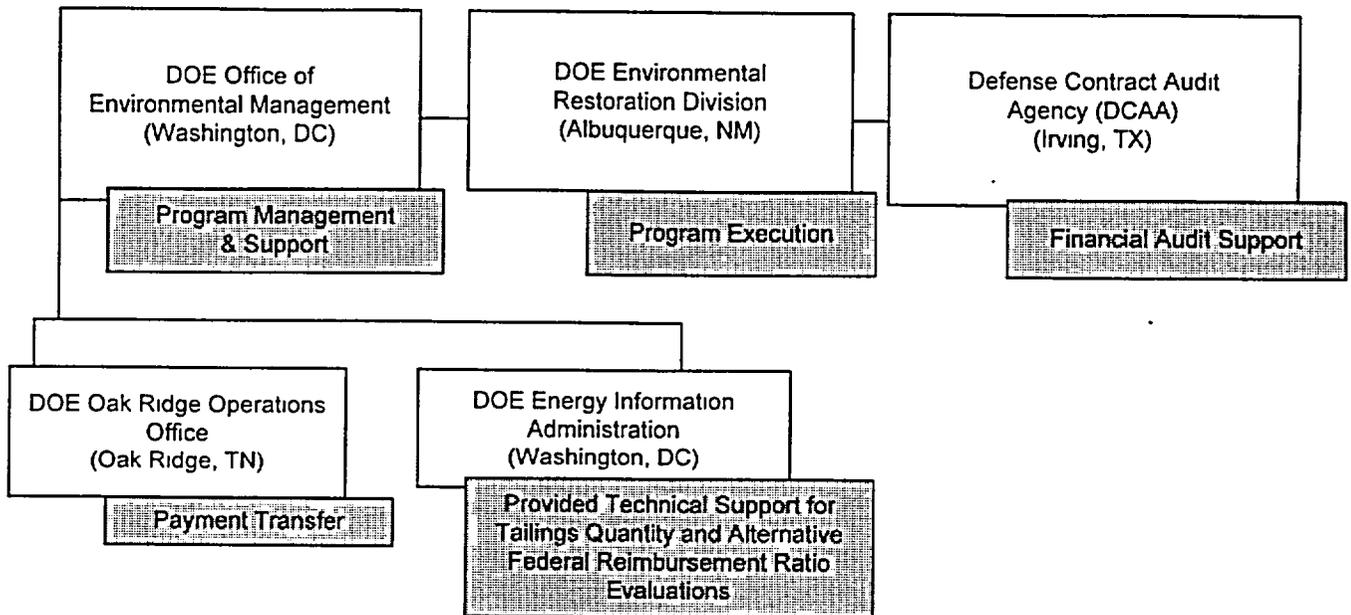


### A.3 Administrative Framework

DOE assembled the administrative framework for implementing Title X in 1994. As shown in Exhibit A-5, the DOE Albuquerque Operations Office, Environmental Restoration Division, in Albuquerque, New Mexico, is carrying out the program with assistance from the Office of Environmental Management in Washington, D.C., the Oak Ridge Operations Office in Oak Ridge, Tennessee, and the Defense Contract Audit Agency (DCAA).

#### Exhibit A-5

#### Administrative Framework



# APPENDIX B.

## TITLE X OF THE ENERGY POLICY ACT OF 1992 AS AMENDED

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### Title X— Remedial Action and Uranium Revitalization

#### Subtitle A— Remedial Action at Active Processing Sites

#### SEC. 1001. Remedial Action Program

(a) **IN GENERAL.**— Except as provided in subsection (b), the costs of decontamination, decommissioning, reclamation, and other remedial action at an active uranium or thorium processing site shall be borne by persons licensed under section 62 or 81 of the Atomic Energy Act of 1954 (42 U.S.C. 2091, 2111) for any activity at such site which results or has resulted in the production of byproduct material.

(b) **REIMBURSEMENT.**—

(1) **IN GENERAL.**— The Secretary of Energy shall, subject to paragraph (2), reimburse at least annually a licensee described in subsection (a) for such portion of the costs described in such subsection as are—

(A) determined by the Secretary to be attributable to byproduct material generated as an incident of sales to the United States; and

(B) either—

(i) incurred by such licensee not later than December 31, 2007; or

(ii) incurred by a licensee after December 31, 2007, in accordance with a plan for subsequent decontamination, decommissioning, reclamation and other remedial action approved by the Secretary

(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 \$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 \$350,000,000.

(C) **TO THORIUM LICENSEES.**— Payments made under paragraph (1) to the licensee of the active thorium site shall not exceed \$365,000,000, and may only be made for off-site disposal. Such payments shall not exceed the following amounts:

(i) \$90,000,000 in fiscal year 2002;

- (ii) \$55,000,000 in fiscal year 2003
- (iii) \$20,000,000 in fiscal year 2004
- (iv) \$20,000,000 in fiscal year 2005
- (v) \$20,000,000 in fiscal year 2006
- (vi) \$20,000,000 in fiscal year 2007

Any amounts authorized to be paid in a fiscal year under this subparagraph that are not paid in that fiscal year may be paid in subsequent fiscal years.

(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 December 31, 2008, whether the amount authorized to be appropriated pursuant to section 1003, when considered with the \$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 \$6.25 per dry short ton on a prorated basis at such sites where the costs reimbursable under subsection (b)(1) exceed the \$6.25 per dry short ton limitation described in paragraph (2) of such subsection.

(3) BYPRODUCT LOCATION.—Notwithstanding the requirement of paragraph (2)(A) that byproduct material be located at the site on the date of the enactment of this Act, byproduct material moved from the site of the Edgemont Mill to a disposal site as the result of the decontamination, decommissioning, reclamation, and other remedial action of such mill shall be eligible for reimbursement to the extent eligible under paragraph (1).

## **SEC. 1002. Regulations.**

Within 180 days of the date of the enactment of this Act, the Secretary shall issue regulations governing reimbursement under section 1001. An active uranium or thorium processing site owner shall apply for reimbursement hereunder by submitting a request for the amount of reimbursement, together with reasonable documentation in support thereof, to the Secretary. Any such request for reimbursement, supported by reasonable documentation, shall be approved by the Secretary and reimbursement therefore shall be made in a timely manner subject only to the limitations of section 1001.

## **SEC. 1003. Authorization of Appropriations.**

(a) In General.—There is authorized to be appropriated \$715,000,000 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.

(b) Source.—Funds described in subsection (a) shall be provided from the Fund established under section 1801 of the Atomic Energy Act of 1954.

**SEC. 1004. Definitions.**

For purposes of this subtitle:

(1) The term “active uranium or thorium processing site” means—

(A) Any uranium or thorium processing site, including the mill, containing byproduct material for which a license (issued by the Nuclear Regulatory Commission or its predecessor agency under the Atomic Energy Act of 1954, or by a State as permitted under section 274 of such Act (42 U.S.C. 2021)) for the production at such site of any uranium or thorium derived from ore—

(i) was in effect on January 1, 1978;

(ii) was issued or renewed after January 1, 1978; or

(iii) for which an application for renewal or issuance was pending on, or after January 1, 1978; and

(B) any other real property or improvement on such real property that is determined by the Secretary or by a State as permitted under section 274 of the Atomic Energy Act of 1954 (42 U.S.C. 2021) to be—

(i) in the vicinity of such site; and

(ii) contaminated with residual byproduct material;

(2) The term “byproduct material” has the meaning given such term in section 11e.(2) of the Atomic Energy Act of 1954, (42 U.S.C. 2014(e)(2)); and

(3) The term “decontamination, decommissioning, reclamation, and other remedial action” means work performed prior to or subsequent to the date of the enactment of this Act which is necessary to comply with all applicable requirements of the Uranium Mill Tailings Radiation Control Act of 1978 (42 U.S.C. 7901 et. seq.), or where appropriate, with requirements established by a State that is a party to a discontinuance agreement under section 274 of the Atomic Energy Act of 1954 (42 U.S.C. 2021).

**APPENDIX C.**  
**INDIVIDUAL APPROVED CLAIM AMOUNTS**  
**AND PAYMENTS: FY 1994 – FY 2002**

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**Exhibit C-1. FY 2002 Individual Approved Claim Amounts and Payments (April and September 2002<sup>1</sup>)**

Licensee	FY 02 Individual Reimbursement Limits	Final Approved Claim Amounts	Final Approved Claims Plus Unpaid Claim Balances	Total Unpaid Claims Within Limits	FY 02 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments	Unpaid Claim Balances in Excess of Limits After Payments
<b>Uranium</b>								
American Nuclear Corp. Site	15,155,294.84						15,136,688.47	0.00
<i>American Nuclear Corporation</i>		13,228.94	13,228.94	13,228.94	13,228.94	0.00		
<i>State of Wyoming</i>		5,377.43	5,377.43	5,377.43	5,377.43	0.00		
Atlantic Richfield Company	36,644,151.40	0.00	0.00	0.00	0.00	0.00	36,644,151.40	0.00
Utah/NRC Moab Escrow <sup>2</sup>	37,490,136.95	791,091.74	791,091.74	791,091.74	791,091.74	0.00	36,699,045.21	0.00
Cotter Corporation	66,943.01	0.00	853,692.11	66,943.01	66,943.01	786,749.10	0.00	786,749.10
Dawn Mining Company	6,012,325.45	275,018.33	275,018.33	275,018.33	275,018.33	0.00	5,737,307.12	0.00
Homestake Mining Company	53,493,210.09	1,489,814.38	1,489,814.38	1,489,814.38	1,489,814.38	0.00	52,003,395.71	0.00
Pathfinder Mines Corporation	14,642,686.32	879,547.97	879,547.97	879,547.97	879,547.97	0.00	13,763,138.35	0.00
Petrotomics Company	3,265,224.95	244,921.43	244,921.43	244,921.43	244,921.43	0.00	3,020,303.52	0.00
Rio Algom Mining LLC <sup>3</sup>	63,908,085.27	1,043,378.89	1,043,378.89	1,043,378.89	1,043,378.89	0.00	62,864,706.38	0.00
Tennessee Valley Authority	345,340.92	0.00	12,796,409.59	345,340.92	345,340.92	12,451,068.67	0.00	12,451,068.67
Umetco Minerals Corporation-CO	1,211,562.19	2,323,448.67	8,603,919.90	1,211,562.19	1,211,562.19	7,392,357.71	0.00	7,392,357.71
Umetco Minerals Corporation-WY	2,840,892.50	1,200,237.06	1,200,237.06	1,200,237.06	1,200,237.06	0.00	1,640,655.44	0.00
Western Nuclear, Incorporated	770,588.40	399,707.43	1,031,082.56	770,588.40	770,588.40	260,494.16	0.00	260,494.16
<b>Total Uranium</b>		\$8,665,772.27	\$29,227,720.33	\$8,337,050.69	\$8,337,050.69	\$20,890,669.64	\$227,509,391.60	\$20,890,669.64
<b>Thorium</b>								
Kerr-McGee Chemical LLC	225,000,000.00	0.00	27,386,891.12	27,386,891.12	9,592,656.31	17,794,234.81	215,407,343.69	0.00
<b>Total Thorium</b>	\$225,000,000.00	\$0.00	\$27,386,891.12	\$27,386,891.12	\$9,592,656.31	\$17,794,234.81	\$215,407,343.69	\$0.00
<b>Total Uranium and Thorium</b>		\$8,665,772.27	\$56,614,611.45	\$35,723,941.81	\$17,929,707.00	\$38,684,904.45	\$442,916,735.29	\$20,890,669.64

<sup>1</sup>Reimbursements to the uranium licensees were issued in April 2002, and the reimbursement to the thorium licensee was made in September 2002 following the enactment of P L. 107-222

<sup>2</sup>The Moab Mill Reclamation Trust assigned its FY 2002 Title X payments to the Trust Beneficiaries (U.S. Nuclear Regulatory Commission and the State of Utah).

<sup>3</sup>Formerly Quivira Mining Company.

**Exhibit C-2A. Second FY 2001 Individual Approved Claim Amounts and Payments (April 2001)**

Licensee	FY 01 Individual Reimbursement Limits After 1 <sup>st</sup> FY 2001 Payments	Final Approved Claim Amounts	Final Approved Claims Plus Unpaid Claim Balances	Total Unpaid Claims Within Limits <sup>1</sup>	2 <sup>nd</sup> FY 01 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments	Unpaid Claim Balances in Excess of Limits After Payments
<b>Uranium</b>								
American Nuclear Corp. Site	14,700,850.05							
<i>American Nuclear Corporation</i>		13,518.72	13,518.72	13,518.72	13,518.72	0.00	14,687,331.33	0.00
<i>State of Wyoming</i>		0.00	0.00	0.00	0.00	0.00		
Atlantic Richfield Company	34,766,134.37	0.00	0.00	0.00	0.00	0.00	34,766,134.37	0.00
Moab Mill Reclamation Trust	37,871,037.70	1,644,529.72 <sup>1</sup>	1,644,529.72 <sup>1</sup>	1,644,529.72 <sup>1</sup>	1,644,529.72	0.00	36,266,507.98	0.00
Cotter Corporation	78,615.02	162,327.26	932,307.13	78,615.02	78,615.02	853,692.11	0.00	853,692.11
Dawn Mining Company	5,958,075.98	194,608.51	194,608.51	194,608.51	194,608.51	0.00	5,763,467.47	0.00
Homestake Mining Company	53,636,441.69	2,568,268.63	2,568,268.63	2,568,268.63	2,568,268.63	0.00	51,068,173.06	0.00
Pathfinder Mines Corporation	15,461,823.52	1,423,111.90	1,423,111.90	1,423,111.90	1,423,111.90	0.00	14,038,711.62	0.00
Petrotomics Company	3,275,389.64	164,239.87	164,239.87	164,239.87	164,239.87	0.00	3,111,149.77	0.00
Quivira Mining Company	62,481,886.72	702,589.11	702,589.11	702,589.11	702,589.11	0.00	61,779,297.61	0.00
Tennessee Valley Authority	405,553.71	0.00	13,201,963.30	405,553.71	405,553.71	12,796,409.59	0.00	12,796,409.59
Umetco Minerals Corporation-CO	1,422,807.21	2,961,852.69	7,703,278.44	1,422,807.21	1,422,807.21	6,280,471.23	0.00	6,280,471.23
Umetco Minerals Corporation-WY	3,814,338.64	1,420,370.42	1,420,370.42	1,420,370.42	1,420,370.42	0.00	2,393,968.22	0.00
Western Nuclear, Incorporated	904,946.32	749,675.85	1,536,321.45	904,946.32	904,946.32	631,375.13	0.00	631,375.13
<b>Total Uranium</b>		\$12,005,092.68	\$31,505,107.20	\$10,943,159.14	\$10,943,159.14	\$20,561,948.06		\$20,561,948.06
<b>Thorium</b>								
Kerr-McGee Chemical LLC	10,846,103.51	38,232,994.63	38,232,994.63	10,846,103.51	10,846,103.51	0.00 <sup>2</sup>	0.00	0.00
<b>Total Thorium</b>	\$10,846,103.51	\$38,232,994.63	\$38,232,994.63	\$10,846,103.51	\$10,846,103.51	\$0.00 <sup>2</sup>	\$0.00	\$0.00
<b>Total Uranium and Thorium</b>		\$50,238,087.31	\$69,738,101.83	\$21,789,262.65	\$21,789,262.65	\$20,561,948.06		\$20,561,948.06

<sup>1</sup>Amount includes \$1,183,954.92 for the Moab Mill Reclamation Trust on its approved FY 2001 claim.

<sup>2</sup>The total amount authorized under Title X for the thorium licensee (Kerr-McGee) at the time of the payment date was exhausted with the 2<sup>nd</sup> FY 2001 payment. The amount of approved thorium claims that exceeded the total authority at that time was \$27,386,891.12.

**Exhibit C-2B. First FY 2001 Individual Approved Claim Amounts and Payments (December 2000)<sup>1</sup>**

Licensee	FY 01 Individual Reimbursement Limits <sup>2</sup>	Unpaid Claim Balances	Total Unpaid Claim Balances Within Limits	1 <sup>st</sup> FY 01 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments	Unpaid Claim Balances in Excess of Limits After Payments
<b>Uranium</b>							
American Nuclear Corp. Site	14,346,036.94						
<i>American Nuclear Corporation</i>		32,840.67	32,840.67	32,840.67	0.00	14,151,293.58	0.00
<i>State of Wyoming</i>		161,902.69	161,902.69	161,902.69	0.00		
Atlantic Richfield Company	33,418,043.57	857,372.69	857,372.69	857,372.69	0.00	32,560,670.88	0.00
Moab Mill Reclamation Trust	36,799,938.66	412,853.20	412,853.20	412,853.20	0.00	36,387,085.46	0.00
Cotter Corporation	77,808.19	847,788.06	77,808.19	77,808.19	769,979.87	0.00	769,979.87
Dawn Mining Company	5,944,076.23	278,248.49	278,248.49	278,248.49	0.00	5,665,827.74	0.00
Homestake Mining Company	52,397,803.66	1,609,222.55	1,609,222.55	1,609,222.55	0.00	50,788,581.11	0.00
Pathfinder Mines Corporation	15,412,693.64	660,152.37	660,152.37	660,152.37	0.00	14,752,541.27	0.00
Petrotomics Company	3,276,376.58	181,926.29	181,926.29	181,926.29	0.00	3,094,450.29	0.00
Quivira Mining Company	60,773,398.40	791,469.56	791,469.56	791,469.56	0.00	59,981,928.84	0.00
Tennessee Valley Authority	445,110.73	13,647,074.03	445,110.73	445,110.73	13,201,963.30	0.00	13,201,963.30
Umetco Minerals Corporation-CO	1,749,457.76	6,490,883.51	1,749,457.76	1,749,457.76	4,741,425.75	0.00	4,741,425.75
Umetco Minerals Corporation-WY	4,316,393.70	1,026,903.96	1,026,903.96	1,026,903.96	0.00	3,289,489.74	0.00
Western Nuclear, Incorporated	1,521,801.79	2,308,447.39	1,521,801.79	1,521,801.79	786,645.60	0.00	786,645.60
<b>Total Uranium</b>		\$29,307,085.46	\$9,807,070.94	\$9,807,070.94	\$19,500,014.52		\$19,500,014.52
<b>Thorium</b>							
Kerr-McGee Chemical LLC	30,605,419.85	20,115,958.04	20,115,958.04	20,115,958.04	0.00	10,489,461.81	0.00
<b>Total Thorium</b>	\$30,605,419.85	\$20,115,958.04	\$20,115,958.04	\$20,115,958.04	\$0.00	\$10,489,461.81	\$0.00
<b>Total Uranium and Thorium</b>		\$49,423,043.50	\$29,923,028.98	\$29,923,028.98	\$19,500,014.52		\$19,500,014.52

<sup>1</sup>DOE made two payments in FY 2001. The first payments were issued in December 2000 and eliminated the backlog of unpaid approved claim balances that had accumulated through the FY 1999 claims. The second payments were issued in April 2001 and fully reimbursed licensees' approved FY 2000 claim amounts.

<sup>2</sup>Beginning in FY 2001, DOE adjusted the method for determining the individual per dry short ton limit to uranium licensees where: Individual Uranium Reimbursement Limit = (Individual Federal Related Dry Short Tons of Tailings x Inflation Adjusted Statutory Per Dry Short Ton Limit) - Cumulative Amount of Reimbursements Paid to Individual Uranium Licensee.

**Exhibit C-3A. \*Second FY 2000 Individual Approved Claim Amounts and Payments (September 2000)**

Licensee	Maximum Reimbursement Ceilings After 1 <sup>st</sup> FY 00 Payments	Unpaid Claims	Total Unpaid Claims Within Ceilings	2 <sup>nd</sup> FY 00 Payments	Unpaid Claim Balances After Payments	Maximum Reimbursement Ceilings After Payments	Unpaid Claim Balances in Excess of Ceilings After Payments
<b>Uranium</b>							
American Nuclear Corp. Site	16,075,167.73						
<i>American Nuclear Corporation</i>		76,382.33	76,382.33	43,541.66	32,840.67	15,816,968.08	0.00
<i>State of Wyoming</i>		376,560.68	376,560.68	214,657.99	161,902.69		
Atlantic Richfield Company	37,773,902.05	1,994,116.60	1,994,116.60	1,136,743.91	857,372.69	36,637,158.14	0.00
Moab Mill Reclamation Trust	41,040,508.71	960,232.84	960,232.84	547,379.64	412,853.20	40,493,129.07	0.00
Cotter Corporation	308,849.34	1,023,847.28	308,849.34	176,059.22	847,788.06	132,790.12	714,997.94
Dawn Mining Company	7,014,888.58	647,163.07	647,163.07	368,914.58	278,248.49	6,645,974.00	0.00
Homestake Mining Company	60,085,897.85	3,742,803.37	3,742,803.37	2,133,580.82	1,609,222.55	57,952,317.03	0.00
Pathfinder Mines Corporation	17,918,785.15	1,535,412.56	1,535,412.56	875,260.19	660,152.37	17,043,524.96	0.00
Petrotomics Company	3,875,869.53	423,132.48	423,132.48	241,206.19	181,926.29	3,634,663.34	0.00
Quivira Mining Company	67,913,529.58	1,840,836.08	1,840,836.08	1,049,366.52	791,469.56	66,864,163.06	0.00
Tennessee Valley Authority	1,499,061.46	14,501,612.32	1,499,061.46	854,538.29	13,647,074.03	644,523.17	13,002,550.86
Umetco Minerals Corporation-CO	5,729,215.48	9,756,816.31	5,729,215.48	3,265,932.80	6,490,883.51	2,463,282.68	4,027,600.83
Umetco Minerals Corporation-WY	6,372,040.74	2,388,420.18	2,388,420.18	1,361,516.22	1,026,903.96	5,010,524.52	0.00
Western Nuclear, Incorporated	5,489,089.85	5,369,092.49	5,369,092.49	3,060,645.10	2,308,447.39	2,428,444.75	0.00
<b>Total Uranium</b>		\$44,636,428.59	\$26,891,278.96	\$15,329,343.13	\$29,307,085.46		\$17,745,149.63
<b>Thorium</b>							
Kerr-McGee Chemical LLC	57,276,076.72	46,786,614.91	46,786,614.91	26,670,656.87	20,115,958.04	30,605,419.85	0.00
<b>Total Thorium</b>	\$57,276,076.72	\$46,786,614.91	\$46,786,614.91	\$26,670,656.87	\$20,115,958.04	\$30,605,419.85	\$0.00
<b>Total Uranium and Thorium</b>		\$91,423,043.50	\$73,677,893.87	\$42,000,000.00	\$49,423,043.50		\$17,745,149.63

\*Congress provided two appropriations in FY 2000 to carry out the Title X reimbursement program: an initial appropriation of \$30 million and a supplemental appropriation of \$42 million for a total of \$72 million. Consequently, DOE issued two sets of payments in FY 2000. DOE allocated \$100,000 of the initial appropriations to DCAA for audit support costs.

**Exhibit C-3B. \*First FY 2000 Individual Approved Claim Amounts and Payments (April 2000)**

Licensee	FY 00 Maximum Reimbursement Ceilings	Approved Claim Amounts	Approved Claims Plus Prior Years Unpaid Claim Balances	Total Unpaid Claims Within Ceilings	1 <sup>st</sup> FY 00 Payments	Unpaid Claim Balances After Payments	Maximum Reimbursement Ceilings After Payments	Unpaid Claim Balances in Excess of Ceilings After Payments
<b>Uranium</b>								
American Nuclear Corp. Site	16,258,981.31						16,075,167.73	0.00
<i>American Nuclear Corporation</i>		17,820.78	107,379.86	107,379.86	30,997.53	76,382.33		
<i>State of Wyoming</i>		7,097.68	529,376.73	529,376.73	152,816.05	376,560.68		
Atlantic Richfield Company	38,583,155.45	0.00	2,803,370.00	2,803,370.00	809,253.40	1,994,116.60	37,773,902.05	0.00
Moab Mill Reclamation Trust	41,430,190.89	267,004.58	1,349,915.02	1,349,915.02	389,682.18	960,232.84	41,040,508.71	0.00
Cotter Corporation	434,186.73	0.00	1,149,184.67	434,186.73	125,337.39	1,023,847.28	308,849.34	714,997.94
Dawn Mining Company	7,277,520.62	177,184.58	909,795.11	909,795.11	262,632.04	647,163.07	7,014,888.58	0.00
Homestake Mining Company	61,604,804.20	1,092,967.96	5,261,709.72	5,261,709.72	1,518,906.35	3,742,803.37	60,085,897.85	0.00
Pathfinder Mines Corporation	18,541,887.05	1,413,964.84	2,158,514.46	2,158,514.46	623,101.90	1,535,412.56	17,918,785.15	0.00
Petrotonics Company	4,047,585.36	228,416.78	594,848.31	594,848.31	171,715.83	423,132.48	3,875,869.53	0.00
Quivira Mining Company	68,660,578.60	675,453.20	2,587,885.10	2,587,885.10	747,049.02	1,840,836.08	67,913,529.58	0.00
Tennessee Valley Authority	2,107,411.33	483,400.48	15,109,962.19	2,107,411.33	608,349.87	14,501,612.32	1,499,061.46	13,002,550.86
Umetco Minerals Corporation-CO	8,054,248.59	6,115,477.77	12,081,849.42	8,054,248.59	2,325,033.11	9,756,816.31	5,729,215.48	4,027,600.83
Umetco Minerals Corporation-WY	7,341,310.62	1,202,087.53	3,357,690.06	3,357,690.06	969,269.88	2,388,420.18	6,372,040.74	0.00
Western Nuclear, Incorporated	7,667,977.67	2,180,338.00	7,547,980.31	7,547,980.31	2,178,887.82	5,369,092.49	5,489,089.85	0.00
<b>Total Uranium</b>		\$13,861,214.18	\$55,549,460.96	\$37,804,311.33	\$10,913,032.37	\$44,636,428.59		\$17,745,149.63
<b>Thorium</b>								
Kerr-McGee Chemical LLC	76,263,044.35	35,539,771.03	65,773,582.54	65,773,582.54	18,986,967.63	46,786,614.91	57,276,076.72	0.00
<b>Total Thorium</b>	\$76,263,044.35	\$35,539,771.03	\$65,773,582.54	\$65,773,582.54	\$18,986,967.63	\$46,786,614.91	\$57,276,076.72	\$0.00
<b>Total Uranium and Thorium</b>		\$49,400,985.21	\$121,323,043.50	\$103,577,893.87	\$29,900,000.00	\$91,423,043.50		\$17,745,149.63

\*Congress provided two appropriations in FY 2000 to carry out the Title X reimbursement program: an initial appropriation of \$30 million and a supplemental appropriation of \$42 million for a total of \$72 million. Consequently, DOE issued two sets of payments in FY 2000. DOE allocated \$100,000 of the initial appropriations to DCAA for audit support costs.

**Exhibit C-4. FY 1999 Individual Approved Claim Amounts and Payments**

Licensee	*FY 99 Maximum Reimbursement Ceilings	Approved Claim Amounts	Approved Claims Plus Prior Years Unpaid Claim Balances	Total Unpaid Claims Within Ceilings	FY 99 Payments	Unpaid Claim Balances After Payments	Maximum Reimbursement Ceilings After Payments	Unpaid Claim Balances in Excess of Ceilings After Payments
<b>Uranium</b>								
American Nuclear Corp. Site	16,220,990.53							
<i>American Nuclear Corporation</i>		14,167.87	135,229.74	135,229.74	45,670.66	89,559.08	15,908,983.67	0.00
<i>State of Wyoming</i>		550,703.59	788,615.25	788,615.25	266,336.20	522,279.05		0.00
Atlantic Richfield Company	39,182,176.85	327,336.41	4,232,948.56	4,232,948.56	1,429,578.56	2,803,370.00	37,752,598.29	0.00
Atlas Corporation	41,090,577.43	504,120.21	1,635,140.62	1,635,140.62	552,230.18	1,082,910.44	40,538,347.25	0.00
Cotter Corporation	641,487.52	62,428.60	1,365,831.95	641,487.52	216,647.28	1,149,184.67	424,840.24	724,344.43
Dawn Mining Company	7,494,456.41	428,336.53	1,106,205.28	1,106,205.28	373,594.75	732,610.53	7,120,861.66	0.00
Homestake Mining Company	62,404,523.28	1,558,362.93	6,294,591.65	6,294,591.65	2,125,849.89	4,168,741.76	60,278,673.39	0.00
Pathfinder Mines Corporation	18,522,429.70	508,712.05	1,124,232.70	1,124,232.70	379,683.08	744,549.62	18,142,746.62	0.00
Petrotoomics Company	4,147,317.10	321,603.42	553,293.29	553,293.29	186,861.76	366,431.53	3,960,455.34	0.00
Quivira Mining Company	68,157,806.89	1,096,539.35	2,887,676.56	2,887,676.56	975,244.66	1,912,431.90	67,182,562.23	0.00
Tennessee Valley Authority	3,113,586.84	0.00	15,678,102.24	3,113,586.84	1,051,540.53	14,626,561.71	2,062,046.31	12,564,515.40
Umetco Minerals Corporation-CO	10,923,420.74	2,719,375.49	9,008,922.93	9,008,922.93	3,042,551.28	5,966,371.65	7,880,869.46	0.00
Umetco Minerals Corporation-WY	8,282,528.02	1,731,495.48	3,254,852.06	3,254,852.06	1,099,249.53	2,155,602.53	7,183,278.49	0.00
Western Nuclear, Incorporated	10,240,142.80	4,235,879.20	8,104,871.54	8,104,871.54	2,737,229.23	5,367,642.31	7,502,913.57	0.00
<b>Total Uranium</b>		\$14,059,061.13	\$56,170,514.37	\$42,881,654.54	\$14,482,267.59	\$41,688,246.78		\$13,288,859.83
<b>Thorium</b>								
Kerr-McGee Chemical LLC	90,039,106.53	21,184,990.62	45,651,543.92	45,651,543.92	15,417,732.41	30,233,811.51	74,621,374.12	0.00
<b>Total Thorium</b>	\$90,039,106.53	\$21,184,990.62	\$45,651,543.92	\$45,651,543.92	\$15,417,732.41	\$30,233,811.51	\$74,621,374.12	\$0.00
<b>Total Uranium and Thorium</b>		\$35,244,051.75	\$101,822,058.29	\$88,533,198.46	\$29,900,000.00	\$71,922,058.29		\$13,288,859.83

\*Ceilings adjusted for Public Law 105-388 increases and the resultant shift for uranium licensees from preliminary to statutory per dry short ton limit.

**Exhibit C-5. FY 1998 Individual Approved Claim Amounts and Payments**

Licensee	FY 98 Maximum Reimbursement Ceilings	Prior Year Unpaid Claim Balances: Basis for FY 98 Payments	*Total FY 98 Payments	Unpaid Claim Balances After Payments	Maximum Reimbursement Ceilings After Payments	Unpaid Claim Balances in Excess of Ceilings After Payments
<b>Uranium</b>						
American Nuclear Corp. Site	14,484,304.39				14,141,318.83	
<i>American Nuclear Corporation</i>		236,731.88	115,670.01	121,061.87		0.00
<i>State of Wyoming</i>		465,227.21	227,315.55	237,911.66		0.00
Atlantic Richfield Company	34,975,881.65	7,637,275.99	3,731,663.84	3,905,612.15	31,244,217.81	0.00
Atlas Corporation	36,598,229.43	2,211,667.39	1,080,646.98	1,131,020.41	35,517,582.45	0.00
Cotter Corporation	724,355.91	1,657,332.25	353,928.90	1,303,403.35	370,427.01	932,976.34
Dawn Mining Company	7,054,009.00	1,325,546.55	647,677.80	677,868.75	6,406,331.20	0.00
Homestake Mining Company	56,493,741.94	9,261,515.07	4,525,286.35	4,736,228.72	51,968,455.59	0.00
Pathfinder Mines Corporation	16,464,420.37	1,203,627.21	588,106.56	615,520.65	15,876,313.81	0.00
Petrotomics Company	3,702,757.49	453,060.73	221,370.86	231,689.87	3,481,386.63	0.00
Quivira Mining Company	60,497,343.97	3,502,500.67	1,711,363.46	1,791,137.21	58,785,980.51	0.00
Tennessee Valley Authority	3,360,149.19	17,319,911.08	1,641,808.84	15,678,102.24	1,718,340.35	13,959,761.89
Umetco Minerals Corporation-CO	11,788,437.26	12,049,518.01	5,759,970.57	6,289,547.44	6,028,466.69	261,080.75
Umetco Minerals Corporation-WY	7,865,396.22	2,978,865.83	1,455,509.25	1,523,356.58	6,409,886.97	0.00
Western Nuclear, Incorporated	10,771,635.30	7,565,667.33	3,696,674.99	3,868,992.34	7,074,960.31	0.00
<b>Total Uranium</b>	<b>\$264,780,662.12</b>	<b>\$67,868,447.20</b>	<b>\$25,756,993.96</b>	<b>\$42,111,453.24</b>	<b>\$239,023,668.16</b>	<b>\$15,153,818.98</b>
<b>Thorium</b>						
Kerr-McGee Chemical LLC	28,945,276.25	38,609,559.34	14,143,006.04	24,466,553.30	14,802,270.21	9,664,283.09
<b>Total Thorium</b>	<b>\$28,945,276.25</b>	<b>\$38,609,559.34</b>	<b>\$14,143,006.04</b>	<b>\$24,466,553.30</b>	<b>\$14,802,270.21</b>	<b>\$9,664,283.09</b>
<b>Total Uranium and Thorium</b>	<b>\$293,725,938.37</b>	<b>\$106,478,006.54</b>	<b>\$39,900,000.00</b>	<b>\$66,578,006.54</b>	<b>\$253,825,938.37</b>	<b>\$24,818,102.07</b>

\* In FY 1998, DOE initiated a new Title X review and payment schedule. In FY 1998 the payments were made in two installments because the Administration had proposed that \$5 million of the \$40 million authorized for Title X be reallocated by Congress to other needs. Soon after the first payment was made, the \$5 million was released and was reimbursed to the licensees. Both FY 1998 payments were based on the prior year approved unpaid balances, and the FY 1998 approved claims were carried forward to FY 1999. This column includes the total of the two FY 1998 payments. Since the FY 1998 claims were not considered for reimbursement in FY 1998, they are not shown here. Both payments were based on the prior year unpaid balance or the maximum reimbursement ceiling, whichever was less for each licensee. In FY 1998 four licensees had a prior year unpaid claim that exceeded their maximum reimbursement ceiling, as shown in the column on the right side of the table.

**Exhibit C-6. FY 1997 Individual Approved Claim Amounts and Payments**

Licensee	FY 97 Maximum Reimbursement Ceilings Including P.L. 104-259 Increase	*Final Approved Claim Amounts	Final Approved Claims Plus Prior Years Unpaid Claim Balances	FY 97 Payments	Unpaid Claim Balances After Payments	Maximum Reimbursement Ceilings After Payments	Unpaid Claim Balances in Excess of Ceilings After Payments
Uranium							
American Nuclear Corp. Site	14,452,728.01					14,158,655.32	
<i>American Nuclear Corporation</i>		32,474.25	335,360.02	98,628.14	236,731.88		0.00
<i>State of Wyoming</i>		472,285.92	660,671.76	195,444.55	465,227.21		0.00
Atlantic Richfield Company	37,397,984.83	375,410.14	10,845,738.19	3,208,462.20	7,637,275.99	34,189,522.63	0.00
Atlas Corporation	36,706,044.60	885,909.74	3,142,316.65	930,649.26	2,211,667.39	35,775,395.34	0.00
Cotter Corporation	1,005,534.57	147,424.04	1,954,796.53	297,464.28	1,657,332.25	708,070.29	949,261.96
Dawn Mining Company	7,452,283.96	1,718,838.11	1,882,416.04	556,869.49	1,325,546.55	6,895,414.47	0.00
Homestake Mining Company	59,114,413.25	1,863,271.97	13,152,329.16	3,890,814.09	9,261,515.07	55,223,599.16	0.00
Pathfinder Mines Corporation	16,594,172.27	490,228.97	1,703,546.92	499,919.71	1,203,627.21	16,094,252.56	0.00
Petrotomics Company	3,809,842.13	148,016.88	643,394.07	190,333.34	453,060.73	3,619,508.79	0.00
Quivira Mining Company	60,608,608.55	989,749.50	4,973,920.59	1,471,419.92	3,502,500.67	59,137,188.63	0.00
Tennessee Valley Authority	4,664,483.47	14,680,444.98	18,699,791.24	1,379,880.16	17,319,911.08	3,284,603.31	14,035,307.77
Umetco Minerals Corporation-CO	16,364,443.25	2,079,653.08	16,890,562.18	4,841,044.17	12,049,518.01	11,523,399.08	526,118.93
Umetco Minerals Corporation-WY	8,939,997.48	1,914,146.35	4,230,303.96	1,251,438.13	2,978,865.83	7,688,559.35	0.00
Western Nuclear, Incorporated	13,775,412.09	5,292,366.25	10,811,621.65	3,245,954.32	7,565,667.33	10,529,457.77	0.00
<b>Total Uranium</b>	<b>\$280,885,948.46</b>	<b>\$31,090,230.18</b>	<b>\$89,926,768.96</b>	<b>\$22,058,321.76</b>	<b>\$67,868,447.20</b>	<b>\$258,827,626.70</b>	<b>\$15,510,688.66</b>
Thorium							
Kerr-McGee Chemical LLC	40,181,180.93	16,848,743.92	50,496,237.58	11,886,678.24	38,609,559.34	28,294,502.69	10,315,056.65
<b>Total Thorium</b>	<b>\$40,181,180.93</b>	<b>\$16,848,743.92</b>	<b>\$50,496,237.58</b>	<b>\$11,886,678.24</b>	<b>\$38,609,559.34</b>	<b>\$28,294,502.69</b>	<b>\$10,315,056.65</b>
<b>Total Uranium and Thorium</b>	<b>\$321,067,129.39</b>	<b>\$47,938,974.10</b>	<b>\$140,423,006.54</b>	<b>\$33,945,000.00</b>	<b>\$106,478,006.54</b>	<b>\$287,122,129.39</b>	<b>\$25,825,745.31</b>

\* The total final approved claim amounts are shown in this column. In FY 1997 licensees' prorata reimbursements were based on the total of their FY 1997 approved claims and their unpaid claim balance from FY 1996. However, if a licensee's total was greater than its maximum reimbursement ceiling, its prorata reimbursement was determined on the basis of its maximum reimbursement ceiling. In FY 1997 four licensees had approved claims and prior year unpaid claims that exceeded their maximum reimbursement ceiling, as shown in the column on the right side of the table.

**Exhibit C-7. FY 1996 Individual Approved Claim Amounts and Payments**

Licensee	FY 96 Maximum Reimbursement Ceilings	Final Approved Claim Amounts <sup>1</sup>	Final Approved Claims Plus Prior Years Unpaid Claim Balances	Total FY 96 Payments <sup>2</sup>	Unpaid Claim Balances After Payments	Maximum Reimbursement Ceilings After Payments	Unpaid Claim Balances in Excess of Ceilings After Payments
<b>Uranium</b>							
American Nuclear Corp. Site	11,202,438.55					11,005,835.27	
<i>American Nuclear Corporation</i>		46,696.94	499,489.05	196,603.28	302,885.77		0.00
<i>State of Wyoming</i>		188,385.84	188,385.84	0.00	188,385.84		0.00
Atlantic Richfield Company	30,961,408.61	2,993,461.69	17,266,622.66	6,796,294.61	10,470,328.05	24,165,114.00	0.00
Atlas Corporation	28,933,051.61	1,617,778.98	3,723,383.16	1,466,976.25	2,256,406.91	27,466,075.36	0.00
Cotter Corporation	896,090.11	59,396.26	2,160,071.44	352,708.95	1,807,362.49	543,381.16	1,263,981.33
Dawn Mining Company	5,732,243.45	0.00	269,756.43	106,178.50	163,577.93	5,626,064.95	0.00
Homestake Mining Company	49,039,623.52	7,263,070.29	18,616,789.25	7,327,732.06	11,289,057.19	41,711,891.46	0.00
Pathfinder Mines Corporation	12,992,998.81	570,773.22	2,000,883.18	787,565.23	1,213,317.95	12,205,433.58	0.00
Petrotomics Company	3,024,146.51	89,005.69	816,926.75	321,549.56	495,377.19	2,702,596.95	0.00
Quivira Mining Company	47,664,297.38	1,606,888.24	6,570,298.13	2,586,127.04	3,984,171.09	45,078,170.34	0.00
Tennessee Valley Authority	3,785,651.61	0.00	5,509,412.05	1,490,065.79	4,019,346.26	2,295,585.82	1,723,760.44
Umetco Minerals Corporation-CO	13,281,230.65	3,310,417.42	20,038,518.35	5,227,609.25	14,810,909.10	8,053,621.40	6,757,287.70
Umetco Minerals Corporation-WY	7,293,132.24	644,344.48	3,819,576.54	1,503,418.93	2,316,157.61	5,789,713.31	0.00
Western Nuclear, Incorporated	12,511,490.00	3,900,548.52	9,639,327.58	4,120,072.18	5,519,255.40	8,391,417.82	0.00
<b>Total Uranium</b>	<b>\$227,317,803.05</b>	<b>\$22,290,767.57</b>	<b>\$91,119,440.41</b>	<b>\$32,282,901.63</b>	<b>\$58,836,538.78</b>	<b>\$195,034,901.42</b>	<b>\$9,745,029.47</b>
<b>Thorium</b>							
Kerr-McGee Chemical LLC	24,306,108.98	14,371,904.58	43,214,592.03	9,567,098.37	33,647,493.66	14,739,010.61	18,908,483.05
<b>Total Thorium</b>	<b>\$24,306,108.98</b>	<b>\$14,371,904.58</b>	<b>\$43,214,592.03</b>	<b>\$9,567,098.37</b>	<b>\$33,647,493.66</b>	<b>\$14,739,010.61</b>	<b>\$18,908,483.05</b>
<b>Total Uranium and Thorium</b>	<b>\$251,623,912.03</b>	<b>\$36,662,672.15</b>	<b>\$134,334,032.44</b>	<b>\$41,850,000.00</b>	<b>\$92,484,032.44</b>	<b>\$209,773,912.03</b>	<b>\$28,653,512.52</b>

<sup>1</sup> The total final approved claim amounts are shown in this column. In FY 1996 the payments were made in two installments. The first payments totaled about 80% of the authorized funding and were based on the prior year unpaid balance or the maximum reimbursement ceiling, whichever was less for each licensee. The remaining 20% of authorized funding was disbursed on the basis of the final review of FY 1996 claims. In FY 1996 four licensees had approved claims and prior year unpaid claims that exceeded their maximum reimbursement ceiling, as shown in the column on the right side of the table

<sup>2</sup> This column includes the total of the two FY 1996 payments. It includes \$262,634.79 that was directly allocated to a licensee because of an underpayment in FY 1995.

**Exhibit C-8. FY 1995 Individual Approved Claim Amounts and Payments**

Licensee	FY 95 Maximum Reimbursement Ceilings	*Final Approved Claim Amounts	Final Approved Claims Plus FY 94 Unpaid Claim Balances	FY 95 Payments	Unpaid Claim Balances After Payments	Maximum Reimbursement Ceilings After Payments	Unpaid Claim Balances in Excess of Ceilings After Payments
<b>Uranium</b>							
American Nuclear Corp. Site <i>American Nuclear Corporation State of Wyoming</i>	11,127,021.06	682,499.41	682,499.41	229,707.30	452,792.11	10,897,313.76	0.00
Atlantic Richfield Company	37,047,580.00	6,314,712.30	21,202,639.21	6,929,478.24	14,273,160.97	30,118,101.76	0.00
Atlas Corporation	29,176,992.62	1,453,586.24	3,137,604.96	1,032,000.78	2,105,604.18	28,144,991.84	0.00
Cotter Corporation	1,294,876.44	1,947,024.00	2,523,868.63	423,193.45	2,100,675.18	871,682.99	1,228,992.19
Dawn Mining Company	5,707,076.38	0.00	400,720.50	130,964.07	269,756.43	5,576,112.31	0.00
Homestake Mining Company	53,216,032.00	7,271,875.95	16,865,837.03	5,512,118.07	11,353,718.96	47,703,913.93	0.00
Pathfinder Mines Corporation	13,333,408.11	127,606.10	2,124,414.17	694,304.21	1,430,109.96	12,639,103.90	0.00
Petrotoinics Company	3,305,199.95	397,135.75	1,091,344.25	363,423.19	727,921.06	2,941,776.76	0.00
Quivira Mining Company	49,206,833.96	5,389,575.96	7,804,195.82	2,840,785.93	4,963,409.89	46,366,048.03	0.00
Tennessee Valley Authority	5,470,377.40	0.00	7,297,248.97	1,787,836.92	5,509,412.05	3,682,540.48	1,826,871.57
Umetco Minerals Corporation-CO	19,191,767.07	2,750,592.56	23,000,382.93	6,272,282.00	16,728,100.93	12,919,485.07	3,808,615.86
Umetco Minerals Corporation-WY	8,636,030.31	578,983.98	4,716,775.76	1,541,543.70	3,175,232.06	7,094,486.61	0.00
Western Nuclear, Incorporated	14,626,108.15	1,523,006.03	8,194,177.09	2,455,398.03	5,738,779.06	12,170,710.12	0.00
<b>Total Uranium</b>	<b>\$251,339,303.45</b>	<b>\$28,436,598.28</b>	<b>\$99,041,708.73</b>	<b>\$30,213,035.89</b>	<b>\$68,828,672.84</b>	<b>\$221,126,267.56</b>	<b>\$6,864,479.62</b>
<b>Thorium</b>							
Kerr-McGee Chemical LLC	35,123,038.98	26,351,788.42	40,321,651.55	11,478,964.10	28,842,687.45	23,644,074.88	5,198,612.57
<b>Total Thorium</b>	<b>\$35,123,038.98</b>	<b>\$26,351,788.42</b>	<b>\$40,321,651.55</b>	<b>\$11,478,964.10</b>	<b>\$28,842,687.45</b>	<b>\$23,644,074.88</b>	<b>\$5,198,612.57</b>
<b>Total Uranium and Thorium</b>	<b>\$286,462,342.43</b>	<b>\$54,788,386.70</b>	<b>\$139,363,360.28</b>	<b>\$41,691,999.99</b>	<b>\$97,671,360.29</b>	<b>\$244,770,342.44</b>	<b>\$12,063,092.19</b>

\* The total final approved claim amounts are shown in this column. In FY 1995 licensees' prorata reimbursements were based on their FY 1995 preliminary approved claims and their unpaid claim balance from FY 1994. However, if a licensee's total was greater than its Maximum Reimbursement Ceiling, the prorata reimbursement was determined on the basis of the maximum reimbursement ceiling. In FY 1995 four licensees had approved claims that exceeded their maximum ceiling, as shown in the column on the right side of the table. In the February 1996 report, the preliminary approved claim amounts were presented in this column.

**Exhibit C-9. FY 1994 Individual Approved Claim Amounts and Payments**

Licensee	FY 94 Maximum Reimbursement Ceilings	*Approved Claim Amounts	FY 94 Payments	Unpaid Claim Balances After Payments	Maximum Reimbursement Ceilings After Payments	Unpaid Claim Balances in Excess of Ceilings After Payments
<b>Uranium</b>						
American Nuclear Corp. Site <i>American Nuclear Corporation State of Wyoming</i>	10,834,489.84	0.00	0.00	0.00	10,834,489.84	0.00
Atlantic Richfield Company	43,480,647.90	22,294,981.82	7,407,054.91	14,887,926.91	36,073,592.99	0.00
Atlas Corporation	29,256,074.73	2,530,168.80	846,150.08	1,684,018.72	28,409,924.65	0.00
Cotter Corporation	1,549,892.96	865,903.67	289,059.04	576,844.63	1,260,833.92	0.00
Dawn Mining Company	5,761,665.58	605,349.68	204,629.18	400,720.50	5,557,036.40	0.00
Homestake Mining Company	56,145,487.52	13,922,474.89	4,328,513.81	9,593,961.08	51,816,973.71	0.00
Pathfinder Mines Corporation	13,983,478.71	2,997,416.18	1,000,608.11	1,996,808.07	12,982,870.60	0.00
Petrotomics Company	3,567,213.96	1,043,116.76	348,908.26	694,208.50	3,218,305.70	0.00
Quivira Mining Company	49,286,596.13	3,788,037.84	1,373,417.98	2,414,619.86	47,913,178.15	0.00
Tennessee Valley Authority	7,995,479.56	9,966,168.26	2,668,919.29	7,297,248.97	5,326,560.27	1,970,688.70
Umetco Minerals Corporation-CO	28,050,602.43	29,613,180.46	9,363,390.09	20,249,790.37	18,687,212.34	1,562,578.03
Umetco Minerals Corporation-WY	10,347,380.62	6,076,184.76	1,938,392.98	4,137,791.78	8,408,987.64	0.00
Western Nuclear, Incorporated	17,840,990.08	10,270,575.79	3,599,404.73	6,671,171.06	14,241,585.35	0.00
<b>Total Uranium</b>	<b>\$278,100,000.02</b>	<b>\$103,973,558.91</b>	<b>\$33,368,448.46</b>	<b>\$70,605,110.45</b>	<b>\$244,731,551.56</b>	<b>\$3,533,266.73</b>
<b>Thorium</b>						
Kerr-McGee Chemical LLC	41,200,000.00	20,970,214.66	7,000,351.53	13,969,863.13	34,199,648.47	0.00
<b>Total Thorium</b>	<b>\$41,200,000.00</b>	<b>\$20,970,214.66</b>	<b>\$7,000,351.53</b>	<b>\$13,969,863.13</b>	<b>\$34,199,648.47</b>	<b>\$0.00</b>
<b>Total Uranium and Thorium</b>	<b>\$319,300,000.02</b>	<b>\$124,943,773.57</b>	<b>\$40,368,799.99</b>	<b>\$84,574,973.58</b>	<b>\$278,931,200.03</b>	<b>\$3,533,266.73</b>

\* The total final approved claim amounts are shown in this column. Licensees' prorata reimbursements were determined on the basis of their final approved claim amount or their maximum reimbursement ceiling, whichever is less. In FY 1994, two licensees had approved claims that exceeded their maximum ceiling, as shown in the column on the right of the table.

# APPENDIX D. TITLE X SITE REMEDIAL ACTION STATUS

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FY 2002 Title X Site Remedial Action Status

SITE	LICENSE STATUS	*ESTIMATED COMPLETION DATE	REFERENCE
<i>TITLE X LIABILITY COMPLETED</i>			
Atlantic Richfield Co. Bluewater Mill Site Grants, NM	License terminated. About 1000 acres with three tailings cells under general license to DOE.	Completed 9/97	U.S. Nuclear Regulatory Commission, "2002 Annual Update - Status of Decommissioning Program," SECY-02-0169, September 18, 2002
Atlas Corp. Moab Mill Site Moab, UT	Licensee bankrupt. Trustee did some work. License terminated and site transferred to DOE for decommissioning & reclamation	DOE has no further Title X liability.	Same as above
<i>CLEANUP COMPLETED BUT STILL ELIGIBLE FOR TITLE X REIMBURSEMENT</i>			
Tennessee Valley Authority Edgemont Mill Site Edgemont, SD	License terminated. Disposal area under general license to DOE.	Completed 6/96	Same as above
<i>CLEANUP ONGOING/INCURRING COSTS ELIGIBLE FOR TITLE X REIMBURSEMENT</i>			
American Nuclear Corp. Gas Hills Mill Site Gas Hills Uranium Mining District, WY	Licensee did not have assets to complete cleanup. State completing cleanup under NRC Confirmatory Order.	2005	Same as above
Cotter Corp. Canon City Mill Site Canon City, CO	In 2001, Cotter Corp. applied for a license amendment to reopen the mill. Cleanup and monitoring under the Remedial Action Plan continue with State oversight.	2011	<a href="http://www.cdphs.state.co.us/lr/cotter/Cotter_Main.htm">http://www.cdphs.state.co.us/lr/cotter/Cotter_Main.htm</a>
Dawn Mining Co. Ford Mill Site Ford, WA	Under the amended closure plan, Dawn Mining is expected to close the mill site in 2013, six years earlier than the original closure date. The mill buildings will be demolished, and contaminated soils at the site will be cleaned up.	2013	<a href="http://www.doh.wa.gov/Publicat/2001_News/01-27.html">http://www.doh.wa.gov/Publicat/2001_News/01-27.html</a>
Homestake Mining Co. Grants Mill Site Grants, NM	Final status survey report approved 1998. Ground water corrective action with evaporation pond on 2nd tailings pile - Superfund site. Alternate Concentration Limits (ACL) request anticipated.	2013	U.S. Nuclear Regulatory Commission, "2002 Annual Update - Status of Decommissioning Program," SECY-02-0169, September 18, 2002

SITE	LICENSE STATUS	*ESTIMATED COMPLETION DATE	REFERENCE
Kerr-McGee Chemical LLC West Chicago Mill Site West Chicago, IL	Active decommissioning.	The bulk of excavation work estimated to be completed in 2002, except for an offsite area. Groundwater remediation work may continue for several additional years beyond 2002.	Licensee correspondence
Pathfinder Mines Corp. Lucky Mc Mill Site Riverton, WY	Final status survey report approved. Continuing evaporation pond reclamation. ACL request under review.	2004	U.S. Nuclear Regulatory Commission, "2002 Annual Update - Status of Decommissioning Program," SECY-02-0169, September 18, 2002
Petrotomics Co. Shirley Basin Mill Site Shirley Basin, WY	Final status survey approved 5/01. Ground water sulfate issue.	2003	Same as above
Rio Algom Mining LLC Ambrosia Lake Mill Site Grants, NM	Stand-by. Decommissioning plan submitted 10/00. NRC awaiting plan revisions. ACL request under review.	2007	Same as above
Umetco Minerals Corp. East Gas Hills Mill Site Gas Hills Uranium Mining District, WY	Received approval of ACL for ground water 3/02. Cover of third pile to be completed in 2004.	2005	Same as above
Umetco Minerals Corp. Uravan Mill Site Uravan, CO	Majority of work was finished in 2001, except for some long-term ground-water cleanup. During 1999, EPA conducted a second Five-year Review of the site, finding a few deficiencies that are being corrected.	2005	<a href="http://www.epa.gov/region08/superfund/sites/co/uravan.html">http://www.epa.gov/region08/superfund/sites/co/uravan.html</a>
Western Nuclear, Inc. Split Rock Mill Site Jeffrey City, WY	Final status survey approved 5/00. Ground water issue proposed to be resolved by institutional controls	2004	U.S. Nuclear Regulatory Commission, "2002 Annual Update - Status of Decommissioning Program," SECY-02-0169, September 18, 2002

\*Estimated completion dates are subject to change.