United States
Department of Energy

FISCAL YEAR 2022 STATUS REPORT

REIMBURSEMENTS TO LICENSEES
OF ACTIVE URANIUM
AND THORIUM PROCESSING SITES

TITLE X OF THE ENERGY POLICY ACT OF 1992

NOVEMBER 2022

U.S. DEPARTMENT OF ENERGY | OFFICE OF ENVIRONMENTAL MANAGEMENT

Contents

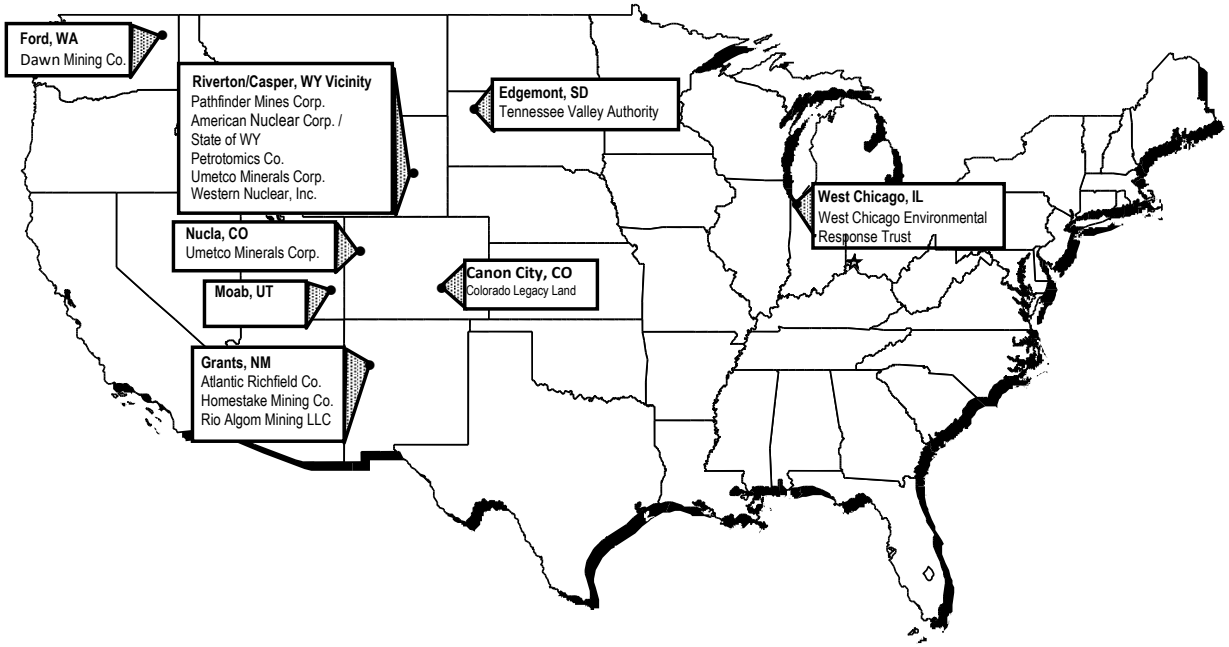
1. PREFACE 1
2. FY 2022 MAJOR ACTIVITIES 2
2.1 CLAIMS RECEIVED IN FY 2021 2
2.2 FY 2022 FUNDING AND PAYMENTS 2
2.3 ADJUSTMENT OF REIMBURSEMENT CEILINGS 3
2.4 PLANS FOR SUBSEQUENT REMEDIAL ACTION 3
3. REIMBURSEMENT SUMMARY 11
4. CONTACT INFORMATION 14
APPENDIX A. STATUTORY AND REGULATORY OVERVIEW A-1
APPENDIX B. TITLE X OF THE ENERGY POLICY ACT, AS AMENDED B-1
APPENDIX C. REVISED 10 CFR PART 765 ..... C-1
APPENDIX D. TITLE X GUIDANCE D-1
APPENDIX E. INDIVIDUAL APPROVED CLAIM AMOUNTS AND PAYMENTS E-1
APPENDIX F. STATUS OF REMAINING COSTS ELIGIBLE FOR FUTURE CLAIMS F-1
APPENDIX G. TITLE X SITE REMEDIAL ACTION STATUS G-1

1. PREFACE

This report summarizes U.S. Department of Energy (DOE) activities for fiscal year (FY) 2022 on reimbursements to licensees of active uranium and thorium processing sites under Title X of the Energy Policy Act of 1992 (Title X)(Public Law [PL] 102-486). Exhibit 1 shows the eligible licensees and site locations for which Congress authorized DOE to reimburse certain costs of 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. Appendix A provides background information on the Title X program. A copy of Title X is included as Appendix B. On June 3, 2003, DOE published a final rule in the Federal Register (68 FR 32955) adopting several technical and administrative amendments to its reimbursement regulations (10 CFR Part 765). The revised 10 CFR Part 765 is included as Appendix C.

Exhibit 1.

Eligible Licensees and Site Locations



See Exhibits 4 and 6 for site details.

2. FY 2022 MAJOR ACTIVITIES

The following activities occurred in FY 2022:

- Completed financial reviews of claims submitted in FY 2021 (See Section 2.1 for more details).
- Reimbursements totaling $16.155 million on approved claim amounts were provided to the Title X Licensees for FY 2021 claims and previously approved but unpaid claims from earlier fiscal years (see Appendix E, Exhibit E-30).
- On July 5, 2022, a Federal Register Notice announcing the acceptance of FY 2022 claims was published in the Federal Register.

The following sections discuss these activities. Appendix E contains annual tables summarizing the licensees' individual approved claim amounts and payments for FY 1994 through FY 2022.

2.1 Claims Received in FY 2021

A Federal Register Notice was issued on June 25, 2021 (86 FR 33696) establishing September 27, 2021, as the closing date for acceptance of claims in FY 2021 and notifying licensees that claims should be submitted to the DOE Office of Legacy Management for financial review. Two uranium licensees submitted claims in FY 2021 totaling $11.181 million before application of the Federal reimbursement ratio. After financial reviews were conducted in FY 2022, it was determined that $11.078 million were considered approved claim amounts and after the application of the Federal reimbursement ratio, $4.513 million was approved for reimbursement, see Appendix E, Exhibit E-30.

2.2 FY 2022 Funding and Payments

The Department supports the continuation of the Title X Uranium and Thorium Reimbursement Program. Appendix E, Exhibit E-30 shows payments through FY 2022 and other reimbursement information for each licensee. Exhibit 2 summarizes the application of the last three years of appropriations from FY 2020-2022.

Appendix E, Exhibit E-30 shows the application of the FY 2022 appropriations amount of $16.155 million to the approved claim amounts (i.e., $4.513 million) submitted in FY 2021, as well as the balance paid to cover the amount of previously approved but unpaid claims from earlier fiscal years. The unpaid claim balance to date is $14.471 million.

Exhibit 2. Recap of the Last Three Years of Appropriations: FY 2020 through FY 2022

Types of Funds	Expenditures ($)	Appropriations ($)
Further Consolidated Appropriations Act, 2020 (PL 116-94)		5,250,000
FY 2020 Reimbursement	(5,250,000)	
Consolidated Appropriations Act, 2021 (Public Law No: 116-260.)		5,000,000
FY 2021 Reimbursement	(5,000,000)	
Consolidated Appropriations Act, 2022 (Public Law 117-103)		16,155,000
FY 2022 Reimbursement	(16,155,000)	
Balance of Funds after FY 2022 Payments:	0	0

2.3 Adjustment of Reimbursement Ceilings

Exhibit 3 shows the annual adjustments to the per dry short ton uranium reimbursement limit and aggregate uranium and thorium reimbursement ceilings for inflation, amounts paid, and any statutory increases. The average monthly Consumer Price Index for All Urban Consumers (CPI-U) adjustment for 2022 was 1.047. 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 September 30, 2022, were:

Individual Uranium Per Dry Short Ton Limit	$11.97
Remaining Uranium Reimbursement Ceiling	$80,320,248.27
Remaining Thorium Reimbursement Ceiling	$0.00

Appendix A, Section A.2.2, contains background information on the inflation adjustment procedures.

2.4 Plans for Subsequent Remedial Action

Section 1001(b)(1)(B)(ii) of Title X directs that reimbursement of any remedial action costs incurred after December 31, 2007, must be in accordance with a plan for subsequent decontamination, decommissioning, reclamation and other remedial action (Plan) approved by DOE (see Appendix B). This requirement is described in the Title X regulation (see Appendix C; 10 CFR Part 765.30 and 765.31). The regulation provides the basic procedures for licensees to prepare and submit these Plans and for DOE to approve them. Supplemental guidance, (refer to Appendix D "Guidance") was provided to assist the licensees in understanding this requirement and to prepare these Plans in a consistent manner to assist DOE in the review and approval of the Plans.

By the end of December 2006, the Department had received a Plan from each of the 10 licensees eligible to submit a Plan. Those Plans were reviewed by DOE during 2007. Comments were provided to several of the licensees to obtain clarification or additional information, and those licensees provided the additional information required by 10 CFR 765.30. From June through August 2007, DOE provided written approval to the 10 licensees.

Approval of each Plan established a maximum dollar amount that each licensee would be eligible to claim for costs incurred after calendar year 2007. Exhibit 4 summarizes the approved cost estimates in those Plans, the remaining amounts that could be claimed, and the remaining Title X liability for each licensee following the payments made through FY 2022:

- The second column in Exhibit 4 shows, for each licensee submitting a Plan, the Federal share of the maximum reimbursements for remedial action costs at each site per 10 CFR 765.30. Each amount includes all approved amounts through the claims approved in early 2008, and each licensee's estimated cost of remedial action in 2008 through the completion of cleanup and closure of their site.

- The third column, Maximum Federal Share of Future Reimbursable Claims after FY 2022 Payments, shows the maximum amount each licensee is eligible to submit claims in the future. Appendix F provides a table showing this value for FY 2007 through FY 2022, and how it was calculated each year. In general, it is calculated each year by subtracting from the previous year's value the final approved claim amount for that year and adjusting the remaining amount based on the change in the average CPI-U for that year.

- The last column shows the total remaining Title X liability for each licensee following the payments made through FY 2022. The amounts for the uranium licensees are equal to the sum of the Maximum Federal Share of Future Reimbursable Claims after FY 2022 Payments (third column) and unpaid claim balances after payment (Exhibit D-30, seventh column). The amount for the thorium licensee is the remaining thorium reimbursement authority as discussed in Section 2.3.

Exhibit 3. Total Annual Reimbursements and Adjustments of Reimbursement Ceilings

Adjustment	CPI-U Change	Uranium Licenses ($)	Thorium License ($)	Totals ($)	Uranium Preliminary Dry Short Ton Limit ($)	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 94 Payments		244,731,551.54	34,199,648.47	278,931,200.01		
1995 Inflation Adjustments	1.027	251,339,303.43	35,123,038.98	286,462,342.41	5.05	5.82
FY 1995 Payments		(30,213,035.89)	(11,478,964.10)	(41,691,999.99)		
Ceiling After FY 95 Payments		221,126,267.54	23,644,074.88	244,770,342.42		
1996 Inflation Adjustments	1.028	227,317,803.03	24,306,108.98	251,623,912.01	5.19	5.98
FY 1996 Payments		(32,282,901.63)	(9,567,098.37)	(41,850,000.00)		
Ceiling After FY 96 Payments		195,034,901.40	14,739,010.61	209,773,912.01		
1997 Inflation Adjustments	1.03	200,885,948.44	15,181,180.93	216,067,129.37	5.35	6.16
P.L. 104-259 Ceiling Increase		80,000,000.00	25,000,000.00	105,000,000.00	0.75	0.75
FY 1997 Payments		(22,058,321.76)	(11,886,678.24)	(33,945,000.00)		
Ceiling After FY 97 Payments		258,827,626.68	28,294,502.69	287,122,129.37	6.10	6.91
1998 Inflation Adjustments	1.023	264,780,662.09	28,945,276.25	293,725,938.34	6.24	7.07
FY 1998 Payments		(25,756,933.96)	(14,143,006.04)	(39,900,000.00)		
Ceiling After FY 98 Payments		239,023,668.13	14,802,270.21	253,825,938.34		

Exhibit 3. Total Annual Reimbursements and Adjustments of Reimbursement Ceilings

Adjustment	CPI-U Change	Uranium Licenses ($)	Thorium License ($)	Totals ($)	Uranium Preliminary Dry Short Ton Limit ($)	Uranium Statutory Dry Short Ton Limit ($)
1999 Inflation Adjustments	1.016	242,848,046.82	15,039,106.53	257,887,153.35		7.18
PL 105-388 Ceiling Increase		0.00	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 99 Payments		228,365,779.23	74,621,374.12	302,987,153.35		
2000 Inflation Adjustments	1.022	233,389,826.37	76,263,044.35	309,652,870.72		7.34
FY 2000 Payments		(26,242,375.50)	(45,657,624.50)	(71,900,000.00)		
Ceiling After FY 00 Payments		207,147,450.87	30,605,419.85	237,752,870.72		
1st FY 2001 Payments		(9,807,070.94)	(20,115,958.04)	(29,923,028.98)		
Ceiling 1st FY 2001 Payments		197,340,379.93	10,489,461.81	207,829,841.74		
2001 Inflation Adjustments	1.034	204,049,952.85	10,846,103.51	214,896,056.36		7.59
2nd FY 2001 Payments		(10,943,159.14)	(10,846,103.51)	(21,789,262.65)		
Ceiling 2nd FY 01 Payments		193,106,793.71	0.00-	193,106,793.71		
2002 Inflation Adjustments	1.028	198,513,783.93	0.00-	198,513,783.93		7.80
PL 107-222 Ceiling Increase		0.00-	225,000,000.00	225,000,000.00		
FY 2002 Payments		(8,337,050.69)	(9,592,656.31)	(17,929,707.00)		
Ceiling FY 02 Payments		190,176,733.24	215,407,343.69	405,584,076.93		
2003 Inflation Adjustments	1.016	193,219,560.97	218,853,861.19	412,073,422.16		7.93

Exhibit 3. Total Annual Reimbursements and Adjustments of Reimbursement Ceilings

Adjustment	CPI-U Change	Uranium Licenses ($)	Thorium License ($)	Totals ($)	Uranium Preliminary Dry Short Ton Limit ($)	Uranium Statutory Dry Short Ton Limit ($)
FY2003 Payments		(988,812.00)	(14,832,188.00)	(15,821,000.00)		
Ceiling After FY 03 Payments		192,230,748.97	204,021,673.19	396,252,422.16		
2004 Inflation Adjustments	1.023	196,652,056.20	208,714,171.67	405,366,227.87		8.11
FY 2004 Payments		(6,049,464.11)	(44,449,635.89)	(50,499,100.00)		
Ceiling After FY 04 Payments		190,602,592.09	164,264,535.78	354,867,127.87		
1st FY 2005 Payment		(6,755,338.98)	(49,265,451.48)	(56,020,790.46)		
Ceiling After FY 05 Payment		183,847,253.11	114,999,084.30	298,846,337.41		
2005 Inflation Adjustments	1.027	188,811,128.94	118,104,059.58	306,915,188.52		8.33
2nd FY 2005 Payments		(6,552,547.18)	(16,386,662.36)	(22,939,209.54)		
Ceiling after FY 05 Payment		182,258,581.76	101,717,397.22	283,975,978.98		
2006 Inflation Adjustments	1.034	188,455,373.54	105,175,788.73	293,631,162.27		8.61
FY 2006 Payments		(7,652,986.96)	(12,047,013.04)	(19,700,000.00)		
Ceiling after FY 06 Payments		180,802,386.58	93,128,775.69	273,931,162.27		
2007 Inflation Adjustments	1.032	186,588,062.95	96,108,896.51	282,696,959.46		8.89
FY 2007 Payments		(8,127,048.65)	(11,472,951.35)	(19,600,000.00)		
Ceiling after FY 07 Payments		178,461,014.30	84,635,945.16	263,096,959.46		
2008 Inflation Adjustments	1.028	183,457,922.70	87,005,751.62	270,463,674.32		9.14

Exhibit 3. Total Annual Reimbursements and Adjustments of Reimbursement Ceilings

Adjustment	CPI-U Change	Uranium Licenses ($)	Thorium License ($)	Totals ($)	Uranium Preliminary Dry Short Ton Limit ($)	Uranium Statutory Dry Short Ton Limit ($)
FY 2008 Payments		(8,321,884.70)	(11,296,115.30)	(19,618,000.00)		
Ceiling After FY08 Payments		175,136,038.00	75,709,636.32	250,845,674.32		
2009 Inflation Adjustments	1.038	181,791,207.45	78,586,602.50	260,377,809.95		9.48
FY 2009 Payments		(14,181,497.14)	(17,689,057.46)	(31,870,554.60)		
Ceiling After FY09 Payments		167,609,710.31	60,897,545.04	228,507,255.35		
2010 Inflation Adjustments	1.00	167,609,710.31	60,897,545.04	228,507,255.35		9.48
FY2010 Payments		(6,418,227.28)	(7,335,561.84)	(13,753,789.12)		
Ceiling after FY10 Payments		161,191,483.03	53,561,983.20	214,753,466.23		
2011 Inflation Adjustments	1.016	163,770,546.76	54,418,974.93	218,189,521.69		9.64
FY2011 Payments		(6,956,290.04)	(2,316,623.16)	(9,272,913.20)		
Ceiling After FY 11 Payments		156,814,256.72	52,102,351.77	208,916,608.49		
2012 Inflation Adjustments	1.032	161,832,312.94	53,769,627.03	215,601,939.96		9.94
FY2012 Payments		(6,250,845.06)	(8,751,897.62)	(15,002,742.68)		
Ceiling after FY 12 Payments		155,581,467.88	45,017,729.41	200,599,197.29		
2013 Inflation Adjustments	1.021	158,848,678.71	45,963,101.73	204,811,780.44		10.15
FY 2013 Payments		0.00	0.00	0.00		
Ceiling after FY 13 Payments		158,848,678.71	45,963,101.73	204,811,780.44		

Exhibit 3. Total Annual Reimbursements and Adjustments of Reimbursement Ceilings

Adjustment	CPI-U Change	Uranium Licenses ($)	Thorium License ($)	Totals ($)	Uranium Preliminary Dry Short Ton Limit ($)	Uranium Statutory Dry Short Ton Limit ($)
2014 Inflation Adjustments	1.015	161,231,408.89	46,652,548.26	207,883,957.15		10.30
FY 2014 Payments		0.00	0.00	0.00		
Ceiling after FY 14 Payments		161,231,408.89	46,652,548.26	207,883,957.15		
2015 Inflation Adjustments	1.016	163,811,111.43	47,398,989.03	211,210,100.46		10.47
FY 2015 Payments		(4,569,242.36)	(5,430,757.64)	(10,000,000.00)		
Ceiling After FY 15 Payments		159,241,869.07	41,968,231.39	201,210,100.46		
2016 Inflation Adjustments	1.001	159,401,110.94	42,010,199.62	201,411,310.56		10.48
FY 2016 Payments		(15,357,244.35)	(17,601,755.65)	(32,959,000.00)		
Ceiling After FY-16 Payments		144,043,866.59	24,408,443.97	168,452,310.56		
2017 Inflation Adjustments	1.013	145,916,436.86	24,725,753.74	170,642,190.60		10.62
FY 2017 Payments		(17,047,348.84)	(12,952,651.16)	(30,000,000.00)		
Ceiling After FY 17 Payments		128,869,088.02	11,773,102.58	140,648,190.60		
2018 Inflation Adjustments	1.021	131,575,338.87	12,020,337.73	143,595,676.00		10.48
FY 2018 Payments		(26,183,441.55)	(9,545,558.45)	(35,732,000.00)		
Ceiling After FY 18 Payments		105,391,897.32	2,471,779.28	107,863,676.60		
2019 inflation Adjustments	1.024	107,921,302.86	2,531,101.98	110,452,404.84		11.10

Exhibit 3. Total Annual Reimbursements and Adjustments of Reimbursement Ceilings

Adjustment	CPI-U Change	Uranium Licenses ($)	Thorium License ($)	Totals ($)	Uranium Preliminary Dry Short Ton Limit ($)	Uranium Statutory Dry Short Ton Limit ($)
FY 2019 Payments		(9,778,651.86)	(1,221,348.14)	(11,000,000.00)		
Ceiling After FY 19 Payments		98,142,651.00	1,309753.84	99,452,404.84		
2020 Inflation Adjustments	1.018	99,909,218.73	1,333,329.41	101,242,548.14		11.30
FY 2020 Payments		(4,384,594.24)	(865,405.76)	(5,250,000.00)		
Ceiling After FY 20 Payments		95,524,624.49	467,923.65	95,992,548.14		
2021 Inflation Adjustments	1.012	96,670,919.98	473,538.73	97,144,458.71		11.43
FY 21 Payments		(4,705,640.85)	(294,359.15)	(5,000,000.00)		
Ceiling After FY 21 Payments		91,965,279.13	179,179.58	92,144,458.71		
2022 Inflation Adjustment	1.047	96,287,647.25	187,601.02	96,475,248.27		11.97
FY 22 Payments		(15,967,398.98)	(187,601.02)	(16,155,000.00)		
Ceiling After FY 22 Payments		80,320,248.27	0.00	80,320,248.27		
Total Payments through FY 2022		389,740,130.69	399,651,767.52	789,391,898.21		
Total Statutory Reimbursement Ceilings (excluding inflation adjustments)		350,000,000.00	365,000,000.00	715,000,000.00		

[1]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.
[2]Public Law 104-259 increased the statutory per dry short ton limit from $5.50 to $6.25, as adjusted annually for inflation.
[3]Includes an accelerated payment of $1,183,954.92 to the Moab Mill Reclamation Trust on its approved FY 2001 claim.

Exhibit 4. Maximum Federal Share of Remedial Action Costs in Approved Plans for Subsequent Remedial Action and Remaining Title X Liability after FY 2022 Payments

Licensee	Federal Share of Total Costs in Approved Plans for Subsequent Remedial Action[1]	Maximum Federal Share of Future Reimbursable Claims after FY 2022 Payments[2]	Maximum Federal Share of Remaining Title X Program Liability after FY 2022 Payments[3,4]
State of Wyoming (ANC Site)	$2,820,674.07	$710,686.34	$710,686.34
Cotter Corporation/Colorado Legacy Land	$6,220,297.23	2,120,671.13	2,120,671.13
Dawn Mining Company	$18,056,205.96	$0.00[5]	$1,851,312.01
Homestake Mining Company	$132,143,076.35	39,570,699.70	$39,570,699.70
Pathfinder Mines Corporation	$11,037,356.70	$328,181.52	$328,181.52
Umetco Minerals Corporation-CO	$87,924,859.06	$12,114,457.20	$21,824,312.79
Umetco Minerals Corporation-WY	$26,518,489.35	1,185,978.04	$1,185,978.04
Subtotal	$284,720,958.72	$56,030,673.93	$67,591,841.53
Completed Site with Remaining Title X Liability			
Tennessee Valley Authority	N/A	N/A	$2,909,845.72
Licensees with No Remaining Federal Liability			
Atlantic Richfield Company	N/A	N/A	N/A
Moab Site Licensees	N/A	N/A	N/A
Petrotomics Company	N/A	N/A	N/A
Rio Algom Mining LLC	$47,107,063.51	$0.00[7]	$0.00[7]
Western Nuclear, Incorporated	$33,430,218.28	$0.00[8]	$0.00[8]
West Chicago Env. Resp. Trust	$401,391,628.45	$0.00[6]	$0.00[6]
Total	$766,649,868.96	$56,030,673.93	$70,501,687.27

Notes:

1: Federal Share of Total Costs in Approved Plans for Subsequent Remedial Action (PFSRA) is the total estimated cost for each site submitting a Plan multiplied by the Federal Reimbursement Ratio for each site per 10CFR765.30. (Amounts are in current dollars for the years claimed for work performed prior to 2007; and in constant 2007 dollars for estimated costs in 2007 and beyond.)
2: Maximum Federal Share of Future Claims after FY 2022 Payments is the maximum total amount that each licensee is eligible to claim in future claims. The table in **Appendix F** shows these amounts for FY 2007 through 2022 and how it was calculated each year (Amounts are in constant 2021 dollars.)
3: Maximum Federal Share of Remaining Title X Program Liability is the sum of the column to the left and the total unpaid claim balance after payment which includes approved costs for uranium licensees that are within and exceed the dry short ton ceiling, (The amounts are in constant 2021 dollars, except approved costs in excess of the uranium dry short ton limit are in current dollars for the years claimed.)
4: Maximum Federal Share of Remaining Title X Program Liability for the thorium is the remaining thorium statutory reimbursement ceiling shown in Section 2.3**.** The remaining thorium liability is the amount of approved unpaid claims in current dollars for the years claimed because no additional claims will be accepted (see Note 6).

5: Dawn Mining Company: With Dawn Mining Company's FY 2015 submission of Title X claims, their total claim amount exceeded the approved PFSRA amount ($18,056,205.96). DOE will continue to reimburse Dawn Mining Company for its past claim amounts that are owed as long as appropriations are available. However, with Dawn Mining Company being over the PFSRA amount, DOE will no

longer accept future claims in FY 2016 or beyond from Dawn Mining Company. Thus, the Maximum Federal Share of Future Reimbursable Claims after Payments amount for Dawn is $0.

6: West Chicago (WCERT): With WCERT's FY 2019 Title X claim submission, their total claim amount exceeded the Thorium statutory ceiling ($365,000,000 plus adjustments for inflation). With WCERT being over the Thorium statutory ceiling, DOE will no longer accept future claims in FY 2020 or beyond from WCERT. Therefore, the Maximum Federal Share of Future Reimbursable Claims after Payments amount for WCERT is $0. In addition, with the FY 2022 payment DOE has fully reimbursed WCERT for all of its past claims so the remaining liability is $0. This entity will continue to complete its remediation efforts.

7: Rio Algom Mining LLC: With Rio Algom Mining LLC's FY 2016 submission of Title X claims, their total claim amount exceeded the approved PFSRA amount ($47,107,063.51). DOE will no longer accept future claims in FY 2017 or beyond. In addition, with the FY 2018 payment DOE has fully reimbursed Rio Algom Mining LLC for all of its past claims so the remaining liability is $0. This company will continue to complete its remediation efforts.

8: Western Nuclear, Inc.: With Western Nuclear, Inc.'s FY 2018 submission of Title X claims, their total claim amount exceeded the approved PFSRA amount ($33,430,218.28). DOE will no longer accept future claims in FY 2019 or beyond. In addition, with the FY 2019 payment DOE has fully reimbursed Western Nuclear, Inc. for all of its past claims so the remaining liability is $0. This company will continue to complete its remediation efforts.

3. REIMBURSEMENT SUMMARY

Exhibit 5 summarizes the total amounts claimed, adjusted, disallowed, and reimbursed for FY 1994 through FY 2022, and Exhibit 6 presents the total reimbursements made to individual licensees during FY 1994 through FY 2022.

During FY 1994 through FY 2022, licensees submitted $1.80 billion in total claims, before review and application of the Federal reimbursement ratios. Of this amount, DOE disallowed $74.5 million because the costs did not meet the 10 CFR Part 765 reimbursement criteria and approved $1.73 billion, of which the Federal share was $803.85 million after application of the Federal reimbursement ratios. Through FY 2022, reimbursements to all uranium and thorium licensees totaled $789.39 million.

The remedial action status of the 14 Title X sites is summarized in Appendix G. As of September 30, 2022:

- Ten sites are continuing remedial activities and DOE is providing reimbursements to six of those sites.[1]
- Three sites (ARCO-Bluewater mill site, TVA-Edgemont mill site, and Petrotomics-Shirley Basin 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 and the Petrotomics Company.
  - Some TVA costs exceed the dry short ton limit, and therefore TVA is still eligible for Title X reimbursement as a result of annual inflation adjustments to that limit.
- 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.

[1] As noted in Exhibit 4, Dawn Mining Company, Rio Algom Mining LLC, and Western Nuclear, Inc. have exceeded their approved PFSRA amounts and West Chicago Environmental Response Trust has exceeded the thorium statutory ceiling – DOE will no longer accept future claims from these sites. With the FY 2018 payment, DOE has fully reimbursed Rio Algom Mining LLC for all of its past claims so the remaining liability is $0. With the FY 2019 payment, DOE has fully reimbursed Western Nuclear, Inc. for all of its past claims so the remaining liability is $0. With the FY 2022 payment, DOE has fully reimbursed West Chicago Env. Resp. Trust for all of its past claims so the remaining liability is $0. DOE will continue to reimburse Dawn Mining Company for their past claim amounts that are owed as long as appropriations are available. Reclamation continues at the Dawn Mining Company, Rio Algom Mining LLC, Western Nuclear, Inc., and West Chicago Environmental Response Trust sites.

Exhibit 5. 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	$266,502.97	($937,297.61)	$26,177,174.05	$9,849,727.19	$51,712,291.63
FY 2002	$157,124,487.88	$0.00	($491,101.00)	$156,633,386.88	$79,654,978.14	$17,929,707.00
FY 2003	$77,147,888.17	$0.00	($7,621,720.00)	$69,526,168.17	$33,760,205.01	$15,821,000.00
FY 2004	$50,746,774.59	$26,174.00	($1,518,545.00)	$49,254,403.59	$23,859,320.07	$50,499,100.00
FY 2005	$46,812,683.96	$0.00	($844,576.16)	$45,968,107.80	$21,367,403.34	$78,960,000.00
FY 2006	$56,482,207.99	$0.00	($3,149,255.00)	$53,332,952.99	$23,610,469.76	$19,700,000.00
FY 2007	$57,676,613.39	$0.00	($2,559,864.00)	$55,116,749.39	$24,889,654.48	$19,600,000.00
FY 2008	$53,167,981.98	$0.00	($3,397,457.00)	$49,770,524.98	$23,264,863.69	$19,618,000.00
FY 2009	$35,027,424.25	$0.00	($855,291.00)	$34,172,133.25	$14,965,536.51	$31,870,554.60
FY 2010	$19,615,551.79	$0.00	($778,344.00)	$18,837,207.79	$7,794,426.23	$13,753,789.12
FY 2011	$40,757,530.13	$0.00	($2,466,914.59)	$38,290,615.54	$19,545,412.42	$9,272,913.20
FY 2012	$35,945,531.12	$0.00	($1,070,826.38)	$34,874,704.74	$17,287,675.82	$15,002,742.68
FY 2013	$33,210,907.14	$0.00	($67,068.57)	$33,143,838.57	$17,492,409.15	$0.00
FY 2014	$38,210,907.14	$0.00	($732,050.56)	$37,478,348.17	$16,083,045.57	$0.00
FY 2015	$49,570,106.10	$0.00	($1,275,128.99)	$48,294,977.11	$21,406,031.33	$10,000,000.00
FY 2016	$46,434,110.65	$0.00	($1,300,570.00)	$45,133,540.65	$16,253,651.97	$32,959,000.00
FY 2017	$18,991,429.65	$0.00	($1,458,657.00)	$17,532,772.65	$8,990,361.67	$30,000,000.00
FY 2018	$11,927,652.58	$754,176.00[2]	($962,560.00)	$11,719,268.58	$5,863,270.94	$35,732,000.00
FY 2019	$20,181,386.79	$0.00	($1,972,040.00)	$18,209,346.79	$8,282,437.67	$11,000,000.00
FY 2020	$18,049,573.14	$0.00	($322,817.00)	$17,726,757.14	$7,082,225.74	$5,250,000.00
FY 2021	$11,181,182.51	$0.00	($103,099.00)	$11,078,083.51	$4,512,792.19	$5,000,000.00
FY 2022	TBD	TBD	TBD	TBD	TBD	$16,155,000.00
Total	$1,804,606,841.28	$245,553.10	($74,506,545.17)	$1,730,345,849.21	$803,848,874.76	$789,391,898.22

[1] To be determined (TBD) pending the completion of DOE's review of claims submitted by September 30, 2022.

[2] DOE reassessed Homestake claims submitted in 2016 and found an understated approved claim amount of $603,545.00. DOE also reassessed Umetco Uravan and Umetco Gas Hills claims submitted in 2017 and found understated approved claim amounts of $135,510.00 and $15,121.00, respectively. These amounts have been noted as Adjustments for the purposes of this table. They have been characterized as Homestake and Umetco's approved 2018 claim amount in Exhibit D-27, and after applying the federal reimbursement ratio, the approved unpaid claim balances have been increased accordingly.

Exhibit 6. Total Reimbursements to Individual Licensees through FY 2022	
Licensee	**Total Payments FY 1994 through FY 2022**
Title X Cleanup and Liability Completed	
Atlantic Richfield Company Bluewater Mill Site, Grants, NM	$32,305,902.36
Petrotomics Company Shirley Basin Mill Site	$2,850,428.21
Title X Liability Completed But Cleanup Ongoing	
Moab Mill Site Moab, UT	$9,694,190.01 (Note: of which $5,908,653.53 to Atlas Corp.; $2,994,444.74 to Moab Mill Reclamation Trust; and $791,091.74 to Trust Beneficiaries: Utah/NRC)
Rio Algom Mining LLC (formerly Quivira) Ambrosia Lake Mill Site, Grants, NM	$48,081,085.86
Western Nuclear Incorporated Split Rock Mill Site, Jeffrey City, WY	$33,636,106.04
West Chicago Environmental Response Trust West Chicago Mill Site, West Chicago, IL	$399,651,767.52
PFSRA Amount Exceeded; Cleanup Ongoing and Still Eligible for Title X Reimbursement	
Dawn Mining Company Ford Mill Site, Ford, WA	$17,299,271.18
Cleanup Completed; Still Eligible For Title X Reimbursement	
Tennessee Valley Authority Edgemont Mill Site, Edgemont, SD	$22,220,168.00
Cleanup Ongoing/Incurring Costs Eligible For Title X Reimbursement	
American Nuclear Corporation/State of WY Gas Hills Mill Site, Gas Hills Uranium Mining District, WY	ANC: $820,406.91 State of WY: $1,485,485.36
Cotter Corporation/Colorado Legacy Land Canon City Mill Site, Canon City, CO	$4,883,144.08
Homestake Mining Company Grants Mill Site, Grants, NM	$110,129,828.08
Pathfinder Mines Corporation Lucky Mc Mill Site, Riverton, WY	$10,789,748.96
Umetco Minerals Corporation Uravan Mill Site, Uravan, CO	$69,709,791.96
Umetco Minerals Corporation East Gas Hills Mill Site, Gas Hills Uranium Mining District, WY	$25,834,573.69
Total	**$789,391,898.22**

4. CONTACT INFORMATION

Julia Donkin, Title X Program Lead & Coordinator

U.S. Department of Energy

Office of Environmental Management

1000 Independence Avenue SW

Washington, DC 20585

Telephone: (202)586-5000

Email: Julia.Donkin@em.doe.gov

-or-

Charlee Boger, Title X Lead for Review of Reimbursement Claims

U.S. Department of Energy

Office of Legacy Management

2597 Legacy Way

Grand Junction, Colorado 81503

Telephone: (970)248-6113

Email: Charlee.Boger@lm.doe.gov

APPENDIX A. STATUTORY AND REGULATORY OVERVIEW

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
June 3, 2003	Technical amendment to 10 CFR Part 765 is issued (68 FR 32955)

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 plan for subsequent remedial action 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, DOE promulgated a final rule on May 23, 1994, under 10 CFR Part 765 (59 FR 26714). On June 3, 2003, DOE issued a technical and administrative amendment (68 FR 32955) to 10 CFR Part 765 updating the original regulations to reflect legislative increases in the reimbursement ceilings and other technical corrections.

In conjunction with the May 23, 1994, final rulemaking, 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

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 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 financial reviews 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 the next fiscal year(s) 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 change in the average monthly 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 change in the average monthly 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) x 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.

Individual Uranium Remaining 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

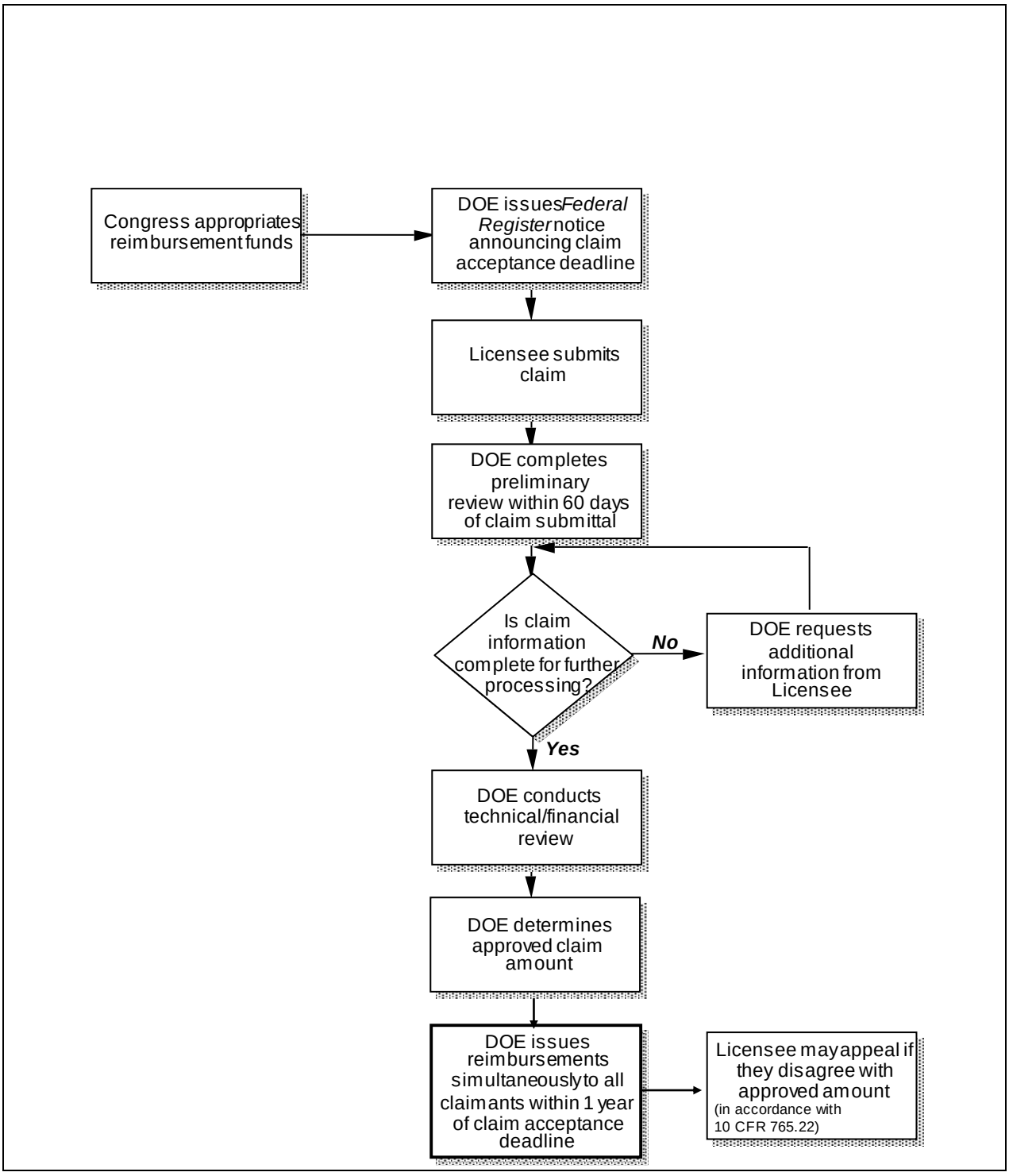
Similarly, the statutory per dry short ton limit on reimbursements to individual uranium licensees is adjusted for inflation each year by multiplying the per dry short ton value for the preceding year by the change in the average monthly CPI-U for the preceding calendar year. For example, the statutory 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 change in the monthly average CPI-U, 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**
American Nuclear Corporation/State of WY Gas Hills Mill Site Gas Hills Uranium Mining District, WY	2.202	6.0	.367
Atlantic Richfield Company Bluewater Mill Site, Grants, NM	8.837	23.9	.370
Atlas/Moab Mill Reclamation Trust Moab Mill Site, Moab, UT	5.946	10.6	.561
Cotter Corporation Canon City Mill Site, Canon City, CO	0.315	2.2	.143
Dawn Mining Company Ford Mill Site, Ford, WA	1.171	3.1	.378
Homestake Mining Company Grants Mill Site, Grants, NM	11.411	22.3	.512
Pathfinder Mines Corporation Lucky Mc Mill Site, Riverton, WY	2.842	11.7	.243
Petrotomics Company Shirley Basin Mill Site, Shirley Basin, WY	0.725	6.3	.115
Rio Algom Mining LLC Ambrosia Lake Mill Site, Grants, NM	10.017	33.2	.302
Tennessee Valley Authority Edgemont Mill Site, Edgemont, SD	1.625	2.0	.813
Umetco Minerals Corporation Uravan Mill Site, Uravan, CO	5.701	10.5	.543
Umetco Minerals Corporation East Gas Hills Mill Site Gas Hills Uranium Mining District, WY	2.103	8.0	.263
Western Nuclear, Incorporated Split Rock Mill Site, Jeffrey City, WY	3.626	8.2	.442
West Chicago Environmental Response Trust 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 ➢ Disposal of process wastes ➢ Removal actions ➢ Mill equipment decommissioning ➢ Monitoring ➢ Administrative expenses for remediation ➢ Treatment of contaminated soils ➢ Air pollution studies ➢ Long-term surveillance and maintenance fees	➢ Charges for fully depreciated equipment ➢ Costs of commuting between residence and work site ➢ Lunch allowances ➢ Entertainment expenses ➢ Employee bonuses ➢ Costs of operating equipment for non-reclamation purposes ➢ Environmental fines ➢ Legal fees not directly related to reclamation of Title X site ➢ Lobbying-related costs

Exhibit A-4. Annual Reimbursement Process



A.3 Administrative Framework

The current administrative framework is:

DOE Office of Environmental Management (Washington, DC)
- Program Oversight

DOE Office of Legacy Management (Grand Junction, CO)
- Financial Review of Claims

DOE Oak Ridge Operations Office (Oak Ridge, TN)
- Payment Transfer

DOE Office of General Counsel (Washington, DC)
- Legal Support

APPENDIX B. TITLE X OF THE ENERGY POLICY ACT, AS AMENDED

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. REVISED 10 CFR PART 765

The following document is the revised 10 CFR Part 765, shown in entirety, resulting from the June 3, 2003, rulemaking. The June 3, 2003, Federal Register and the electronic 10 CFR Part 765 are available on the U.S. National Archives & Records Administration website (http://www.archives.gov/federal_register/).

http://www.gpo.gov/fdsys/pkg/CFR-2003-title10-vol4/pdf/CFR-2003-title10-vol4-part765.pdf

PART 765—REIMBURSEMENT FOR COSTS OF REMEDIAL ACTION AT ACTIVE URANIUM AND THORIUM PROCESSING SITES

Subpart A—General

Sec.

765.1 Purpose.

765.2 Scope and applicability.

765.3 Definitions.

Subpart B—Reimbursement Criteria

765.10 Eligibility for reimbursement.

765.11 Reimbursable costs.

765.12 Inflation index adjustment procedures.

Subpart C—Procedures for Submitting and Processing Reimbursement Claims

765.20 Procedures for submitting reimbursement claims.

765.21 Procedures for processing reimbursement claims.

765.22 Appeals procedures.

765.23 Annual report.

Subpart D—Additional Reimbursement Procedures

765.30 Reimbursement of costs incurred in accordance with a plan for subsequent remedial action.

765.31 Designation of funds available for subsequent remedial action.

765.32 Reimbursement of excess funds.

AUTHORITY: 42 U.S.C. 2296a *et seq.*

SOURCE: 59 FR 26726, May 23, 1994, unless otherwise noted.

Subpart A—General

§ 765.1 Purpose.

The provisions of this part establish regulatory requirements governing reimbursement for certain costs of remedial action at active uranium or thorium processing sites as specified by Subtitle A of Title X of the Energy Policy Act of 1992. These regulations are authorized by section 1002 of the Act (42 U.S.C. 2296a–1), which requires the Secretary to issue regulations governing the reimbursements.

§ 765.2 Scope and applicability.

(a) This part establishes policies, criteria, and procedures governing reimbursement of certain costs of remedial action incurred by licensees at active uranium or thorium processing sites as a result of byproduct material generated as an incident of sales to the United States.

(b) Costs of remedial action at active uranium or thorium processing sites are borne by persons licensed under section 62 or 81 of the Atomic Energy Act (42 U.S.C. 2092, 2111), either by NRC or an Agreement State pursuant to a counterpart to section 62 or 81 of the Atomic Energy Act, under State law, subject to the exceptions and limitations specified in this part.

(c) The Department shall, subject to the provisions specified in this part, reimburse a licensee, of an active uranium or thorium processing site for the portion of the costs of remedial action as are determined by the Department to be attributable to byproduct material generated as an incident of sales to the United States and either incurred by

the licensee not later than December 31, 2007, or incurred by the licensee in accordance with a plan for subsequent remedial action approved by the Department.

(d) Costs of remedial action are reimbursable under Title X for decontamination, decommissioning, reclamation, and other remedial action, provided that claims for reimbursement are supported by reasonable documentation as specified in subpart C of this part.

(e) Except as authorized by § 765.32, the total amount of reimbursement paid to any licensee of an active uranium processing site shall not exceed $6.25 multiplied by the number of Federal-related dry short tons of byproduct material. This total amount shall be adjusted for inflation pursuant to section 765.12.

(f) The total amount of reimbursement paid to all active uranium processing site licensees shall not exceed $350 million. This total amount shall be adjusted for inflation by applying the CPI–U, as provided by § 765.12.

(g) The total amount of reimbursement paid to the licensee of the active thorium processing site shall not exceed $365 million, as adjusted for inflation by applying the CPI–U as provided by § 765.12.

(h) Reimbursement of licensees for costs of remedial action will only be made for costs that are supported by reasonable documentation as required by § 765.20 and claimed for reimbursement by a licensee in accordance with the procedures established by subpart C of this part.

(i) The $715 million aggregate amount authorized to be appropriated under section 1003(a) of the Act (42 U.S.C. 2296a-2(a)) shall be adjusted for inflation by applying the CPI–U as provided by § 765.12, and shall be provided from the Fund.

[59 FR 26726, May 23, 1994, as amended at 68 FR 32957, June 3, 2003]

§ 765.3 Definitions.

For the purposes of this part, the following terms are defined as follows:

Active uranium or thorium processing site or *active processing site* means:

(1) Any uranium or thorium processing site, including the mill, containing byproduct material for which a license, issued either by NRC or by an Agreement State, for the production at a 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

(2) Any other real property or improvement on such real property that is determined by the Secretary or by an Agreement State to be:

(i) In the vicinity of such site; and

(ii) Contaminated with residual byproduct material.

Agreement State means a State that is or has been a party to a discontinuance agreement with NRC under section 274 of the Atomic Energy Act (42 U.S.C. 2021) and thereafter issues licenses and establishes remedial action requirements pursuant to a counterpart to section 62 or 81 of the Atomic Energy Act under state law.

Atomic Energy Act means the Atomic Energy Act of 1954, as amended, (42 U.S.C. 2011 *et seq.*).

Byproduct material means the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content.

Claim for reimbursement means the submission of an application for reimbursement in accordance with the requirements established in subpart C of this part.

Costs of remedial action means costs incurred by a licensee prior to or after enactment of UMTRCA to perform decontamination, decommissioning, reclamation, and other remedial action. These costs may include but are not necessarily limited to expenditures for work necessary to comply with applicable requirements to conduct groundwater remediation, treatment or containment of contaminated soil, disposal of process wastes, removal actions, air pollution abatement measures, mill and equipment decommissioning, site monitoring, administrative activities, expenditures required to meet necessary regulatory standards, or other requirements established by NRC, or an Agreement State. Costs of remedial action must be supported by reasonable documentation in accordance with the requirements of subpart C of this part.

Decontamination, decommissioning, reclamation, and other remedial action means work performed which is necessary to comply with all applicable requirements of UMTRCA or, where appropriate, with applicable requirements established by an Agreement State.

Department means the United States Department of Energy or its authorized agents.

Dry short tons of byproduct material means the quantity of tailings generated from the extraction and processing of 2,000 pounds of uranium or thorium ore-bearing rock.

Federal reimbursement ratio means the ratio of Federal-related dry short tons of byproduct material to total dry short tons of byproduct material present at an active uranium or thorium processing site on October 24, 1992. The ratio shall be established by comparing Federal-related dry short tons of byproduct material to total dry short tons of byproduct material present at the site on October 24, 1992, or by another means of attributing costs of remedial action to byproduct material generated as an incident of sales to the United States which the Department determines is more accurate than a ratio established using dry short tons of byproduct material.

Federal-related dry short tons of byproduct material means dry short tons of byproduct material that was present at an active uranium or thorium processing site on October 24, 1992, and was generated as an incident of uranium or thorium sales to the United States.

Generally accepted accounting principles means those principles established by the Financial Accounting Standards Board which encompass the conventions, rules, and procedures necessary to define accepted accounting practice at a particular time.

Inflation index means the consumer price index for all urban consumers (CPI–U) as published by the Department of Commerce's Bureau of Labor Statistics.

Licensee means a site owner licensed under section 62 or 81 of the Atomic Energy Act (42 U.S.C. 2092, 2111) by NRC, or an Agreement State, for any activity at an active uranium or thorium processing site which results, or has resulted, in the production of byproduct material.

Maximum reimbursement amount or maximum reimbursement ceiling means the smaller of the following two quantities:

(1) The amount obtained by multiplying the total cost of remedial action at the site, as determined in the approved plan for subsequent remedial action, by the Federal reimbursement ratio established for the site; or

(2) $6.25, as adjusted for inflation, multiplied by the number of Federal related dry short tons of byproduct material.

NRC means the United States Nuclear Regulatory Commission or its predecessor agency.

Offsite disposal means the disposal, and activities that contribute to the disposal, of byproduct material in a location that is not contiguous to the West Chicago Thorium Mill Site located in West Chicago, Illinois, in accordance with a plan approved by, or other written authorization from, the State of Illinois or NRC provided the activities are consistent with the ultimate removal of byproduct material from the West Chicago Thorium Mill Site.

Plan for subsequent remedial action means a plan approved by the Department which includes an estimated total cost and schedule for remedial action, and all applicable requirements of remedial action established by NRC or an Agreement State to be performed after December 31, 2007, at an active uranium or thorium processing site.

Reclamation plan or site reclamation plan means a plan, which has been approved by NRC or an Agreement State, for remedial action at an active processing site that establishes the work necessary to comply with applicable requirements of UMTRCA, or where appropriate with requirements established by an Agreement State.

Remedial action means decontamination, decommissioning, reclamation, and other remedial action at an active uranium or thorium processing site.

Secretary means the Secretary of Energy or her designees.

Site owner means a person that presently holds, or held in the past, any interest in land, including but not limited to a fee simple absolute, surface or subsurface ownership of mining claims, easements, and a right of access for the purposes of cleanup, or any other legal or equitable interest.

Tailings means the remaining portion of a metal-bearing ore after some or all of the metal, such as uranium, has been extracted.

The Fund means the Uranium Enrichment Decontamination and Decommissioning Fund established at the United States Department of Treasury pursuant to section 1801 of the Atomic Energy Act (42 U.S.C. 2297g).

Title X or ''the Act'' means Subtitle A of Title X of the Energy Policy Act of 1992, Public Law 102–486, 106 Stat. 2776 (42 U.S.C. 2296a–1 *et seq*.).

UMTRCA means the Uranium Mill Tailings Radiation Control Act of 1978, as amended (42 U.S.C. 7901 *et seq*.).

United States means any executive department,

commission, or agency, or other establishment in the executive branch of the Federal Government.

Written Authorization means a written statement from either the NRC or an Agreement State that a licensee has performed in the past, or is authorized to perform in the future, a remedial action that is necessary to comply with the requirements of UMTRCA or, where appropriate, the requirements of an Agreement State.

[59 FR 26726, May 23, 1994, as amended at 68

FR 32957, June 3, 2003]

Subpart B—Reimbursement Criteria

§ 765.10 Eligibility for reimbursement.

(a) Any licensee of an active uranium or thorium processing site that has incurred costs of remedial action for the site that are attributable to byproduct material generated as an incident of sales to the United States shall be eligible for reimbursement of these costs, subject to the procedures and limitations specified in this part.

(b) Prior to reimbursement of costs of remedial action incurred by a licensee, the Department shall make a determination regarding the total quantity of dry short tons of byproduct material, and the quantity of Federal related dry short tons of byproduct material present on October 24, 1992 at the licensee's active processing site. A claim for reimbursement from a site for which a determination is made will be evaluated individually. If a licensee does not concur with the Department's determination regarding the quantity of dry short tons of byproduct material present at the site, the licensee may appeal the Department's determination in accordance with § 765.22 of this part. The Department's determination shall be used to determine that portion of an approved claim for reimbursement submitted by the licensee which shall be reimbursed, unless or until the determination is overturned on appeal. If the outcome of an appeal requires a change in the Department's initial determination, the Department will adjust any payment previously made to the licensee to reflect the change.

§ 765.11 Reimbursable costs.

(a) Costs for which a licensee may be reimbursed must be for remedial action that a licensee demonstrates is attributable to byproduct material generated as an incident of sales to the United States, as determined by the Department. These costs are equal to the total costs of remedial action at a site multiplied by the Federal reimbursement ratio established for the site. These costs must be incurred in the performance of activities, prior to or after enactment of UMTRCA, and required by a plan, portion thereof, or other written authorization, approved by NRC or by an Agreement State. Costs of remedial action shall be reimbursable only if approved by the Department in accordance with the provisions of this part.

(b) In addition, costs of remedial action incurred by a licensee after December 31, 2007 must be in accordance with a plan for subsequent remedial action approved by the Department as specified in § 765.30.

(c) Total reimbursement of costs of remedial action incurred at an active processing site that are otherwise reimbursable pursuant to the provisions of this part shall be limited as follows:

(1) Reimbursement of costs of remedial action to active uranium processing site licensees shall not exceed $6.25, as adjusted for inflation, multiplied by the number of Federal-related dry short tons of byproduct material.

(2) Aggregate reimbursement of costs of remedial action incurred at all active uranium processing sites shall not exceed $350 million. This aggregate amount shall be adjusted for inflation pursuant to § 765.12; and

(3) Reimbursement of costs of remedial action at the active thorium processing site shall be limited to costs incurred for offsite disposal and shall not exceed $365 million. This amount shall be adjusted for inflation pursuant to § 765.12.

(d) Notwithstanding the Title X requirement that byproduct material must be located at an active processing site on October 24, 1992, byproduct material moved from the Edgemont Mill in Edgemont, South Dakota, to a disposal site as a result of remedial action, shall be eligible for reimbursement in accordance with all applicable requirements of this part.

[59 FR 26726, May 23, 1994, as amended at 68 FR 32957, June 3, 2003]

§ 765.12 Inflation index adjustment procedures.

(a) The amounts of $6.25 (as specified in § 765.2(e) of this rule) $350 million (as specified in § 765.2(f) of this rule), $365 million (as specified in § 765.2(g) of this rule) and $715 million (as specified in § 765.2(i) of this rule) shall be adjusted for inflation as provided by this section.

(b) To make adjustments for inflation to the amounts specified in paragraph (a) of this section, the Department shall apply the CPI–U to these amounts annually, beginning in 1994, using the CPI–U as published by the Department of Commerce for the preceding calendar year.

(c) The Department shall adjust annually, using the CPI–U as defined in this part, amounts paid to an active uranium processing site licensee for purposes of comparison with the $6.25 per dry short ton limit on reimbursement as adjusted for inflation.

[59 FR 26726, May 23, 1994, as amended at 68

FR 32957, June 3, 2003]

Subpart C—Procedures for Submitting

and Processing Reimbursement Claims

§ 765.20 Procedures for submitting reimbursement claims.

(a) All costs of remedial action for which reimbursement is claimed must be supported by reasonable documentation as specified in this subpart. The Department reserves the right to deny any claim for reimbursement, in whole or in part, that is not submitted in accordance with the requirements of this subpart.

(b) The licensee shall provide a copy of the approved site reclamation plan or other written authorization from NRC or an Agreement State upon which claims for reimbursement are based, with the initial claim submitted. Any revision or modification made to the plan or other written authorization, which is approved by NRC or an Agreement State, shall be included by the licensee in the next claim submitted to the Department following that revision or modification. This reclamation plan or other written authorization, as modified or revised, shall serve as the basis for the Department's evaluation of all claims for reimbursement submitted by a licensee.

(c) Each submitted claim shall provide a summary of all costs of remedial action for which reimbursement is claimed. This summary shall identify the costs of remedial action associated with each major activity or requirement established by the site's reclamation plan or other written authorization. In addition, each claim shall provide a summary of the documentation relied upon by the licensee in support of each cost category for which reimbursement is claimed.

(d) Documentation used to support a reimbursement claim must demonstrate that the costs of remedial action for which reimbursement is claimed were incurred specifically for activities specified in the site's reclamation plan, or otherwise authorized by NRC or an Agreement State. Summary documentation used in support of a claim must be cross-referenced to the relevant page and activity of the licensee's reclamation plan, or other written authorization approved by NRC or an Agreement State.

(1) Documentation prepared contemporaneous to the time the cost was incurred should be used when available. The documentation should identify the date or time period for which the cost was incurred, the activity for which the cost was incurred, and the reclamation plan provision or other written authorization to which the cost relates. Where available, each claim should be supported by receipts, invoices, pay records, or other documents that substantiate that each specific cost for which reimbursement is claimed was incurred for work that was necessary to comply with UMTRCA or applicable Agreement State requirements.

(2) Documentation not prepared contemporaneous

to the time the cost was incurred, or not directly related to activities specified in the reclamation plan or other written authorization, may be used in support of a claim for reimbursement provided that the licensee determines the documentation is the only means available to document costs for which reimbursement is sought.

(e) The Department may audit, or require the licensee to audit, any documentation used to support a claim on a case-by-case basis and may approve, approve in part, or deny reimbursement of any claim in accordance with the requirements of this part. Documentation relied upon by a licensee in support of a claim for reimbursement shall be made available to the Department and retained by the licensee until 4 years after final payment of a claim is made by the Department.

(f) Each licensee should utilize generally accepted accounting principles consistently throughout the claim.

These accounting principles, underlying assumptions, and any other information necessary for the Department to evaluate the claim shall be set forth in each claim.

(g) Following each annual appropriation by Congress, the Department will issue a Federal Register Notice announcing:

(1) A claim submission deadline for that fiscal year;

(2) Availability of funds for reimbursement of costs of remedial action;

(3) Whether the Department anticipates that approved claims for that fiscal year may be subject to prorated payment;

(4) Any changes in the Federal reimbursement ratio or maximum reimbursement ceiling for any active uranium or thorium processing site;

(5) Any revision in the per dry short ton limit on reimbursement for all active uranium processing sites; and

(6) Any other relevant information.

(h) A licensee shall certify, with respect to any claim submitted by it for reimbursement, that the work was completed as described in an approved reclamation plan or other authorization. In addition, the licensee shall certify that all costs for which reimbursement is claimed, all documentation relied upon in support of its costs, and all statements or representations made in the claim are complete, accurate, and true. The certification shall be

signed by an officer or other official of the licensee with knowledge of the contents of the claim and authority to represent the licensee in making the certification. Any knowingly false or frivolous statements or representations may subject the individual to penalties under the False Claims Act, sections 3729 through 3731 of title 31 United States Code, or any other applicable statutory authority; and criminal penalties under sections 286, 287, 1001 and 1002 of title 18, United States Code, or any other applicable statutory authority.

(i) All claims for reimbursement submitted to the Department shall be sent by registered or certified mail, return receipt requested. The Department reserves all rights under applicable law to recover any funds paid to licensees which an audit finds to not meet the requirements of this part.

§ 765.21 Procedures for processing reimbursement claims.

(a) The Department will conduct a preliminary review of each claim within 60 days after the claim submission deadline announced in the FEDERAL REGISTER Notice specified in § 765.20(g) to determine the completeness of each claim. Payments from the Fund to active uranium or thorium processing site licensees for approved costs of remedial action will be made simultaneously by the Department within 1 year of the claim submission deadline.

(b) After completing the preliminary review specified in paragraph (a) of this section, the Department may audit, or require the licensee to audit, any documentation used in support of such claim, request the licensee to provide additional information, or request the licensee to provide other clarification determined by the Department to be necessary to complete its evaluation of the claim. In addition, the Department reserves the right to conduct an inspection of the site to verify any information provided by the licensee in a claim for reimbursement, or in support thereof. Any information requested by the Department, if provided, must be submitted by the claimant within 60 days of receipt of the request unless the Department specifies in writing that additional time is provided.

(c) At any time during the review of a claim, the Department may request an informal conference with a licensee to obtain further information or clarification on any unresolved issue pertaining to the claim. While the licensee is not required to provide additional clarification requested by the Department, a failure to do so may result in the denial of that portion of the claim for which information is requested.

(d) Based upon the claim submitted and any additional information received by the Department, including any audit or site inspection if conducted, the Department shall complete a final review of all relevant information prior to making a reimbursement decision. When the Department determines it is not clear that an activity for which reimbursement is claimed was necessary to comply with UMTRCA or where appropriate, with applicable Agreement State requirements, the Department may consult with the appropriate regulatory authorities.

(e) A written decision regarding the Department's determination to approve, approve in part, or deny a claim will be provided to the licensee within 10 days of completion of the claim review. Within 45 days after the Department's issuance of a written decision to deny the claim due to inadequate documentation, the licensee may request the Department to reconsider its decision if the licensee provides reasonable documentation in accordance with § 765.20. If a licensee chooses not to submit the documentation, the licensee has the right to file a formal appeal to a claim denial in accordance with § 765.22. If a licensee chooses to submit the documentation, the Department will consider whether the documentation results in the Department's reversal of the initial decision to deny the claim and will inform the licensee of the Department's subsequent decision. The licensee may appeal that decision in accordance with § 765.22.

(f) If the Department determines that insufficient funds are available at any time to provide for complete payment of all outstanding approved claims, reimbursements of approved claims will be made on a prorated basis. A prorated payment of all outstanding approved claims for reimbursement, or any unpaid portion thereof, shall be made on the basis of the total amount of all outstanding approved claims, regardless of when the claims were submitted or approved.

(g) Notwithstanding the provisions of paragraph (f) of this section, or any other provisions of this part, any requirement for the payment or obligation of funds by the Department established by this part shall be subject to the availability of appropriated funds, and no provision herein shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act (31 U.S.C. 1341).

[59 FR 26726, May 23, 1994, as amended at 68 FR 32957, June 3, 2003]

§ 765.22 Appeals procedures.

(a) Any appeal by a licensee of any Department determination subject to the requirements of this part, shall invoke the appeals process specified in paragraph (b) of this section.

(b) A licensee shall file an appeal of any Department determination subject to the requirements of this part with the Office of Hearings and Appeals, U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC

20585. Any appeal must be filed within 45 days from the date the licensee received notice, actual or constructive (i.e., publication in the FEDERAL REGISTER), of the Department's determination. Appeals must comply with the procedures set forth in 10 CFR part 1003, subpart C. The decision of the Office of Hearings and Appeals shall be the final decision of the Department. A licensee must file an appeal in order to exhaust its administrative remedies, and the receipt of an appellate decision is a prerequisite to seeking judicial review of any determination made under this part.

[59 FR 26726, May 23, 1994, as amended at 60 FR 15017, Mar. 21, 1995]

§ 765.23 Annual report.

The Department shall prepare annually a report summarizing pertinent information concerning claims submitted in the previous calendar year, the status of the Department's review of the claims, determinations made regarding the claims, amounts paid for claims approved, and other relevant information concerning this reimbursement program. The report will be available to all interested parties upon written request to the Department's National Nuclear Security Administration Service Center, Office of Technical Services, Environmental Programs Department, P.O. Box 5400, Albuquerque, NM 87185–5400 and will also be available in the Department's Freedom of Information Reading room, 1000 Independence

Avenue SW., Washington, DC.

[59 FR 26726, May 23, 1994, as amended at 68 FR 32957, June 3, 2003]

Subpart D—Additional Reimbursement Procedures

§ 765.30 Reimbursement of costs incurred in accordance with a plan for subsequent remedial action.

(a) This section establishes procedures governing reimbursements of costs of remedial action incurred in accordance with a plan for subsequent remedial action approved by the Department as provided in this section. Costs otherwise eligible for reimbursement in accordance with the terms of this part and incurred in accordance with the plan shall be reimbursed in accordance with the provisions of subpart D and subpart C. In the event there is an inconsistency between the requirements of subpart D and subpart C, the provisions of subpart D shall govern reimbursement of such costs of remedial action.

(b) A licensee who anticipates incurring costs of remedial action after December 31, 2007 may submit a plan for subsequent remedial action. This plan may be submitted at any time after January 1, 2005, but no later than December 31, 2006. Reimbursement of costs of remedial action incurred after December 31, 2007 shall be subject to the approval of this plan by the Department. This plan shall describe:

(1) All applicable requirements established by NRC pursuant to UMTRCA, or where appropriate, by the requirements of an Agreement State, included in a reclamation plan approved by NRC or an Agreement State which have not yet been satisfied in full by the licensee, and

(2) The total cost of remedial action required at the site, together with all necessary supporting documentation, segregated into actual costs incurred to date, costs incurred or expected to be incurred prior to December 31, 2007 but not yet approved for reimbursement, and anticipated future costs.

(c) The Department shall review the plan for subsequent remedial action to verify conformance with the NRC- or Agreement State-approved reclamation plan or other written authorization, and to determine the reasonableness of anticipated future costs, and shall approve, approve with suggested modifications, or reject the plan. During its review, the Department may request additional information from the licensee to clarify or provide support for any provision or estimate contained in the plan. The Department may also consult with NRC or an Agreement State concerning any provision or estimate contained in the plan. Upon approval, approval with modifications, or rejection of a plan, the Department shall inform and explain to the licensee its decision.

(d) If the Department rejects a plan for subsequent remedial action submitted by a licensee, the licensee may appeal the Department's rejection or prepare and submit a revised plan. The licensee may continue to submit revised plans for subsequent remedial action until the Department approves a plan, or September 30, 2007, whichever occurs first. A failure by a licensee to receive approval from the Department of a plan prior to December 31, 2007 will preclude that licensee from receiving any reimbursement for costs of remedial action incurred after that date.

(e) The Department shall determine, in approving a plan for subsequent remedial action, the maximum reimbursement amount for which the licensee may be eligible. This maximum reimbursement amount shall be the smaller of the following two quantities:

(1) The amount obtained by multiplying the total cost of remedial action at the site, as determined in the approved plan for subsequent remedial action, by the Federal reimbursement ratio established for such site; or

(2) For the uranium site licensees only, $6.25, as adjusted for inflation, multiplied by the number of Federal-related dry short tons of byproduct material. For all licensees, the Department shall subtract from the maximum reimbursement amount any reimbursement already approved to be paid to the licensee. The resulting sum shall be the potential additional reimbursement to which the licensee may be entitled. This resulting sum will be adjusted after the approval of claims for work performed through December 31, 2007, to reflect the actual approved costs of work performed through that date.

[59 FR 26726, May 23, 1994, as amended at 68 FR 32957, June 3, 2003]

§ 765.31 Designation of funds available for subsequent remedial action.

(a) The Department shall authorize reimbursement of costs of remedial action, incurred in accordance with an approved plan for subsequent remedial action and approved by the Department as specified in subpart C to this part, to be made from the Fund. These costs are reimbursable until:

(1) This remedial action has been completed, or

(2) The licensee has been reimbursed its maximum reimbursement amount as determined by the Department pursuant to paragraph (e) of § 765.30.

(b) A licensee shall submit any claim for reimbursement of costs of remedial action incurred pursuant to an approved plan for subsequent remedial action in accordance with the requirements of subpart C of this part. The Department shall approve, approve in part, or deny any claims in accordance with the procedures specified in subpart C of this part. The Department shall authorize the disbursement of funds upon approval of a claim for reimbursement.

(c) After all remedial actions have been completed by affected Agreement State or NRC licensees, the Department will issue a Federal Register notice announcing a termination date beyond which claims for reimbursement will no longer be accepted.

[59 FR 26726, May 23, 1994, as amended at 68 FR 32958, June 3, 2003]

§ 765.32 Reimbursement of excess funds.

(a) No later than December 31, 2008, the Department shall determine if the aggregate amount authorized for appropriation pursuant to section 1003 of the Act (42 U.S.C. 2296a–2), as adjusted for inflation pursuant to § 765.12, exceed as of that date the combined total of all reimbursements which have been paid to licensees under this part, any amounts approved for reimbursement and owed to any licensee, and any anticipated additional reimbursements to be made in accordance with approved plans for subsequent remedial action.

(b) If the Department determines that the amount authorized pursuant to section 1003 of the Act (42 U.S.C. 2296a–2), as adjusted for inflation, exceed the combined total of all reimbursements (as indicated in paragraph (a) of this section), the Department may establish procedures for providing additional reimbursement to uranium licensees for costs of remedial action, subject to the availability of appropriated funds. If the amount of available excess funds is insufficient to provide reimbursement of all eligible costs of remedial action, then reimbursement shall be paid on a prorated basis.

(c) Each eligible uranium licensee's prorated share will be determined by dividing the total excess funds available by the total number of Federal-related dry short tons of byproduct material present at the site where costs of remedial action exceed $6.25 per dry short ton, as adjusted for inflation pursuant to § 765.12. The resulting number will be the maximum cost per dry short ton, over $6.25, that may be reimbursed. Total reimbursement for each licensee that has incurred approved costs of remedial action in excess of $6.25 per dry short ton will be the product of the excess cost per dry short ton multiplied by the number of Federal related dry short tons of byproduct material at the site or the actual costs incurred and approved by the Department, whichever is less.

(d) Any costs of remedial action for which reimbursement is sought from excess funds determined by the Department to be available is subject to all requirements of this part except the related dry short tons of byproduct material. For all licensees, the Department shall subtract from the maximum reimbursement amount any reimbursement already approved to be paid to the licensee. The resulting sum shall be the potential additional reimbursement to which the licensee may be entitled. This resulting sum will be adjusted after the approval of claims for work performed through December 31, 2007, to reflect the actual approved costs of work performed through that date.

[59 FR 26726, May 23, 1994, as amended at 68 FR 32957, June 3, 2003]

Appendix D. Guidance

United States
Department of Energy

Environmental Restoration Division
(Albuquerque, NM)

Guidance for Preparation of Reimbursement Claims under Title X of the Energy Policy Act

Revision 1

April 26, 1995

TABLE OF CONTENTS

CHAPTER I: INTRODUCTION I-1

A. OVERVIEW I-1
1. Purpose and Scope I-2
2. Contents and Layout I-2

B. UNDERLYING REQUIREMENTS, STANDARDS, AND CONCEPTS I-3
1. Regulatory Requirements I-3
a. Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA) I-3
b. Title X of the Energy Policy Act of 1992 (Title X) I-3
c. 10 CFR Part 765, Reimbursement of Costs of Remedial Action at Active Uranium and Thorium Processing Sites; Final Rule I-4
2. Financial Management and Accounting Standards I-5
a. Financial Management Systems I-6
b. Accounting Standards and Principles I-6
c. Documentation Standards I-7
3. Licensee's Role in Cost Reimbursement I-8

CHAPTER II: TYPES OF COSTS II-1

A. TYPES OF COSTS OF REMEDIAL ACTION II-1

B. GUIDANCE ON CHARGING COSTS OF REMEDIAL ACTION II-1
1. Direct Labor II-2
2. Travel II-2
a. Direct Travel II-2
b. Indirect Travel II-2
3. Materials and Supplies II-3
a. Direct Materials and Supplies II-3
b. Indirect Materials and Supplies II-3
4. Equipment II-3
a. Equipment Purchase II-4
b. Depreciation II-4
c. Equipment Lease II-5
d. Equipment Usage II-5
e. Contractor Provided II-5
5. Contractor Services II-5
6. Other Direct II-5
7. Overhead II-5

TABLE OF CONTENTS

C. GUIDANCE ON CHARGING USAGE RATES II-6
1. Materials and Supplies II-6
2. Equipment II-7

D. REIMBURSABLE VS. NON-REIMBURSABLE COSTS II-7

CHAPTER III: COST DOCUMENTATION AND RECORDKEEPING III-1

A. RECORDKEEPING OBJECTIVES III-1
1. Maintain Complete Cost Documentation of Remedial Activities III-1
2. Follow Applicable Documentation Standards III-1
3. Ensure Timely Access to Remediation Cost Documentation III-1

B. COST DOCUMENTATION AND RECORDKEEPING GUIDANCE III-2
1. Direct Labor III-2
2. Travel III-2
3. Materials and Supplies III-4
4. Equipment III-4
a. Equipment Purchase III-4
b. Depreciation III-5
c. Equipment Lease III-5
d. Equipment Usage III-5
e. Contractor Provided III-5
5. Contractor Services III-5
6. Other Direct III-6
7. Overhead III-6

CHAPTER IV: CLAIM FILING IV-1

A. COST REIMBURSEMENT CLAIM FILING IV-1
1. Determination of Total Costs of Remedial Action IV-2
2. Demonstration of Link Between Costs of Remedial Action and a Reclamation Plan or Other Written Authorization IV-2
3. Summarization of Costs of Remedial Action and Supporting Documentation IV-2
4. Calculation of Federal Portion of Costs of Remedial Action IV-3
5. Preparation and Submission of Claim Packages IV-3
6. Review of Claim Packages IV-3
7. Cost Reimbursement Decision-Making and Appeals IV-3

TABLE OF CONTENTS

B. REIMBURSEMENT CLAIM PACKAGES IV-5
1. Cost Summary Document IV-5
2. Summary Documentation IV-5
3. Narrative Description IV-6
4. Regulatory Authorization Matrix IV-7
5. Approved Reclamation Plan or Other Written Authorization IV-7

C. DOE REVIEW AND AUDIT OF COST DOCUMENTATION IV-7
1. Preliminary Review IV-7
2. Audit Processes IV-8
a. Timing of Audits IV-8
b. Audit Scope IV-8
c. Licensee Preparation IV-9
3. Reimbursement Decisions IV-9
4. DOE Appeals Process IV-9

APPENDIX A: SAMPLE CLAIM SUBMITTAL A-1

A. COST SUMMARY DOCUMENT A-1

B. SUMMARY DOCUMENTATION A-1

C. NARRATIVE DESCRIPTION A-2

D. REGULATORY AUTHORIZATION MATRIX A-2

APPENDIX B: APPLICATION OF FEDERAL REIMBURSEMENT RATIOS B-1

A. SAMPLE CALCULATION OF FEDERAL REIMBURSEMENT RATIO B-2

B. SAMPLE CALCULATION OF FEDERAL-RELATED COSTS OF REMEDIAL ACTION B-2

APPENDIX C: SOURCES FOR FURTHER REFERENCE C-1

A. GENERALLY ACCEPTED ACCOUNTING PRINCIPLES (GAAP) C-1

B. GENERALLY ACCEPTED GOVERNMENT AUDITING STANDARDS (GAGAS) C-1

C. URANIUM MILL TAILINGS RADIATION CONTROL ACT OF 1978 (UMTRCA) C-1

TABLE OF CONTENTS

D. TITLE X OF THE ENERGY POLICY ACT OF 1992 (TITLE X) C-2

E. ATOMIC ENERGY ACT OF 1954, SECTION 2022(d) C-2

F. ATOMIC ENERGY ACT OF 1954, SECTION 274 . . . . . C-2

G. 10 CFR PART 765, REIMBURSEMENT FOR COSTS OF REMEDIAL ACTION AT ACTIVE URANIUM AND THORIUM PROCESSING SITES; FINAL RULE . . . C-2

APPENDIX D: GLOSSARY OF TERMS D-1

LIST OF EXHIBITS

Exhibit I-1: Timeline of Legislation Governing Cost Reimbursement I-3

Exhibit II-1: Examples of Non-Reimbursable Costs II-8

Exhibit III-1: Sample Documentation of Costs of Remedial Action III-3

Exhibit IV-1: Claim Package Checklist IV-4

Exhibit IV-2: Calculation of Pro-Rated Reimbursement Payments IV-10

Exhibit A-1: Sample Cost Summary Document A-3

Exhibit A-2: Sample Summary Documentation A-4

Exhibit A-3: Sample Narrative Description A-12

Exhibit A-4: Sample Regulatory Authorization Matrix A-16

The *Guidance for Preparation of Reimbursement Claims under Title X of the Energy Policy Act* provides guidance to licensees of active uranium and thorium processing sites on standards, concepts, and procedures relating to reimbursement of costs of remedial action under Title X of the Energy Policy Act. DOE encourages licensees to use these standards, concepts, and procedures as guidelines for producing, maintaining, and summarizing reasonable documentation in support of claims filed for reimbursement. However, licensees are not required to comply with the suggested concepts and methods discussed, as requirements governing cost reimbursement under Title X are set forth in 10 CFR Part 765, "Reimbursement of Costs of Remedial Action at Active Uranium and Thorium Processing Sites; Final Rule."

As set forth by 10 CFR Part 765, licensees are required to submit to DOE only summaries of both costs of remedial action and supporting documentation. DOE recommends that the licensee submit these cost and documentation summaries as part of all claims for reimbursement, following the general concepts described in this guidance document. It is not DOE's intent to require extensive and unnecessary efforts from the licensees. Therefore, licensees should organize and summarize costs and documentation in a manner consistent with individual accounting and documentation systems. Claims for reimbursement should be sent by registered or certified mail, return receipt requested, to James Coffey, U.S. Department of Energy, Environmental Restoration Division, 2155 Louisiana NE, Suite 10,000, Albuquerque NM, 87110. Questions regarding claims for reimbursement or any of the information set forth in this document should be addressed to Mr. Coffey at (505) 845-4026.

CHAPTER I: INTRODUCTION

From 1942 through 1970, the U.S. Army's Manhattan Engineer District/Atomic Energy Commission (AEC) entered into several contracts with commercially-operated mills to purchase uranium concentrate in support of U.S. defense programs. Due to the limited knowledge of the hazards created by the resulting milling-process waste, these contracts did not include provisions for managing and remediating these waste materials. Between 1975 and 1979, studies of the environmental impacts of uranium mill tailings were conducted, revealing potentially significant health hazards. As a result, in 1978, Congress enacted the Uranium Mill Tailings Radiation Control Act (UMTRCA). Under UMTRCA, the Nuclear Regulatory Commission (NRC) regulates the mill tailings and other byproduct material remaining at "active" processing sites (i.e., sites with active licensees under the Atomic Energy Act of 1954, hereafter referred to as the *Atomic Energy Act*, on or after January 1, 1978). The Atomic Energy Act provides the NRC and any Agreement State (pursuant to a discontinuance agreement with the NRC) with the authority to approve a plan for remediating an "active" site, as developed by the site licensee.

In 1979, the Department of Energy (DOE) and the General Accounting Office (GAO) reported to Congress that Federal assistance should be provided to the "active" site licensees to defray a portion of the costs to remediate mill tailings remaining at the sites. Title X of the Energy Policy Act of 1992, hereafter referred to as *Title X*, authorizes DOE to provide that Federal assistance. DOE, in turn, published 10 CFR Part 765, to establish the requirements and procedures under which it will implement the Title X cost reimbursement program. This guidance document serves as the primary source of implementation guidance for licensees of active uranium and thorium processing sites, hereafter referred to as *licensees*, on the Title X cost reimbursement program.

A. OVERVIEW

The *Guidance for Preparation of Reimbursement Claims under Title X of the Energy Policy Act*, hereafter referred to as the *guidance document*, addresses regulatory and accounting requirements, standards, and concepts which apply to the processes of documenting and filing claims for reimbursement of costs incurred to perform decontamination, decommissioning, reclamation, and other remedial action at "active" uranium and thorium processing sites, hereafter referred to as *costs of remedial action*. These requirements, standards, and concepts are directed at the licensees of the "active" sites, as identified by DOE in 10 CFR Part 765 and referenced in Appendix B of this guidance document.

In addition, this guidance document presents a detailed discussion of the cost reimbursement claim filing process, and provides sample or suggested methods for documenting costs of remedial action and preparing the claim package. Although this guidance document serves primarily as "guidance," licensees must ensure that their cost documentation and reimbursement claims comply with the requirements established by 10 CFR Part 765 and described in the guidance document.

1. Purpose and Scope

The purpose of this document is to establish consistent guidelines for licensees on submitting complete and accurate cost reimbursement claim packages; and to outline the related review and audit processes.

This guidance document was written to address uranium and thorium licensees eligible for reimbursement of costs of remedial action by the DOE under Title X and 10 CFR Part 765. The document is necessarily broad in scope due to the differences between various licensees' cost accounting systems and involvement in remediation activities. The primary focus of this document is to provide licensees with guidance on documenting costs of remedial action for cost reimbursement purposes. In addition, methods are suggested for maintaining cost documentation to facilitate claim processing.

2. Contents and Layout

This guidance document is divided into four chapters and four appendices. The contents of each chapter and appendix are as follows:

- *Chapter I, Introduction:* identifies the purpose, scope, contents, and layout of the guidance; discusses regulatory and accounting requirements, standards, and concepts; and defines the licensee's role in the cost reimbursement process.
- *Chapter II, Types of Costs:* describes major categories of reimbursable costs of remedial action; and provides guidance on and specific examples of reimbursable versus non-reimbursable costs within each category.
- *Chapter III, Cost Documentation and Recordkeeping:* identifies cost documentation and recordkeeping objectives and "best practices;" and suggests reasonable cost documentation to be maintained for each major category of costs of remedial action.
- *Chapter IV, Claim Filing:* outlines major steps in the claim filing process; defines the licensee's responsibilities during each step; describes the major components of the claim package; and discusses related review and audit processes.
- *Appendix A, Sample Claim Submittal:* provides brief discussions and samples of each major component of the cost reimbursement claim package.
- *Appendix B, Application of Federal Reimbursement Ratios:* lists Federal-related and total tailings for each licensee/site; and provides sample calculations of a Federal reimbursement ratio and the Federal-related portion of total costs of remedial action.
- *Appendix C, Sources for Further Reference:* provides a listing and brief descriptions of other sources of reference for the Title X cost reimbursement process and related issues.

- *Appendix D, Glossary of Terms*: provides a glossary of terms and acronyms used throughout this guidance document.

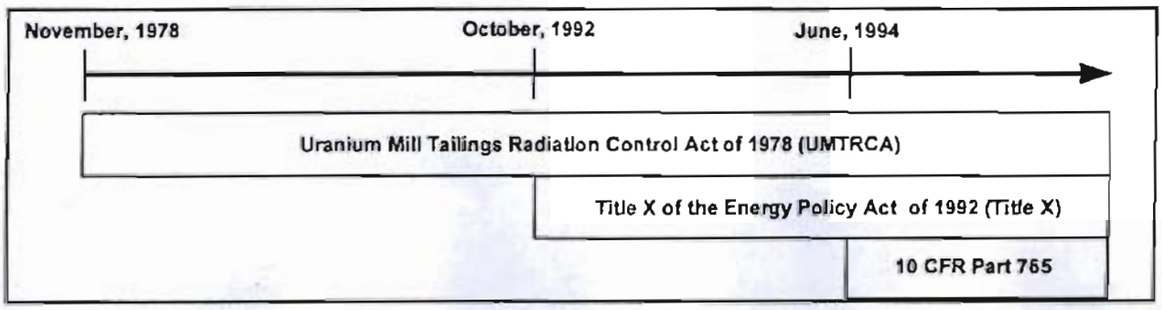
B. UNDERLYING REQUIREMENTS, STANDARDS, AND CONCEPTS

The concept of cost reimbursement under Title X is based on various underlying regulatory and cost documentation requirements, standards, and concepts. Reimbursement of costs by DOE is dependent upon compliance with regulatory requirements and the reasonableness of documentation maintained by the licensee in support of costs of remedial action. Various regulatory requirements govern the licensee's initial eligibility for reimbursement; financial management and accounting standards govern the extent to which the licensee is able to support claims for costs of remedial action.

1. Regulatory Requirements

The following legislation governs the eligibility of licensees for reimbursement of costs of remedial action. Exhibit I-1 below, provides a timeline of legislation governing the cost reimbursement process.

Exhibit I-1
Timeline of Legislation Governing Cost Reimbursement



a. Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA)

UMTRCA authorizes DOE to undertake remedial action at "inactive" sites and vicinity properties contaminated with residual radioactive material generated at the site; and authorizes the NRC to regulate byproduct material generated during processing at "active" sites throughout production, remedial action, and disposal.

b. Title X of the Energy Policy Act of 1992 (Title X)

Title X requires DOE to reimburse licensees for costs of remedial action which are necessary to comply with UMTRCA or, where appropriate, with relevant Agreement State requirements, which are

determined to be attributable to byproduct material generated as an incident of sales to the United States Government.

c. 10 CFR Part 765, Reimbursement of Costs of Remedial Action at Active Uranium and Thorium Processing Sites; Final Rule

10 CFR Part 765 sets forth the procedures under which DOE will implement the reimbursement program under Title X. This section of the guidance document defines the major concepts outlined in 10 CFR Part 765 which address remedial action cost reimbursement.

- *Reimbursable Costs*: Reimbursable costs comprise that portion of costs of remedial action incurred by the licensee and (1) attributable to byproduct material generated as an incident of sales to the United States, (2) incurred to comply with applicable requirements of UMTRCA or Agreement State requirements, and (3) incurred prior to December 31, 2002 or in accordance with a plan for subsequent remedial action approved by DOE. See Chapter II of this guidance document, "Types of Costs," for further discussion and definition of reimbursable costs.

- *Federal Reimbursement Ratios*: Reimbursable costs are to be calculated using Federal reimbursement ratios for each active uranium or thorium processing site. These Federal reimbursement ratios will be based on the ratio of Federal-related dry short tons of tailings to total dry short tons of tailings, unless a licensee is able to demonstrate to the satisfaction of DOE an alternative approach that is more accurate than the tonnage-based approach in delineating the Federal share. See Appendix B of this guidance document for additional information on Federal reimbursement ratios.

- *Reimbursement Limitations*: The following limitations are set forth regarding costs of remedial action:

  - Reimbursement is only allowable for remedial action efforts necessary to comply with UMTRCA or Agreement State requirements.

  - Costs must be incurred prior to December 31, 2002; or in accordance with a plan for subsequent remedial action approved by DOE.

  - Reimbursement to a uranium licensee shall not exceed $5.50 multiplied by the number of dry short tons of Federal-related tailings (adjusted for inflation) present at the site as of October 24, 1992.

  - Total reimbursement to all uranium licensees shall not exceed $270 million; $40 million for the thorium licensee (adjusted for inflation).

- *Reimbursement Claims*: The following requirements govern filing of claims for reimbursement of costs of remedial action:

  - Claims shall be supported by reasonable cost documentation, as specified by DOE in this guidance.

  - The NRC/Agreement State approved reclamation plan or other written authorization shall be submitted with the first claim; revised or modified plans shall be submitted with subsequent claims.

  - Each claim shall provide a summary of the costs of remedial action being claimed, and a summary of the documentation available to support the claim. (DOE's suggested format for preparing reimbursement claim packages is described in more detail in Chapter IV and Appendix A of this guidance document.)

  - Supporting documentation shall be cross-referenced to the licensee's approved reclamation plan or other written authorization and shall be accessible to DOE. Contemporaneous documentation should be used to support claims when available. (Cost documentation and recordkeeping procedures recommended by DOE are discussed in Chapter III of this guidance document.)

  - DOE may audit a licensee's remedial action cost documentation, on a case-by-case basis, prior to approving a reimbursement claim. (See section IV.C. of this document for guidance on audit requirements and procedures developed by DOE.)

  - Generally Accepted Accounting Principles (GAAP) shall be followed in preparing cost reimbursement claims. (See section B.2.b. of this chapter for further discussion of GAAP.)

  - Claims shall include certification by the licensee that work was performed as described in an approved reclamation plan or other written authorization, and that cost documentation supporting the claim is complete, accurate, and true.

- *Appeals Process*: A licensee wishing to contest a determination made by DOE may file an appeal with DOE's Office of Hearings and Appeals. Appeals must be made within 45 days of receiving notice of a determination by DOE.

2. Financial Management and Accounting Standards

The following financial management and accounting standards and objectives are essential to expediting the cost reimbursement process.

a. Financial Management Systems

To provide reasonable support of costs of remedial action claimed for reimbursement, and to facilitate the reimbursement process, it is important that the licensee maintain documentation that is both accurate and complete, as follows:

- *Maintain Accurate Cost Information*: The licensee should ensure that only costs attributable to remediation activities are charged to remediation projects, activities, or cost centers. This will help to ensure that costs claimed can be traced back to an approved reclamation plan or other written authorization and therefore, are reimbursable under Title X. The licensee should maintain costs in such a manner as to allow it to isolate and deduct those costs which DOE determines to be non-reimbursable. (See Chapter II, Section D for guidance on non-reimbursable costs.)

- *Maintain Complete Cost Information*: The licensee should ensure that all costs of remedial action are recorded and charged to the appropriate remediation projects, activities, or cost centers. This will help to ensure that the licensee receives reimbursement for all reasonable and acceptable costs of remedial action.

DOE recognizes that not all licensees' accounting systems and financial management processes are the same. Different licensees' systems may have different capabilities. However, each licensee should have some financial management controls in place which ensure the accuracy and completeness of accounting information. During potential audits of cost reimbursement claims, overall financial management controls will be evaluated along with actual cost documentation. Therefore, each licensee should evaluate its current systems to ensure that adequate controls are in place to meet cost reimbursement needs.

b. Accounting Standards and Principles

10 CFR Part 765 indicates that licensees should comply with GAAP in preparing and supporting cost reimbursement claims. Compliance with GAAP would help to ensure:

- Accurate recording of direct costs
- Fair and acceptable allocation of indirect costs.

Definitions of direct and indirect costs as they apply to remediation efforts can be found in Chapter II of this guidance document under section A, "Types of Costs of Remedial Action."

The following principles and standards addressed in GAAP provide reasonable assurance as to the accuracy of the licensee's cost accounting records:

- *Reliability*: Information is reasonably free from error or bias and represents faithfully what it is intended to represent. Reliability comprises the three factors discussed below: verifiability, neutrality, and representational faithfulness.

- *Verifiability*: Information is determined objectively and can be verified by other accountants using the same methods of measurement (i.e., use of standard procedures, methodologies).

- *Neutrality*: Information is reported in an unbiased manner (i.e., use of standard reporting formats).

- *Representational faithfulness*: Information represents faithfully the activities or results being measured (i.e., use of objective reporting methods).

- *Completeness*: Reported information includes everything that is material and necessary to represent faithfully all relevant activities.

- *Consistency and Comparability*: Accounting methodologies are used consistently from one period to the next, thus facilitating comparison of two or more periods.

- *Matching Principle*: Costs are realized within a reasonable period of time, based on a correlation between the costs and the benefits derived (benefits being defined as progress made toward completion of remedial activities). In other words, costs are documented as close as possible to the time at which they are incurred and remedial activities are completed.

c. Documentation Standards

It is critical that the cost documentation supporting a licensee's claim for reimbursement demonstrates clearly the costs of remedial action incurred. Achieving the following primary objectives will help to ensure that the licensee's documentation will be found to be reasonable during financial and technical audits:

- Cost documentation should demonstrate clearly that funds were spent

- Cost documentation should demonstrate clearly on what the funds were spent (i.e., cross-reference to approved remediation activities).

To achieve these objectives, the licensee's cost documentation should demonstrate the following:

- The work or purchase was *authorized* by the licensee (e.g., documentation of supervisory approval such as signatures on work or purchase orders)

- The work or purchase was *completed* (e.g., time sheets or cards, or progress reports)

- The licensee was *billed* for the work or purchase (e.g., contractor or vendor invoices)

- The licensee actually *paid* for the work or purchase (e.g., records of payment dates, amounts, and check numbers).

These four points are key factors that will be evaluated during financial audits. In addition, the second point (i.e., work or purchase was *completed*) will be a key factor during technical audits of claims for reimbursement. Therefore, it is essential that the licensee maintain documentation supporting claims for reimbursement which demonstrates these points. In addition, DOE will evaluate whether the licensee's documentation demonstrates a link between remediation costs and activities required under an NRC- or Agreement State-approved reclamation plan or other written authorization.

3. Licensee's Role in Cost Reimbursement

The licensee should have a firm understanding of its roles and responsibilities during the cost reimbursement process, as follows:

- *Maintenance of Effective Financial Management Systems*: The licensee should maintain financial management systems which adhere to the cost accounting and documentation standards discussed above.

- *Preparation and Submission of Cost Reimbursement Claims*: The licensee should submit claims for reimbursement in the manner discussed in section IV.B. of this guidance document.

- *Satisfaction of the Burden of Proof*: The burden of proof in the cost reimbursement process is on the licensee. It is important that the licensee's cost documentation demonstrates that:

  - Remediation activities for which reimbursement is claimed were required by an approved reclamation plan or other written authorization.*

  - Costs are reasonable and acceptable as specified by DOE in this guidance document.

  - Costs claimed represent the Federal portion of total costs of remedial action incurred.

These responsibilities are discussed further throughout the remainder of this document.

* It is recognized that licensees may not have a final approved reclamation plan prior to submittal of claims for reimbursement. However, costs for which reimbursement is claimed must still be for activities necessary to comply with the requirements of UMTRCA. Throughout the remainder of the document the phrase "activities in a reclamation plan or other written authorization" will be used to denote activities required under an approved reclamation plan or other written authorization, as well as activities required to comply with UMTRCA for which a final plan has not yet been approved.

CHAPTER II: TYPES OF COSTS

This chapter identifies seven major categories of costs which may be reimbursed under the Title X Cost Reimbursement Program. The purpose of this chapter is to provide guidance on acceptable methods of charging costs to remediation projects, activities, and cost centers; and on classifying costs into the defined cost categories for reimbursement claim filing purposes. Although the seven categories have been structured to encompass all possible types of costs of remedial action, DOE recognizes that the licensee's cost categories may differ from those identified below. Each licensee should use the cost categories applicable to their individual accounting systems.

A. TYPES OF COSTS OF REMEDIAL ACTION

Licensees may include both direct and indirect costs of remedial action in claims for reimbursement:

- *Direct costs*: Expenses that can be directly attributed to remediation efforts, and therefore, are charged directly to remediation projects, activities, or cost centers.

- *Indirect costs*: Expenses that support remedial activities but are not directly assignable to the remediation efforts' end product or process, or that represent costs of operations not directly related or attributable to remediation efforts; and therefore, cannot be charged directly to specific remediation projects, activities, or cost centers.

To expedite review and audit of claims for reimbursement, the licensee should charge costs of remedial action directly to specific projects, activities, or cost centers whenever possible, and should link such costs to specific activities required under a reclamation plan or other written authorization. Licensee managers should determine whether reimbursable costs should be accounted for and documented as direct charges, or included in an indirect or overhead cost pool to be allocated among various activities utilizing a generally accepted method of allocation. The licensee should always ensure that costs which are charged directly to remediation projects, activities, or costs centers are not also allocated to those projects, activities, or costs centers, as this would result in duplication of costs.

In addition, the licensee should ensure that direct charging of costs to remediation projects, activities, or cost centers is consistent with the nature of the costs (i.e., the licensee should not charge inherently indirect costs as direct costs). For example, costs of printing corporate materials for a specific office should not be charged directly to reclamation even if that office solely supports reclamation efforts, because the nature of the cost is inherently indirect and has non-reclamation related benefits.

B. GUIDANCE ON CHARGING COSTS OF REMEDIAL ACTION

Seven major categories of costs of remedial action are defined in this section of the guidance document, as follows:

- Direct Labor
- Travel
- Materials and Supplies

- Equipment
- Contractor Services
- Other Direct
- Overhead.

In addition to defining these categories, this section provides guidance on methods of charging costs within each category to appropriate remedial action projects, activities, or cost centers; and gives examples of specific types of costs or charges which are eligible for reimbursement by DOE under Title X. This section is intended only to provide the licensee with *guidelines* for charging and classifying costs of remedial action. The licensee should follow the concepts outlined in this section, but may structure its cost categories to match the licensee's current accounting and recordkeeping systems. It is not DOE's intent to require extensive and unnecessary efforts from the licensee in preparing a claim for reimbursement. Further guidance on the cost records which should be maintained to support costs in each category is provided in Chapter III of this guidance document, "Cost Documentation and Recordkeeping."

1. Direct Labor

The Direct Labor cost category includes salary and benefit expenses charged directly to remediation projects, activities, or cost centers. Direct labor charges may include compensation for hours worked and related benefit distributions. Salary expense which is included in an indirect cost pool and allocated among various projects, activities, or cost centers should not be charged under direct labor, as this would result in duplicate charging of labor costs. It is important that direct labor costs be easily traceable to activities required under a reclamation plan or other written authorization.

2. Travel

The Travel cost category includes costs of auto, rail, or air transportation; meals; and lodging, which are incurred to support remediation activities. These expenses may be direct or indirect in nature. Regardless of whether travel costs are direct or indirect in nature, travel vouchers and employee time or attendance records should correspond; and travel costs should be traceable to remedial activities in a reclamation plan or other written authorization.

a. Direct Travel

Costs incurred for travel which supports exclusively remediation activities should be directly charged to the appropriate remediation project, activity, or cost center.

b. Indirect Travel

Costs of travel which support both remediation and non-remediation activities should be allocated between the remediation projects, activities, or cost centers and the non-remediation projects, activities, or cost centers which the travel supports. This allocation should be based on a defensible methodology such as the amount of time spent conducting activities which support each project, activity, or cost center. For instance, if travel expenses were incurred over a three-day period, and

one full day was spent conducting remediation activities, one-third of the travel voucher might be allocated to the appropriate remediation project, activity, or cost center.

3. Materials and Supplies

The Materials and Supplies cost category includes the cost of materials and supplies which are purchased for use during remediation activities. This category may include costs of materials used to perform actual remedial work (e.g., cover materials, piping, and fuel), as well as costs of supplies used to support activities associated with the actual cleanup process (e.g., computer equipment and office supplies needed to manage on-site office work). These costs may be charged directly to remediation projects, activities, or cost centers; or may be allocated between remediation and non-remediation projects, activities, or cost centers, depending on the nature of the benefit derived from the activities conducted. The licensee should ensure that cost documentation and recordkeeping systems provide for reasonable materials and supplies charges, as described below.

a. Direct Materials and Supplies

Materials and supplies purchased solely for use during remedial activities should be charged directly to remediation projects, activities, or cost centers. These materials and supplies should be easily traceable to some remedial activity required under a reclamation plan or other written authorization.

b. Indirect Materials and Supplies

Materials and supplies purchased for use on both remediation and non-remediation activities should be allocated between the remediation projects, activities, or cost centers; and the non-remediation projects, activities, or cost centers which the materials and supplies supported. This allocation should be based on a defensible methodology. For example, allocation of these expenses may be made based on percentage use or may be performed by calculating and charging an appropriate usage rate. Guidance on usage rates is included in section C, below.

4. Equipment

The Equipment cost category may include costs within one or more of the following five general categories:

- Equipment Purchase
- Depreciation
- Equipment Lease
- Equipment Usage
- Contractor Provided.

It is recommended that the licensee follow the policies regarding each of these five categories outlined in the following sections. However, the licensee should ensure that particular equipment costs are not charged under more than one method, as this would result in duplicate costs. In addition, it is crucial that all types of equipment charges be traceable to some remedial activity required under a reclamation plan or other written authorization.

a. Equipment Purchase

If equipment costing less than $5,000 is purchased solely for use during remediation activities, the purchase cost may be charged directly to a remediation project, activity, or cost center. Conversely, if equipment costing $5,000 or more is purchased for exclusive use on remediation activities, the cost of the equipment cannot be charged directly to remediation projects, activities, or cost centers. In the latter case, the licensee should capitalize the equipment, charging depreciation costs to the applicable remediation projects, activities, or cost centers as described under *Depreciation*. If any equipment purchased is utilized for non-remediation activities as well, a usage charge should be applied, as described under *Equipment Usage* below.

b. Depreciation

Depreciation expense may be charged directly to a remediation project, activity, or cost center in any of the following three situations:

- The equipment was purchased solely for use during remediation activities.
- The equipment was purchased prior to beginning remediation activities, and was subsequently transferred for sole use during remediation activities. In this case, depreciation expense incurred after transferring the equipment to a remediation project or activity can be charged directly to the appropriate remediation project, activity, or cost center.
- The equipment was utilized for both remedial and non-remedial activities during the same period. The licensee should first determine the total depreciation expense for the item in question for the current period. Next, the licensee should determine the percentage of use on remediation versus non-remediation projects or activities (e.g., percentage of hours or days used on each project or activity, based on time or attendance records or equipment log books). To determine the amount to be charged to the remediation project, activity, or cost center, this percentage should then be applied to the total calculated depreciation expense.

Depreciation should not be charged directly or indirectly to remedial projects, activities, or cost centers for periods of a month or more during which the equipment remains completely idle. For instance, if a dump truck is being utilized on remediation activities, but remains idle during the entire month of June, depreciation of the dump truck should not be charged during June, either directly or as part of overhead costs. Depreciation also should not be charged for equipment which has been fully depreciated or fully costed, regardless of whether the depreciation or costing occurred during the conduct of reimbursable or non-reimbursable activities. The licensee should always utilize a method for calculating depreciation which complies with GAAP, and should document the method utilized, and the date of transfer of the equipment to a remediation project or activity, as applicable.

c. Equipment Lease

If equipment is leased solely for use during remediation activities, the lease payments may be charged directly to a remediation project, activity, or cost center. If the leased equipment is utilized on non-remediation activities as well, a usage charge should be applied, as described below, in section C.

d. Equipment Usage

If purchased or leased equipment is used for both remediation and non-remediation activities, equipment costs should be allocated between the remediation projects, activities, or cost centers and the non-remediation projects, activities, or cost centers for which the equipment was utilized. This allocation should be performed by calculating and charging an appropriate usage rate, as discussed in section C, below.

e. Contractor Provided

If a contractor provides the equipment utilized during remediation activities, and the equipment costs are paid by the licensee as part of a contractor invoice, the procedures described below in section 5, "Contractor Services," apply.

5. Contractor Services

The Contractor Services cost category may include any or all of the types of costs described in this chapter. These costs are charged directly to remediation projects, activities, or cost centers by charging the amount of any "reimbursable costs" included in contractor invoices paid by the licensee. Contractor invoice costs are "reimbursable" under Title X provided the work performed by the contractor meets the criteria discussed in section B.1.b. of Chapter I (i.e., costs incurred are for activities required under a reclamation plan or other written authorization). Documentation of contractor costs should demonstrate clearly that these criteria were met.

6. Other Direct

The Other Direct cost category includes all direct costs of remedial activities not included in the specific categories listed above. Other direct costs may include such items as rent, utilities, taxes, and permit costs. These charges should be made directly to the appropriate remediation projects, activities, or cost centers; provided the items benefit exclusively remediation activities. The cost of these items should be clearly traceable to some remediation activity required under a reclamation plan or other written authorization.

7. Overhead

The Overhead cost category may include costs of any items or services which benefit remediation activities, but whose benefit can not be directly traced to specific remediation projects, activities, or cost centers. Overhead costs may include such items as salaries of staff performing duties which indirectly benefit remedial activities, such as administrative, headquarters, and accounting staff salaries. It also may include costs such as utilities, taxes, and training costs, if those costs are not

directly tracked and charged to a remediation project, activity, or cost center. All costs included in overhead charges to remediation projects, activities, or cost centers must be clearly identified and described in the licensee's overhead cost documentation. Overhead costs also must meet the criteria discussed in section B.1.b. of Chapter I (i.e., costs incurred are for activities required under a reclamation plan or other written authorization). In addition, the method used to apply overhead to a remediation project, activity, or cost center must comply with GAAP and must be documented clearly.

C. GUIDANCE ON CHARGING USAGE RATES

In situations where costs benefit remediation activities, but can not be directly tracked and charged to remediation projects, activities, or cost centers, it is appropriate for the licensee to determine and charge a usage rate. It is important to note that the licensee should weigh the effort required to utilize this method against the cost involved. For instance, it would not be cost effective to allocate the cost of an adding machine based on hours used, because the effort required to perform the allocation would outweigh the cost that might be recovered. In addition, the licensee should always ensure that allocated costs can be traced easily to some project or activity required under a reclamation plan or other written authorization. This section provides guidance on utilizing usage rates to allocate costs of materials and supplies, as well as costs of equipment.

1. Materials and Supplies

In situations where costs of materials and supplies are being allocated between two or more projects, activities, or cost centers, the allocation should be based on the relative usage of the materials and supplies for activities supporting each project, activity, or cost center. This usage should be determined as follows:

- *For Inventoried Items (such as paper or computer discs)*: Usage should be charged based on the number of items (or packages of items) utilized for each project, activity, or cost center, during the reporting period. The licensee should first calculate the decrease in inventory of the item in question, from beginning to end of the reporting period. Then, the amount of the decrease in items should be multiplied by a pre-determined cost per item. The resulting amount should then be charged to the appropriate remediation project, activity, or cost center.

- *For Property Items (such as computers or sampling devices)*: Costs should be charged based on a defensible methodology such as hourly usage or some other unit of work. The licensee could first determine the estimated life and value of the property item (e.g., based on purchase price), and use this information to determine an hourly usage rate. Next, usage of the item could be tracked during the normal course of business (e.g., utilizing time or attendance records, or number of samples). Finally, the pre-determined usage rate could be applied to the tracked usage to calculate the cost to be charged to remediation.

In either case, the methodology used should comply with GAAP, and be applied consistently and documented clearly.

2. Equipment

Where equipment costs are being allocated between two or more projects, activities, or cost centers, the allocation should be based on the relative usage of the equipment required to conduct the activities which support each project, activity, or cost center. First, an equipment usage rate should be determined, based on the estimated life and purchase price of the equipment. Next, use of the equipment should be carefully tracked and documented for each remediation project, activity, or cost center. Finally, the pre-determined rate should be applied to the usage tracked for each remediation project, activity, or cost center to determine the total remediation-related equipment cost. This cost may then be charged directly to the appropriate remediation project, activity, or cost center. Methods of establishing rates and tracking usage should comply with GAAP, and be applied consistently and documented clearly.

D. REIMBURSABLE VS. NON-REIMBURSABLE COSTS

Although a licensee may request reimbursement for costs within any of the seven categories, not all costs within each category will be reimbursable under Title X. Reimbursable vs. non-reimbursable costs are defined as follows:

- *Reimbursable Costs*: Costs that are incurred to perform activities in a reclamation plan or other written authorization pursuant to UMTRCA and/or Agreement State requirements.

- *Non-Reimbursable Costs*: Costs incurred to perform activities which are not included in a reclamation plan or other written authorization pursuant to UMTRCA and/or Agreement State requirements, even though they may be legitimate costs of doing business. For example, although sponsoring a 'going-away' lunch or party for an employee is a standard business practice, this function is not required to perform reclamation activities; therefore, costs associated with this function are not reimbursable. Exhibit II-1 provides examples of costs which DOE has determined to be non-reimbursable.

Various costs may be either reimbursable or non-reimbursable, depending on the situation. The licensee should make determinations as to whether or not specific costs should be claimed for reimbursement on a case-by-case basis, as appropriate and feasible. For example, salaries of staff who perform remediation-related duties are generally reimbursable as direct labor costs. However, depending on the specific nature of the duties performed by those staff members, DOE may determine that certain labor costs included in claims for reimbursement should not be approved. For instance, assume that John Doe works in an office which supports remediation activities exclusively, and is an hourly employee. Likewise, assume John Doe attends an annual company picnic. The cost associated with the hours spent attending the picnic would not be appropriate for inclusion in a claim for reimbursement, because those costs are not necessary to conduct remediation activities and therefore, are not reimbursable. If John Doe were a salaried employee, his salary would be reimbursable, but not the time spent attending the picnic (i.e., the time spent attending the picnic should not be part of the requisite number of hours (e.g., 40 per week) required to earn that salary).

Exhibit II-1 is intended to provide selected examples only; it is not intended to be an all-inclusive list. DOE will make further determinations regarding non-reimbursable costs as additional claims are submitted and reviewed, and additional types of costs are identified. Such decisions will be made on a case-by-case basis, and will be applied to all licensees consistently upon a DOE policy decision regarding specific costs.

Exhibit II-1
Examples of Non-Reimbursable Costs

- Employee bonuses
- Time charged to attend corporate-related training
- Costs of commuting between residence and the work site
- Personal travel expenses (e.g., costs of extending work-related travel for personal reasons)
- Fuel used for personal vehicle use
- Cost of personal office supplies (e.g., plants, calendars)
- Charges for fully depreciated or fully costed equipment
- Costs of operating equipment for non-remediation purposes
- Cost of independent audits conducted for corporate purposes
- Costs of printing corporate-required documents (e.g., periodic financial reports submitted to corporate headquarters)
- Fees for membership in professional organizations, if the licensee cannot demonstrate a link between membership and qualifications for performing reclamation work
- Entertainment expenses
- Salaries of corporate officers not supporting remediation efforts
- Costs of legal activities which are not necessary to comply with UMTRCA or Agreement State requirements
- Costs for which the licensee previously received reimbursement from DOE
- Direct charges for equipment in excess of $5,000
- Employee relations costs such as employee luncheons, cash awards, donations, athletic or other personal club fees, and gifts
- Fines or penalties for violation of environmental or other laws and regulations

CHAPTER III: COST DOCUMENTATION AND RECORDKEEPING

Accurate and complete documentation of activities and costs requires use and maintenance of effective cost documentation and recordkeeping systems. This chapter defines primary recordkeeping objectives and "best practices," and suggests methods of summarizing and organizing the remediation cost documentation maintained at the licensee's site, and used to support claims for reimbursement.

A. RECORDKEEPING OBJECTIVES

To ensure the effectiveness of cost documentation and recordkeeping systems, licensees should evaluate whether their systems achieve the following recordkeeping objectives:

- Maintain complete cost documentation of remediation activities
- Follow applicable documentation standards
- Ensure timely access to remediation cost documentation.

Each of these objectives, as well as the impact of meeting these objectives in order to expedite the reimbursement process, is described below.

1. Maintain Complete Cost Documentation of Remedial Activities

Records of costs of remedial action must be complete to ensure that all claims are supported by reasonable documentation, as defined in Appendix D of this guidance, and are traceable to an NRC- or Agreement State-approved reclamation plan or other written authorization. In other words, the licensee should maintain whatever documentation is necessary to provide a clear trail from the cost incurred to an activity required under the approved reclamation plan or other written authorization. DOE will only reimburse those costs which are supported by reasonable documentation, as specified below. In accordance with 10 CFR Part 765, documentation relied upon by a licensee in support of a claim for reimbursement shall be retained by the licensee until four years after final payment of a claim is made by DOE.

2. Follow Applicable Documentation Standards

Licensees should ensure that the documentation upon which a claim is based meets DOE's definition of "reasonable" documentation, as described throughout this guidance. Under 10 CFR Part 765, licensees are requested to comply with GAAP in preparing claims for reimbursement. Audits of claims for reimbursement will determine whether or not GAAP was followed in documenting the costs of remedial action being claimed.

3. Ensure Timely Access to Remediation Cost Documentation

Licensees should ensure timely access to remediation cost documentation. This will allow licensees to prepare and submit claims in a more timely and less costly manner, thus increasing potentially the benefit received through the Title X reimbursement process. In addition, timely access to cost documentation will facilitate formal audit processes, thereby expediting claim reimbursement.

B. COST DOCUMENTATION AND RECORDKEEPING GUIDANCE

The following sections provide guidance on methods of maintaining and organizing documentation of costs of remedial action. These sections provide suggested documentation and recordkeeping practices specific to each of the seven cost categories defined in Chapter II, "Types of Costs." Although these sections serve as guidance only, utilization of the procedures suggested or similar recordkeeping methods would help to ensure that the cost documentation maintained at the licensee's site is found to be reasonable and acceptable to DOE. Exhibit III-1 illustrates the types and level of documentation which DOE suggests that the licensee maintain to support costs of remedial action claimed for reimbursement.

In addition to the other recordkeeping requirements described below, it is critical that the licensee maintain documentation that demonstrates a link between costs claimed for reimbursement and remediation activities required under a reclamation plan or other written authorization. Licensees are required to identify the costs of remedial action associated with each major activity or requirement established by the reclamation plan or other written authorization.

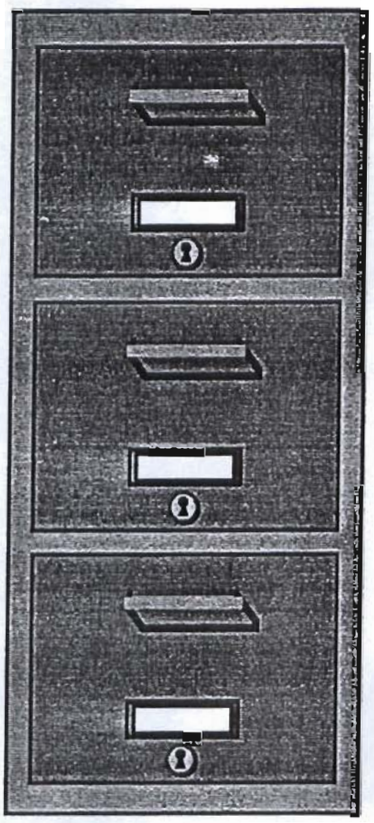
1. Direct Labor

The licensee should maintain records of time or attendance of staff performing remediation-related activities. This documentation should include timesheets or timecards; records of staff positions and salaries; worksheets demonstrating calculation of fringe benefit charges, if the licensee's accounting system does not calculate fringe benefit charges automatically; a description of the methodology used for allocating fringe benefits to remediation projects, activities, or cost centers; and documentation demonstrating that costs charged to remediation were incurred to perform activities required under a reclamation plan or other written authorization.

2. Travel

The licensee should maintain records of travel expenses incurred by employees performing remediation-related activities. Travel expense records should include documentation of the purpose of the trip, including authorization by the appropriate manager or supervisor; travel vouchers submitted by employees showing travel dates, starting point and destination, method of transportation, and names of the persons traveling; receipts for major travel costs (e.g., hotel, airline tickets) incurred by employees; proof of payment of travel vouchers; and documentation demonstrating that costs charged to remediation projects, activities, or cost centers were incurred to perform activities required under a reclamation plan or other written authorization. Travel expense records should correlate to time or attendance records for the same period. For instance, if John Doe is on travel between August 3 and August 5 to conduct activities related to Project X, John Doe's timesheet should show time charged to Project X for August 3-5.

Exhibit III-1
Sample Documentation of Costs of Remedial Action



Direct Labor

- Time and attendance records
- Position titles of staff
- Salaries of staff (annual or hourly rate)
- Methodology for allocating fringe benefits
- Fringe benefit worksheets
- Link to reclamation plan or other written authorization

Overhead

- Types of costs included in overhead
- Authorization of goods or services (e.g., purchase or work orders)
- Receipt of goods or services (e.g., invoices or receiving reports)
- Cost of goods or services (e.g., invoices or receipts)
- Payment for goods or services (e.g., receipts or cancelled checks)
- Overhead methodology and worksheets
- Link to reclamation plan or other written authorization

Travel

- Authorization (including purpose of trip)
- Vouchers showing: starting point and destination, transportation method, number and names of travelers, dates
- Receipts for major costs (airline, hotel, etc.)
- Proof of payment
- Basis for allocation of costs (for indirect travel)
- Link to reclamation plan or other written authorization

Other Direct

- Authorization of goods or services (e.g., purchase or work orders)
- Receipt of goods or services (e.g., invoices or receiving reports)
- Cost of goods or services (e.g., invoices or receipts)
- Payment for goods or services (e.g., receipts or cancelled checks)
- Link to reclamation plan or other written authorization

Materials & Supplies

- Type(s) of materials and supplies purchased
- Purchase orders, invoices, and receiving reports
- "Usage rate" methodology and calculations
- Records of use
- Proof of payment
- Basis for allocation of costs (for indirect materials and supplies)
- Link to reclamation plan or other written authorization

Contractor Services

- Contract documents
- Work orders and change orders
- Periodic progress reports
- Approved contractor invoices
- Proof of payment
- Licensee audits of contractors
- Basis for allocation of costs (for indirect contractor costs)
- Link to reclamation plan or other written authorization

Equipment

- Type(s) of equipment purchased
- Purchase orders, invoices, and receiving reports
- Depreciation methodology and worksheets
- Records of accumulated depreciation
- Lease agreements and bills
- "Usage rate" methodology and calculations
- Records of use
- Contractor documents
- Proof of payment
- Link to reclamation plan or other written authorization

In cases where travel expenses are incurred to support both remedial and non-remedial activities, the licensee should, at a minimum, maintain *copies* of the documentation described in the preceding paragraph to support the portion of costs charged to remediation projects, activities, or cost centers, as well as documentation of the basis for allocating travel expenses between applicable projects, activities, or cost centers.

3. Materials and Supplies

The licensee should maintain records of materials and supplies purchased or used during remediation activities. Documentation of costs of materials and supplies should include a record of materials and supplies purchased for use during remedial activities; purchase orders, invoices, and receiving reports; contractor invoices, if applicable; usage records, including methodologies for calculating usage rates and documentation of the amount of materials or supplies used (e.g., inventory records, or time or attendance records) if applicable; proof of payment; and documentation demonstrating that costs charged to remediation were incurred to perform activities required under a reclamation plan or other written authorization.

In cases where materials and supplies are purchased or used for both remedial and non-remedial activities, the licensee should, at a minimum, maintain *copies* of the documentation described in the preceding paragraph to support costs charged to remediation projects, activities, or cost centers; as well as documentation of the basis for allocating costs of materials and supplies between applicable projects, activities, or cost centers.

4. Equipment

The licensee should maintain records of equipment costs incurred in support of remediation-related activities. Equipment cost records will vary depending on the nature of the costs incurred (e.g., equipment purchase, depreciation, equipment lease, equipment usage, or contractor provided), as described in this section. For each category of equipment cost described, however, the licensee should maintain documentation demonstrating that equipment costs charged to remediation projects, activities, or cost centers were incurred to perform activities required under a reclamation plan or other written authorization.

a. Equipment Purchase

If equipment is purchased solely for use during remedial activities, and equipment purchases were charged directly to a remediation project, activity, or cost center, cost records should include a record of all equipment purchased; purchase orders, invoices, and receiving reports; and proof of payment. Documentation should demonstrate clearly that the cost of any equipment charged directly to remediation projects, activities, or cost centers is less than $5,000. If equipment depreciation charges are made to remediation projects, activities, or cost centers; the licensee should refer to section b, "Depreciation." If the equipment purchased is utilized for both remedial and non-remedial activities, the licensee should refer to section d, "Equipment Usage."

b. Depreciation

If equipment is used to perform remediation activities, and equipment depreciation charges are appropriately made to remediation projects, activities, or cost centers, cost records should include a record of all equipment purchased; purchase orders, invoices, and receiving reports; proof of payment; methodology and worksheets used to calculate depreciation charges; and records of accumulated depreciation.

c. Equipment Lease

If equipment is leased solely for use during remedial activities, cost records should include lease agreements, lease bills, and proof of payment. If leased equipment was used for both remedial and non-remedial activities, licensees should refer to section d, "Equipment Usage."

d. Equipment Usage

If purchased or leased equipment is used for both remediation and non-remediation activities, equipment usage charges should be made to both the remediation projects, activities, or cost centers, and the non-remediation projects, activities, or cost centers for which the equipment was utilized. Cost records should include "Equipment Purchase" or "Equipment Lease" records, as described above; methodology and worksheets used to calculate equipment usage rates; and records of equipment use for each applicable remediation project, activity, or cost center.

e. Contractor Provided

If a contractor provides the equipment utilized during remedial activities, cost records should include contract documents, contractor invoices, and proof of payment as described under "Contractor Services" below.

5. Contractor Services

The licensee should maintain records of payments made to contractors for goods or services obtained to further remediation efforts. Records of contractor costs should include contract documents; work orders; periodic (e.g., monthly) progress reports; reports of any contract audits conducted; approved contractor invoices; proof of payment; and documentation demonstrating that the goods or services received were utilized to perform activities required under a reclamation plan or other written authorization.

In cases where contractor goods or services are obtained in support of both remedial and non-remedial activities, the licensee should, at a minimum, maintain *copies* of the documentation described in the preceding paragraph to support costs charged to remediation projects, activities, or cost centers, as well as documentation of the methodology and worksheets used to allocate contractor costs between the applicable projects, activities, or cost centers.

6. Other Direct

The licensee also should maintain records of direct expenses incurred in support of remediation activities which do not fall under the categories listed above. As stated in Chapter II, section B.6., other direct costs may include such items as rent, utilities, taxes, and permit costs. The cost records maintained for each type of expense will vary depending on the nature of the expense. In general, records should be maintained that document the following:

- Authorization of goods or services obtained (e.g., signed purchase or work orders)
- Receipt of goods or services by the licensee (e.g., invoices or receiving reports)
- Cost of goods or services received (e.g., invoices or receipts)
- Payment by the licensee for goods or services received (e.g., receipts or cancelled checks).

In addition, the licensee should maintain documentation demonstrating that the costs charged to remediation projects, activities, or cost centers were incurred to perform activities required under a reclamation plan or other written authorization.

7. Overhead

The licensee should maintain records of expenses included in overhead charges made to remediation projects, activities, or cost centers. Cost records in this category should include a listing and description of all expense items included in overhead cost pools; copies of supporting documentation which demonstrate the four points described in section 6, "Other Direct" above, for each item included in overhead; documentation of the methodology used to allocate overhead cost pools to applicable remediation projects, activities or cost centers; documentation of overhead calculations; and documentation demonstrating a link between overhead costs and a reclamation plan or other written authorization.

Some licensees may include overhead costs attributable to a parent company or other corporate off-site location. While these costs may be reimbursable, the licensee must be able to document how the claimed portion of overhead was derived. At a minimum, *copies* of the records described above should be maintained for corporate overhead included in claims for reimbursement of remediation costs.

CHAPTER IV: CLAIM FILING

It is important that the licensee understand its roles and responsibilities during the claim filing process. The first step is to follow the concepts illustrated by the documentation and recordkeeping guidance provided in the preceding chapters. This will ensure that the licensee has reasonable documentation to support its cost reimbursement claims. The next step is for the licensee to understand the claim filing process and subsequent review, audit, and appeals processes set forth in this chapter.

A. COST REIMBURSEMENT CLAIM FILING

This section describes the major steps in the cost reimbursement claim filing process, and defines the licensee's responsibilities during each step. There are seven major steps in the reimbursement claim filing and approval process, as follows:

- Determination of Total Costs of Remedial Action
- Demonstration of Link Between Costs of Remedial Action and a Reclamation Plan or Other Written Authorization
- Summarization of Costs of Remedial Action and Supporting Documentation
- Calculation of Federal Portion of Costs of Remedial Action
- Preparation and Submission of Claim Packages
- Review of Claim Packages
- Cost Reimbursement Decision-Making and Appeals.

The first five steps in the process are to be completed by the licensee; the last two by DOE.

These seven steps should be completed for each year or portion thereof for which the licensee is seeking reimbursement. In other words, separate claims for reimbursement should be prepared for each complete corporate fiscal year during which the licensee incurred reimbursable costs of remedial action. In addition, if the licensee has only incurred costs of remedial action during some portion of a given corporate fiscal year or if the licensee is claiming specific additional costs from a year previously claimed, the claim should still be submitted by year. Multiple claim submittals may be prepared and submitted to DOE simultaneously. For example, if the licensee intends to claim costs incurred during fiscal years 1980 through 1993 in one claim filing period, the licensee should prepare and submit at least 14 separate claim packages plus a summary of all 14 years, as described in this chapter and in Appendix A. Appendix A provides additional detail and examples of each section of the claim submittal. The remainder of this section provides further discussion of each of the seven steps of the claim filing process listed above.

1. Determination of Total Costs of Remedial Action

The first step of the claim filing process requires the licensee to determine total costs of remedial action incurred, for each fiscal year or portion thereof, included in the claim. For instance, if the licensee claims costs for 1992 and 1993, the first step of the process would be to determine total costs of remedial action for 1992 and total costs of remedial action for 1993. Costs should be compiled in such a manner as to facilitate tracing of those costs back to the licensee's official books and records. As part of these determinations, the licensee must exclude any costs which DOE has defined to be non-reimbursable, as described in section D of Chapter II. If non-reimbursable costs are not excluded from the claim, the claim will most likely be returned to the licensee for revision, and the review process and response time may be significantly impacted.

2. Demonstration of Link Between Costs of Remedial Action and a Reclamation Plan or Other Written Authorization

The second step of the process is for the licensee to correlate costs of remedial action for which reimbursement is claimed to a reclamation plan or other written authorization. The licensee should compile documentation which provides this "trail" from total cost to costs of specific remedial activities to the approved plan. The licensee should cross-reference this documentation to sections of or activities set out in a reclamation plan or other written authorization. The licensee may already utilize codes which reference particular projects, activities, or cost centers. If this is the case, the licensee should explain the correlation between the identification codes and the reclamation plan or other written authorization. Costs which cannot be traced back to an approved reclamation plan or other written authorization are not reimbursable.

3. Summarization of Costs of Remedial Action and Supporting Documentation

The third step of the claim filing process is for the licensee to summarize the total costs of remedial action determined in step 1, as well as the documentation supporting those costs. The licensee should summarize costs and documentation by major category of cost as suggested in Chapter II of this guidance document, "Types of Costs," and by type of remediation work as identified in a reclamation plan or other written authorization. The licensee should utilize its General Ledger as the basis for identifying types of costs, as this will facilitate tracing of those costs to the licensee's summary and source supporting documentation. If cost and/or documentation summaries provided do not reconcile to official books and records (i.e., General Ledger and source documents), the licensee should note the nature of and reason for the departure. Exhibit A-1 in Appendix A provides a sample matrix of types of costs and types of remediation activities. (Note: The first column should be tailored to each site based on the applicable reclamation plan; the first row should be tailored to the licensee's accounting and/or recordkeeping systems.)

Each summary of costs and documentation should cover all costs incurred within a particular fiscal year. For instance, cost and documentation summaries should be prepared for each major category of cost (e.g., labor, travel, materials and supplies, equipment, contractor services, other direct, and overhead) incurred in performing interim stabilization duties in a particular fiscal year. Likewise, summaries should be prepared for each other type of activity conducted during that fiscal year. Summaries of costs of remedial action and supporting documentation should serve as the basis for, and

should be included in reimbursement claim packages submitted to, DOE. Section B.1. and B.2. of this chapter describe inclusion of summaries of costs of remedial action and summaries of supporting documentation in claims for reimbursement.

4. Calculation of Federal Portion of Costs of Remedial Action

The fourth step of the process requires the licensee to calculate the Federal-related portion of the total cost determined in the first step of the process, using the DOE Federal reimbursement ratios for each site. As stated previously, the licensee must ensure that the total costs used in this calculation do not include any "non-reimbursable" costs. This calculation should be performed for each year included in the claim package. Thus, the licensee should multiply each year's total claimed amount by the site's Federal reimbursement ratio to determine the total Federal-related, reimbursable costs of remedial action for each year. If DOE subsequently disapproves any of the costs of remedial action included in the licensee's claim for reimbursement, the Federal ratio should be re-applied to the revised total costs of remedial action. A current listing of Federal reimbursement ratios (per 10 CFR Part 765) is included in Appendix B of this guidance. In addition, Appendix B presents a sample calculation of the Federal portion of total costs of remedial action for one year.

5. Preparation and Submission of Claim Packages

The fifth step is for the licensee to prepare the reimbursement claim package for submission to DOE. A detailed discussion of the documents to be submitted as part of the claim package is included in section B below; a checklist of items to be included in the claim package submittal is included in Exhibit IV-1; and a sample claim package submittal is included in Appendix A of this guidance document.

6. Review of Claim Packages

Upon receipt of the reimbursement claim package, DOE will perform a preliminary review of the summary cost documentation and regulatory authorization submitted. If DOE cannot complete the preliminary review to its satisfaction with the information provided in the claim (e.g., data is incomplete or unclear), DOE may either 1) return the claim to the licensee for revision/clarification, or 2) may request additional information to be submitted prior to completing the preliminary review. Documentation supporting claims for reimbursement is also subject to formal financial and technical audit, as determined by DOE. Section C below provides a detailed discussion of the formal audit processes.

7. Cost Reimbursement Decision-Making and Appeals

Upon completion of necessary audit and/or review of one or more years of a claim package, DOE will make a determination as to the amount to be reimbursed to the licensee, and will process the licensee's payment as discussed in section C.3. Following this determination, the licensee has the option to file an appeal as described below in section C.4.

Exhibit IV-1
Claim Package Checklist

[X] COST SUMMARY DOCUMENT

- √ Include Cost Sumary Document for each year or portion thereof
- √ Include all reclamation cost categories
- √ Include all types of reclamation activities conducted
- √ Include totals for each type of cost and type of reclamation activity
- √ Include calculation of Federal-related costs of remedial action

[X] SUMMARY DOCUMENTATION

- √ Summary-level documentation is provided for each year or portion thereof included in the claim
- √ Cross-references to the regulatory authorization matrix
- √ Clearly defines the cost categories included in the claim, and facilitates understanding of the documentation

[X] NARRATIVE DESCRIPTION

- √ Includes a narrative section for each year or portion thereof for which costs are being claimed, including items such as start and end dates, major accomplishments, and resources utilized
- √ Includes a high-level summary narrative section (or updates to such a section) with such items as major phases of reclamation completed, and general site history information
- √ Cross-references to the regulatory matrix
- √ Cross-references to the types of costs and reclamation activities included in the Cost Summary Document
- √ Includes a statement of certification as to the accuracy and completeness of the claim
- √ In general, provides the reviewer with enough of an understanding of the costs, activities, and associated regulatory authorization to allow adequate evaluation of the claim at a summary level

[X] REGULATORY AUTHORIZATION MATRIX

- √ Cross-references to the Cost Summary Document
- √ Identifies all major sources of regulatory authorization
- √ Provides description of regulatory source documents, in bibliography format or within the matrix itself
- √ Is updated prior to each claim submittal to include revision, amendments, or new sources of regulatory authorization
- √ Clearly ties each type of reclamation activity to source(s) of regulatory authorization

[X] APPROVED RECLAMATION PLAN OR OTHER WRITTEN AUTHORIZATION

- √ Current copy of reclamation plan and any amendments have been submitted at least one time to DOE, or are included in this claim package
- √ Claim package includes all amendments, modifications, etc. issued since the previous claim package submittal
- √ Each document submitted is clearly referenced and described in the regulatory authorization matrix

B. REIMBURSEMENT CLAIM PACKAGES

Following each annual appropriation of funds for reimbursement by Congress, DOE will issue a Federal Register notice announcing the claim submission deadline for that fiscal year. DOE may also issue additional guidance at this time as a result of policy decisions made or lessons learned in the previous review cycle. The remainder of this section describes the major items to be included in the licensee's claim package. Exhibit IV-1 provides a checklist of claim package components.

1. Cost Summary Document

The first item which the licensee should submit as part of the cost reimbursement claim package is the Cost Summary Document. Separate Cost Summary Documents should be prepared for each fiscal year or portion thereof for which reimbursement is claimed. The Cost Summary Document is a matrix of categories of costs (e.g., direct labor, contractor costs) versus remediation work types (e.g., ground water, tailings management). Each block of the matrix should contain the total reimbursable costs of remedial action being claimed for that cost category and type of work for the given year. For instance, a block mapping to "Direct Labor" and "Ground Water" should include the total direct labor costs incurred in performing ground water-related activities for the given year.

A sample Cost Summary Document is included in Appendix A of this guidance document. The licensee should use this sample as a guideline for developing Cost Summary Documents. However, the categories of costs and remediation activities included in a licensee's actual Cost Summary Document should be based on that licensee's official books and records. Thus, a licensee's Cost Summary Document may include additional or different cost categories and remediation activities than the sample Cost Summary Document. If the costs reported do not reconcile to the licensee's official books and record, the licensee should explain the nature of and reason for the departure. In addition, if the licensee utilized an accounting principle or practice that differs from actual financial accounting practices, the licensee should explain or be prepared to discuss/demonstrate how this principle or practice results in a more accurate assignment or allocation of cost. As previously stated, the licensee should not include the same costs on more than one Cost Summary Document. A separate Cost Summary Document should be submitted for each fiscal year or portion thereof for which costs are being claimed.

2. Summary Documentation

The second item in the cost reimbursement claim package is a summary of the documentation supporting the claim for reimbursement. This portion of the claim should summarize the documentation supporting each block of cost included on the Cost Summary Document, and should be cross-referenced accordingly. For example, for the block mapping to "Materials & Supplies" and "Ground Water," the summary documentation might consist of a log of materials and supplies utilized in conducting ground water monitoring activities. The summary documentation included in the claim package is intended to provide only summary level support, serving as a starting point for further review and audit, not as a detailed trail of source documents. However, the documentation provided should trace back to detailed supporting or source documentation maintained on-site for the purpose of conducting audits. If the documentation provided does not reconcile to official books and records, the licensee should note the nature of and reason for the departure.

The licensee also should include in their claim any information necessary to accurately interpret the supporting documentation (e.g., the licensee could include portions of an accounting manual which define cost pools or accounting codes contained on the supporting documentation). A sample of the summary documentation which might be included in the reimbursement claim package can be found in Appendix A of this guidance document.

3. Narrative Description

The third item to be included in the reimbursement claim package is a narrative description of remedial activities at the site. This narrative should provide a summary of the activities completed for which costs are being claimed, and should demonstrate a link between costs claimed and activities required under a reclamation plan or other written authorization. A link must be shown between costs and approved remediation activities in order for the costs to be reimbursable.

The licensee should provide the following narrative sections, as specified:

- The first section should provide a high-level, summary description of the site and reclamation efforts to date. This section should include such things as site operating and closure dates; characterization of buildings and property; major regulatory drivers; unique site characteristics; significant actual or planned milestones and accomplishments (e.g., start and end dates of major phases of the cleanup process, major purchases of equipment and materials); characterization of cleanup approach; extent of contractor involvement; previous interactions with or funding received from DOE; and NRC, Agreement State, or other regulatory authority involvement. This section or updates to it should be provided with each claim. For example, a lengthy narrative might be needed with earlier claims that cover multiple years, whereas subsequent claims may need only 1-2 additional paragraphs.

- The second section should be broken by type of remediation activity, and by year or portion thereof for which costs are being claimed. This narrative should provide additional detail on activity descriptions, status, and start and end dates; major accomplishments and milestones; resources used for each activity performed during that year or portion thereof, including materials, equipment, and personnel (e.g., whether an activity was conducted in-house or contracted out); and, descriptions of the components of any other major categories of costs included in the claim for that year.

In general, the licensee should attempt to provide the claim reviewer with enough of an understanding of the types of reclamation activities and cost categories included in the claim, and the associated regulatory authorization, to allow adequate evaluation of the claim at a summary level.

Also as part of the narrative, the licensee should provide a certification as to the accuracy and completeness of the claim package. Sample narrative description sections are included in Appendix A of this guidance document.

4. Regulatory Authorization Matrix

The fourth item in the reimbursement claim package is a matrix of sources of regulatory authorization for remedial activities performed at the site. This matrix should provide a correlation between remedial activities being conducted by the licensee and the source of authority for conducting those activities. For each major type of remedial activity, a section of the reclamation plan or other written authorization (e.g., letters or memos issued by the NRC or Agreement State) should be identified and defined. The licensee may 1) submit an actual matrix cross-referencing reclamation activities to titles of the appropriate sources of regulatory authorization with an attached 'bibliography' defining each of the regulatory documents referenced; or 2) incorporate brief descriptions of each source of regulatory authorization into the matrix. The licensee should resubmit this matrix with each new claim, updating the list of regulatory source documents as necessary. However, the actual source documents need only be submitted once if they remain unchanged. A sample Regulatory Authorization Matrix can be found in Appendix A of this guidance document. This sample incorporates descriptions of the source regulatory documents into the matrix.

5. Approved Reclamation Plan or Other Written Authorization

The final item included in the cost reimbursement claim package is the NRC- or Agreement State-approved reclamation plan or other written authorization. A copy of the final approved plan and/or other written authorization should be included in the initial claim package submitted to DOE. If a final plan has not been approved, the licensee should submit the most current approved reclamation plan or other written authorization. For subsequent years, the licensee should submit all approved revisions or modifications occurring between the dates of the last claim submittal and the current submittal. For instance, if a licensee submits a claim in 1995 and submits its next claim in 1997, the licensee should include in the 1997 submittal all approved revisions or modifications to the plan or other authorization, made subsequent to the 1995 submittal date. If a licensee does not have a final approved reclamation plan when the initial claim is submitted, a final approved plan should be submitted with the first claim filed subsequent to approval of the final plan. Each source of regulatory authorization (i.e., reclamation plan and amendments or other written authorization) should be noted and described briefly in the regulatory authorization matrix of the claim package. (See section 4 above.)

C. DOE REVIEW AND AUDIT OF COST DOCUMENTATION

This section provides a general discussion of the review and audit processes associated with Title X cost reimbursement, and addresses the licensee's responsibilities regarding these processes.

1. Preliminary Review

Upon receipt of a claim package from a licensee, DOE will perform a preliminary review of the documentation submitted. DOE will evaluate the reasonableness of the documentation submitted and determine whether the costs claimed were incurred specifically for activities required under a reclamation plan or other written authorization.

If the documentation is inadequate to make this determination, DOE may return the claim package to the licensee for revision, or may request additional material or clarification of information received. In addition, DOE may decide to conduct formal financial and/or technical audits of the licensee's cost documentation. DOE also may rely, in part, on findings of prior years' reviews and audits for further assurance regarding a licensee's claim.

2. Audit Processes

As necessary, DOE will schedule with the licensee an independent financial audit and/or technical audit of the documentation supporting the claim for reimbursement. These audits will be conducted at the licensee's site, and shall be performed based on Generally Accepted Government Auditing Standards (GAGAS), and applicable technical standards as determined by DOE. The remainder of this section describes the timing and scope of the audits, as well as necessary preparation for which the licensee is responsible.

a. Timing of Audits

The decision as to whether financial and technical audits should be conducted for a particular claim for reimbursement will be made on a case-by-case basis. However, DOE's intent is to conduct audits on a periodic basis, rather than with every claim submission, relying in part on the results of previous claims to determine the frequency of audits necessary for each licensee. Technical and financial audits may not necessarily be conducted concurrently.

b. Audit Scope

Audits will be limited in scope to those documents that allow the auditor to verify costs and remediation activities included in the Cost Summary Document. A decision as to the depth of the audits will be determined by the auditors based on a preliminary review of the documentation available, and on GAGAS and other applicable standards. The licensee should be prepared to provide financial and technical auditors with all necessary documentation, and to make available all appropriate personnel to be interviewed and to assist the auditors in completing their reviews. See section c, Licensee Preparation, for guidance on steps to be taken by the licensee in preparing for financial and technical audits.

Prior to conducting an audit, DOE will notify the licensee in writing as to the dates, nature and scope of the audit, and any additional steps which the licensee will need to take to adequately prepare for the audit (e.g., ensure that specific individuals or documentation will be available). In addition, DOE may hold a teleconference with the licensee or other related parties and or send a letter in order to discuss specific issues or relay any information which will facilitate the audit process.

The auditors will meet with the licensee prior to finalizing audit reports to allow clarification of any unresolved issues. DOE will take into account any financial and technical audit reports when making a decision regarding a claim for reimbursement.

c. **Licensee Preparation**

In preparing for the financial and technical audit processes, it is the licensee's responsibility to:

- Ensure that all appropriate personnel are available for financial and technical audits.
- Ensure that underlying supporting data are readily available for review (as of claim submission date).
- Be prepared to discuss in detail each type of cost (i.e., components of costs and relation to remediation efforts, including both direct and indirect cost components) and types of remediation activities (i.e., description of activities and relation to regulatory authorization) included in the claim).
- Be prepared to demonstrate/explain cost calculations, especially in cases where accounting principles used in claim preparation deviate from normal accounting practices utilized and/or from GAAP.
- Be prepared to discuss the remediation history of the site from inception to the present date.

These main preparatory steps will greatly facilitate the on-site audits conducted by/under the supervision of DOE. In addition, the licensee should be prepared to provide to DOE timely follow-up information resulting from the audit processes.

3. Reimbursement Decisions

After completion of the review and audits (if applicable), DOE will provide the licensee with a decision regarding reimbursement of costs claimed, including amounts approved, disallowed, and/or deferred. In some instances, costs may be disallowed as a result of audits or reviews; in other instances, decisions regarding specific costs may be deferred, pending further investigation. All reimbursements approved by DOE in a given year will be processed for payment at the same time to ensure an equitable distribution of appropriations. Reimbursement decisions will be made on a pro-rated basis if there are insufficient funds to reimburse all claims in full. See Exhibit IV-2 for an illustration of the pro-ration process to be used. Any outstanding balances will be carried over to the next fiscal year for payment. If the licensee takes exception to a decision rendered, DOE's appeals process may be utilized, as described below.

4. DOE Appeals Process

Upon receiving a reimbursement decision from DOE, the licensee has 45 days to appeal that decision. Appeals should be filed with DOE's Office of Hearings and Appeals. Appeals will be governed by, and must comply in full with, the procedures set forth in 10 CFR Part 1003, Subpart C.

Exhibit IV-2
Calculation of Pro-Rated Reimbursement Payments

199X CLAIM AMOUNT ± ADJUSTMENT FOR ERRORS − DISALLOWED COSTS = ***APPROVED AMOUNT***

APPROVED AMOUNT x FEDERAL REIMBURSEMENT RATIO = ***199X FEDERAL PORTION***

199X FEDERAL PORTION + OUTSTANDING PAYMENT BALANCE DUE = ***TOTAL LICENSEE FEDERAL PORTION***

$$\frac{\textit{TOTAL LICENSEE FEDERAL PORTION}}{\text{SUM OF ALL LICENSEES' FEDERAL PORTIONS}} \times \text{AVAILABLE 199X FEDERAL FUNDS} = \text{199X LICENSEE PRORATED PAYMENT}$$

APPENDIX A: SAMPLE CLAIM SUBMITTAL

The following is a list of the items to be provided in the cost reimbursement claim submittal:

- Cost Summary Document (Exhibit A-1)
- Summary Documentation (Exhibit A-2)
- Narrative Description (Exhibit A-3)
- Regulatory Authorization Matrix (Exhibit A-4)
- Reclamation Plan or Other Written Authorization.

This Appendix provides a brief description and sample of each of the first four items. The fifth item, "Reclamation Plan or Other Written Authorization," is discussed in section B.5. of Chapter IV of this guidance document.

The discussions and examples included in this appendix are intended to provide the licensee with *guidance* only. The licensee should follow the concepts outlined below, but should complete claim packages based on its own existing cost documentation, and categories of costs and remedial activities, to ensure that the cost of completing the claim package does not outweigh the potential amount of reimbursement to be received.

A. COST SUMMARY DOCUMENT (Exhibit A-1)

The Cost Summary Document (Exhibit A-1) provides a summary of total reimbursable costs of remedial action for a specified year or portion thereof. The costs are segregated into defined categories (e.g., Direct Labor, Travel) for each major type of activity included in a reclamation plan or other written authorization (e.g., Project Management, Compliance Activities). *This matrix of costs should be tailored to the individual licensee's accounting system and reclamation plan or other written authorization.* Additional or different categories of costs and/or types of remediation activities should be included, as applicable, in the Cost Summary Document submitted by each licensee. Following the cost matrix, the licensee should provide the total of all blocks in the matrix multiplied by the appropriate Federal reimbursement ratio (see Appendix B) to determine the total Federal-related costs of remedial action.

B. SUMMARY DOCUMENTATION (Exhibit A-2).

The second part of the claim submittal is the Summary Documentation which supports costs claimed in each block of the Cost Summary Document (Exhibit A-1). Summary documentation should be cross-referenced to individual categories in the Cost Summary Document, as shown in Exhibit A-2. This documentation is intended to provide only summary level support of the claim, not a detailed compilation of source documents. Detailed source documentation should be maintained on-site as described in section III.B. of this document. Sample summary documentation which meets DOE's claim submittal needs is included as Exhibit A-2, and for illustrative purposes, ties to the sample Cost Summary Document. Due to differences in each licensee's financial management and accounting systems, the summary documentation may vary. Each licensee should include in this portion of its claim package the best available summary documentation to support the Cost Summary Document.

C. NARRATIVE DESCRIPTION (Exhibit A-3)

The third part of the claim submittal is a narrative description of remedial activities conducted for which costs are being claimed. This will provide DOE with a link between the costs claimed and a reclamation plan or other written authorization, as well as information on which to evaluate claims. There are two sections of narrative: one providing a high-level site summary and description of major milestones/accomplishments; and one for each year of the claim, providing a lower level of detail on activities completed. See section B.3. of Chapter IV for additional guidance on the content of each narrative section. As part of the narrative, the licensee also should include a statement of certification as to the accuracy and completeness of the claim. Sample narrative sections are included as Exhibit A-3, and for illustrative purposes, tie to the sample Cost Summary Document (Exhibit A-1) and Summary Documentation (Exhibit A-2).

D. REGULATORY AUTHORIZATION MATRIX (Exhibit A-4)

The fourth part of the claim submittal is a matrix mapping types of remediation activities to the appropriate sources of regulatory authorization (e.g., NRC- or Agreement State-approved reclamation plan or other correspondence with regulatory agencies). The "Types of Remediation Activities" included in this matrix should match the "Types of Remediation Activities" included in the far left column of the Cost Summary Document (Exhibit A-1). This matrix should include and describe each major section of the reclamation plan and any other correspondence or similar authorization received by the licensee from a regulatory organization, that is included in the claim package. A sample matrix is included as Exhibit A-4, and for illustrative purpose, ties to the sample Cost Summary Document (Exhibit A-1) and Narrative Description (Exhibit A-3). The sample regulatory matrix includes only those sources of regulatory authorization referenced in Exhibit A-3, Section 2.

The licensee may instead provide a matrix in a format similar to the sample Cost Summary Document (Exhibit A-1) with reclamation activities mapped against sources of regulatory authorization (instead of types of costs). However, if this standard matrix format is utilized, the licensee should also attach brief descriptions of each source document included in the matrix (i.e., a bibliography of sources of regulatory authorization).

Exhibit A-1: Sample Cost Summary Document

Year Covered: 1995

ACME CORPORATION

TYPE OF REMEDIATION ACTIVITY (Cost Center)	TYPE OF COST							
	Direct Labor	Travel	Materials & Supplies	Equipment	Contractor Services	Other Direct	Overhead	TOTALS
Ground Water (100)	$3,100.00		$300.00		$3,000.00	$300.00		$6,700.00
Occupational Radiation Control (200)	$1,500.00							$1,500.00
Environmental Radiation Control (300)	$820.00							$820.00
Tailings Management (400)	$1,300.00			$230.00				$1,530.00
General Mill Remediation (500)	$4,400.00							$4,400.00
Evaporation Pond Operation (600)	$900.00		$340.00			$120.00		$1,360.00
Tailings Facility (700)					$15,700.00			$15,700.00
Mill Decommissioning (800)					$18,200.00			$18,200.00
Analytical (900)	$390.00				$740.00			$1,130.00
Hazardous Waste Management (1000)	$850.00			$490.00		$300.00		$1,640.00
Administrative (1100)		$150.00					$4,800.00	$4,950.00
TOTALS	$13,260.00	$150.00	$640.00	$720.00	$37,640.00	$720.00	$4,800.00	$57,930.00

Total Costs of Remedial Action	x	Federal Reimbursement Ratio	=	Federal-Related Costs
$57,930.00	x	.493 (see Appendix B)	=	$28,559.49

Exhibit A-2: Sample Summary Documentation

DIRECT LABOR COSTS:

ACME Corporation
Direct Labor Summary
Ground Water Activities

Cost Center, Description	Month	Total Cost
100, Ground Water	1/95	$ 250.00
	2/95	250.00
	3/95	250.00
	4/95	250.00
	5/95	250.00
	6/95	250.00
	7/95	350.00
	8/95	250.00
	9/95	250.00
	10/95	250.00
	11/95	250.00
	12/95	250.00
Total, Cost Center 100:		$3,100.00

Exhibit A-2: Sample Summary Documentation (Cont.)

TRAVEL COSTS:

ACME Corporation
Summary of Travel Costs

Traveler Name	Purpose of Travel	Dates of Travel	Total Cost
John Doe	Conduct 2-day OSHA training course at Site X.	04/15/95-04/18/95	$150.00
Total, Cost Center 1100:			$150.00

Exhibit A-2: Sample Summary Documentation (Cont.)

MATERIALS AND SUPPLIES COSTS:

ACME Corporation
Warehouse Supplies Summary
Y/E December 31,1995

Description	No. of Items	Date	Value	Cost Center
Filters (w/hose, clamps)	20	6/30	$ 300.00	100
Misc. supplies	N/A	9/15	340.00	600
Total Value:			$ 640.00	

Exhibit A-2: Sample Summary Documentation (Cont.)

EQUIPMENT COSTS:

ACME Corporation
Equipment Records

Item Description	Period	Equipment Cost	Est. Life	Depreciation Expense*	Cost Center
Scraper	5/95	$41,400.00	15 yrs	$ 230.00	400
Truck A	7/95	18,000.00	12 yrs	125.00	1000
Truck B	7/95	18,000.00	12 yrs	125.00	1000
Truck C	7/95	18,000.00	12 yrs	125.00	1000
Truck D	7/95	16,560.00	12 yrs	115.00	1000
Total:				$ 720.00	

* Calculated using straight-line method of depreciation.

Exhibit A-2: Sample Summary Documentation (Cont.)

CONTRACTOR SERVICES COSTS:

Contract Cost Summary
(ABC Corporation)

Contractor	:	ABC Corporation
Contract Number	:	99-ABC-1234
Type of Contract	:	Fixed Cost/Unit
Project Officer	:	Robert Johnson
Dates of Service	:	02/01/95 - 11/01/95
Actual Total Cost	:	$36,900.00
Summary of Services Provided	:	Drill 4 injection wells; recontour site; survey and provide QC; and decommission mill at Site X.
Documentation	:	Copies of Applicable Paid Invoices (detail below)

Invoice Number	Invoice Date	Invoice Amount	Cost Center
1234-001	06/30/95	$ 3,000.00	100
1234-002	12/01/95	15,700.00	700
1234-003	12/01/95	18,200.00	800
Total:		$36,900.00	

Exhibit A-2: Sample Summary Documentation (Cont.)

CONTRACTOR SERVICES COSTS (Cont.):

Contract Cost Summary
(Chem Laboratories, Inc.)

Contractor	:	Chem Laboratories, Inc.
Contract Number	:	15231-CL-345
Type of Contract:	:	Fixed Price
Actual Total Cost	:	$740.00
Summary of Services Provided	:	Laboratory analysis of water samples (30 samples) from reclamation site.
Documentation	:	Copy of Paid Invoice (detail below)

Invoice Number	Invoice Date	Invoice Amount	Cost Center
CL-54321	10/15/95	$ 740.00	900
Total:		$ 740.00	

Exhibit A-2: Sample Summary Documentation (Cont.)

OTHER DIRECT COSTS:

ACME Corporation
Other Direct Account Summary

Description	Period Covered	Total Cost	Cost Center
Electric	3/95-6/95	$ 300.00	100
Electric	3/95-6/95	120.00	600
Diesel Fuel	7/95	300.00	1000
Total:		$ 720.00	

Exhibit A-2: Sample Summary Documentation (Cont.)

OVERHEAD COSTS:

ACME Corporation
Overhead Distribution Sheet for Cost Center 1100

Fiscal Year	Payroll Hours	Overhead Rate	Overhead Costs
1995	100.00	$ 48.00*	$ 4,800.00
Total Charged:			$ 4,800.00

* Description of items included in the overhead cost pool is incorporated in the narrative section under *administrative* costs.

Exhibit A-3: Sample Narrative Description

Section 1: Narrative Site Summary

ACME Corporation's mill site is located approximately 4 miles west of Springfield, AZ, on the confluence of the East and West Rivers. The site covers 110 acres of which 73 acres are covered by 3.2 million cubic yards of tailings and 20 acres by the processing plant. An area of about 120 acres adjacent to the site is also contaminated by windblown tailings. Major features at the site include tailings pile 1 (2.8 million cubic yards), tailings pile 2 (0.4 million cubic yards), primary and secondary mill buildings, ten ore storage pads, eight maintenance buildings, nine thickener tanks, six office buildings, and one 15-acre brine evaporation pond. The mill operated from 1951 to 1986 under a series of licenses issued by the U.S. Government.

Reclamation was initiated in 1988 and involves demolition of the mill buildings and associated structures (Phase I), tailings reclamation (Phase II), and ground water restoration (Phase III). These activities are being conducted pursuant to amendments to Source Material License No. SUA-1471 and a series of mill decommissioning, tailings reclamation, and ground water corrective action plans approved by the Nuclear Regulatory Commission (NRC). These regulatory authorizations are further described in the regulatory authorization matrix of this claim package.

Phase I was initiated in 1988 and is being conducted in accordance with the site's Mill Decommissioning Plan. It is approximately 70 percent complete. Major accomplishments include the preparation and approval of the Mill Decommissioning Plan (1988-1989); removal and disposal of 100 cubic yards of asbestos from all buildings and structures (1989-1990); and demolition of the primary and secondary mill buildings (1990-92), four ore storage pads and two office buildings (1993), five thickener tanks (1994-95), and four maintenance buildings (1995). Roughly 6,000 cubic yards of demolition debris will be generated, most of which will be disposed of in tailings pile 1. Remaining work is scheduled to be completed by 1997.

Phase II was initiated in 1989 and is being conducted pursuant to the site's Tailings Reclamation Plan. Primary activities include the consolidation of windblown contaminated material with tailings piles 1 and 2, and the placement of an earthen cover over tailings piles 1 and 2. The cover will consist of a two-foot thick clay radon barrier, eight-foot thick bedding layer, and external riprap layer. Phase II is approximately 25 percent complete. Completed milestones include the preparation and approval of the Tailings Reclamation Plan (1989-91), remediation of windblown contaminated materials (1991), dewatering and

Exhibit A-3: Sample Narrative Description (Cont.)

Section 1: Narrative Site Summary (Cont.)

recontouring of the tailings piles (1991-93), and the placement of a two-foot thick clay barrier (1993-95). Outstanding activities are expected to be completed by 1999. Borrow material for the clay and soil barriers are being supplied by on-site deposits. Riprap will be purchased and imported from a nearby commercial quarry.

Phase III was initiated in 1993 and is being performed in accordance with the site's Ground Water Corrective Action Plan. The plan requires the prevention of ground water contamination from the site and the removal and collection of contaminated ground water. Phase III is roughly 10 percent complete. Significant accomplishments include the completion of a hydro-geological assessment and approval of the Ground Water Corrective Action Plan (1993-1995), the installation of 24 ground water monitoring, collection, or injection wells (1993-1995), and the construction of a ground water evaporation pond and sprayer system (1994). Additional collection and injection wells may be required. Depending on system performance, Phase III will be finished by 2002.

Since 1988, all activities conducted at the site have been dedicated to remedial action. ACME maintains an average on-site staff of 35 full-time employees to carry out remedial activities. This includes one site manager, three health physicists, four environmental scientists/technicians, one quality control specialist, two mechanics, one accountant, two administrative assistants, ten equipment operators, six truck drivers, and five general laborers In addition, technical support is provided on an as needed basis from ACME's corporate office in Phoenix, AZ. Contractor support has been limited to mill decommissioning, ground water sample analyses, and well installation activities. Major equipment owned by ACME and used in remedial action includes four scrapers, six dump trucks, five dozers, one track hoe, and five utility vehicles. Remedial activities are being conducted year-round, five days a week, during normal business hours.

Exhibit A-3: Sample Narrative Description (Cont.)

Section 2: Narrative Description of ACME Remediation Activities for 1995*

Ground Water: Ground water is being restored in two aquifers underlying the site in accordance with license conditions and the site's NRC-approved Ground Water Corrective Action Plan. Activities include the operation and maintenance of a ground water restoration system consisting of four collection wells, three injection wells, and seventeen monitoring wells. Major activities conducted in 1995 included the quarterly sampling of all wells, preparation and submission of an annual monitoring report to the NRC, installation of one injection well and three monitoring wells, monthly replacement of water filters on the injection system, replacement of packers on five wells, and the addition of chemical inhibitors in the collection system to reduce scale. Laboratory costs for analyzing ground water samples are included in the "Analysis" cost category of this claim. Well installation and packer replacement were performed by the XYZ Drilling Company. All other activities were conducted by ACME employees. Electricity was prorated from site electric utility invoices on a horsepower consumed basis. The ground water system consumed electrical horsepower for the collection wells, fresh water injection and the evaporation of water. (Authorization Ref. 1, 7, 13, 19, 22, 25, 26, 28, 30, 31, 32, 33)

Mill Decommissioning: This activity is being conducted pursuant to ACME's license conditions and NRC-approved Mill Decommissioning Plan. It includes the dismantling of buildings and foundation structures; cutting, crushing, and flattening of pipes, tanks, and similar structures for ease of handling; transporting and layering of debris in tailings pile 1; cleanup of contaminated soil; and recontouring and revegetation of disturbed areas. Activities completed in 1995 included the dismantling of two thickener tanks and four maintenance buildings. Most of the debris, totaling approximately 900 cubic yards, were disposed of in tailings pile 1. Several fuel tanks were decontaminated and salvaged. The costs of decontaminating the tanks, however, were correctly excluded from the reimbursement claim. All decommissioning work was performed by D&D contractors, using the contractors' own equipment, under ACME oversight. (Authorization Ref. 1, 7, 13, 19, 32, 33)

* For illustrative purposes, includes description of Ground Water and Mill Decommissioning activities only.

Exhibit A-3: Sample Narrative Description (Cont.)

LICENSEE CERTIFICATION:

The information included in this cost reimbursement claim, submitted to DOE on June 8, 1996, is to the best of my knowledge, accurate and complete. Costs claimed are supported by reasonable documentation. The summary documentation included in the claim package provides the best available information in support of the Cost Summary Document. In addition, the costs claimed include only those costs which were incurred to perform activities required under the NRC-approved reclamation plan.

William H. Roberts

William H. Roberts
President, ACME Corporation

Exhibit A-4: Sample Regulatory Authorization Matrix

Ref.	SOURCE OF REGULATORY AUTHORIZATION	APPLICABLE COST CENTERS
1	SOURCE MATERIAL LICENSE NO. SUA-1471, Amendment No. 1-16 Condition 10: Authorizes the licensee to possess only residual uranium byproduct material in the form of uranium waste tailings and other byproduct waste generated by the licensee past milling operations, as noted in Tables 1 and 3 and the procedures submitted by letter dated September 2, 1993.	Occupational Radiation Control, Environmental Radiation Control, Analytical
7	Condition 16: Requires the licensee to prepare and record an environmental evaluation of any activity not previously assessed by the NRC. When the evaluation indicates that the activity may result in a significant adverse environmental impact that was not previously assessed or that is greater than that previously assessed, the licensee must provide a written evaluation of the activities and obtain prior approval from the NRC in the form of a license amendment.	Ground Water, Occupational Radiation Control, Environmental Radiation Control, Tailings Management, General Mill Remediation, Evaporation Pond Operation, Tailings Facility, Mill Decommissioning, Analytical, Hazardous Waste Management
13	Condition 22: Requires the licensee to document (and maintain for at least 5 years) the results of sampling, analyses, surveys and monitoring; the results of calibration of equipment, and reports on audits and inspections; all meetings and training courses required by this license and any subsequent reviews, investigations, and corrective actions, unless otherwise specified by the NRC.	Ground Water, Occupational Radiation Control, Environmental Radiation Control, Tailings Management, Evaporation Pond Operation, Tailings Facility, Mill Decommissioning, Analytical, Hazardous Waste Management

Exhibit A-4: Sample Regulatory Authorization Matrix (Cont.)

Ref.	SOURCE OF REGULATORY AUTHORIZATION	APPLICABLE COST CENTERS
19	Condition 28: Requires the licensee to maintain an NRC-approved financial surety arrangement consistent with 10 CFR 40, Criteria 9 and 10, adequate to cover estimated costs, if accomplished by a third party, for decommissioning and decontamination of the mill and mill site, reclamation of tailings or waste disposal areas, ground water restoration, and the long-term surveillance fee. Within 3 months of NRC approval of a revised reclamation plan, the licensee must submit for NRC approval a proposed revision to the financial surety arrangement if estimated costs for the newly approved plan exceed the amount covered in the existing financial surety. The revised surety arrangement shall then be in effect within 3 months of written NRC approval.	Ground Water, Tailings Management, General Mill Remediation, Evaporation Pond Operation, Tailings Facility, Mill Decommissioning
22	Condition 31: Allows the licensee to conduct and operate a lined brine evaporation pond in accordance with plans, conditions, revision, and commitments made in conjunction with Ground Water Discharge Plan DP-339. Plans, conditions, revisions, and commitments are contained in submittals and correspondence from ACME Corp. dated March 1, 1983; February 16, 1988; and includes a commitment by letter dated February 5, 1988, to reclaim the pond area in accordance with appropriate reclamation standards after the cessation of operations.	Ground Water, Evaporation Pond Operation, Analytical
25	Condition 35: Requires the licensee to implement a compliance monitoring program to the specifications contained in transmittals by the licensee dated October 3, 1992, and June 15, 1993. Includes requirement to submit annual ground water monitoring reports.	Ground Water, Environmental Radiation Control, Evaporation Pond Operation, Analytical

Exhibit A-4: Sample Regulatory Authorization Matrix (Cont.)

Ref.	SOURCE OF REGULATORY AUTHORIZATION	APPLICABLE COST CENTERS
26	Condition 36: Requires that the licensee complete site reclamation in accordance with an approved reclamation plan, and conduct the ground water corrective action plan in accordance with condition 35 (above). Includes specifications regarding schedules for completion of various phases of reclamation.	Ground Water, Environmental Radiation Control, Tailings Management, General Mill Remediation, Evaporation Pond Operation, Tailings Facility, Analytical, Hazardous Waste Management
28	Discharge Plan (200) for ground water clean-up program.	Ground Water, General Mill Remediation, Analytical
30	1993 Agreement and Stipulation between EPA and ACME Corp.	Evaporation Pond Operation, General Mill Remediation, Analytical
31	1989 Ground Water Corrective Action Program	Ground Water, Analytical
32	Reclamation Plan SUA-1471 Docket No. 40-8903	Ground Water, Occupational Radiation Control, Environmental Radiation Control, Tailings Management, General Mill Remediation, Evaporation Pond Operation, Tailings Facility, Mill Decommissioning, Analytical, Hazardous Waste Management
33	Reclamation Plan Revision 10/93	Ground Water, Occupational Radiation Control, Environmental Radiation Control, Tailings Management, General Mill Remediation, Evaporation Pond Operation, Tailings Facility, Mill Decommissioning, Analytical, Hazardous Waste Management

APPENDIX B: APPLICATION OF FEDERAL REIMBURSEMENT RATIOS

This appendix serves as a source of reference for determining the Federal-related portion of total reimbursable costs of remedial action. The chart below depicts the Federal-related tailings and total tailings determined by DOE, and the resulting Federal reimbursement ratio for each licensee and site. This appendix also includes sample Federal reimbursement ratio and Federal-related cost calculations.

Licensee, Active Uranium or Thorium Site	Federal Related Tailings (millions of dry short tons)	Total Tailings (millions of dry short tons)	Federal Reimbursement Ratio
American Nuclear Corporation, Gas Hills Mill Site	2.202	6.0	.367
Atlantic Richfield Company, Bluewater Mill Site	8.837	23.9	.370
Atlas Corporation, Moab Mill Site	5.946	10.6	.561
Cotter Corporation, Canon City Mill Site	0.315	2.2	.143
Dawn Mining Company, Ford Mill Site	1.171	3.1	.378
Homestake Mining Company, Grants Mill Site	11.411	22.3	.512
Pathfinder Mines Corporation, Lucky McMine	2.842	11.7	.243
Petrotomics Company, Shirley Basin Mill Site	0.725	6.3	.115
Quivira Mining Company, Ambrosia Lake Mill Site	10.017	33.2	.302
Tennessee Valley Authority, Edgemont Mill Site	1.625	2	.813
Umetco Mineral Corporation, Uravan Mill Site	5.701	10.5	.543
Union Carbide Corporation, East Gas Hills Mill Site	2.103	8	.263
Western Nuclear, Inc, Split Rock Mill Site	3.626	8.2	.442
Kerr-McGee Corporation, West Chicago Thorium Mill Site	0.032	0.058	.552

A. SAMPLE CALCULATION OF FEDERAL REIMBURSEMENT RATIO

Assume that the total tailings at Mill Site A equal 15.2 million dry short tons. Of this amount, 7.5 million dry short tons were generated as an incident of sales to the United States Government (i.e., Federal-related tailings). The Federal ratio of tailings (i.e., Federal reimbursement ratio) would be calculated in the following manner:

Federal-Related Tailings (millions of dry short tons)	/	**Total Tailings** (millions of dry short tons)	=	**Federal Reimbursement Ratio**
7.5	/	15.2	≈	.493

Thus, the Federal reimbursement ratio which should be used to determine the Federal (i.e., reimbursable) portion of reclamation costs is .493.

B. SAMPLE CALCULATION OF FEDERAL-RELATED COSTS OF REMEDIAL ACTION

Once the total reimbursable costs of remedial action (Appendix A) and the Federal reimbursement ratio (above) are known, the licensee can calculate the Federal-related portion of costs of remedial action (i.e., the amount to claim for reimbursement). Using the examples found in Appendix A and the sample calculation above, the amount of reimbursable costs claimed should be:

Total Reimbursable Costs of Remedial Action	*	**Federal Reimbursement Ratio**	=	**Federal-Related Costs of Remedial Action**
$57,930.00	*	.493	=	$28,559.49.

APPENDIX C: SOURCES FOR FURTHER REFERENCE

This appendix provides licensees with information on other available reference materials relating to the Title X cost reimbursement process. These reference materials contain information useful to licensee managers in ensuring that their documentation and recordkeeping systems provide for accurate and complete recording and reporting of costs of remedial activities. Some of the materials do not specifically provide licensee guidance, but contain valuable background information. Items A and B are readily available through commercial retailers. Items C through G can be obtained from DOE's UMTRA Project Office. Each document is listed below with a brief synopsis.

A. GENERALLY ACCEPTED ACCOUNTING PRINCIPLES (GAAP)

The Generally Accepted Accounting Principles (GAAP) is a statement of the accounting principles established by an authoritative body. The Financial Accounting Standards Board (FASB) establishes accounting principles for nongovernment entities. Financial statement audits must provide reasonable assurance about whether the financial statements of an audited entity present fairly the financial position, results of operations, and cash flows in accordance with generally accepted accounting principles.

B. GENERALLY ACCEPTED GOVERNMENT AUDITING STANDARDS (GAGAS)

The Generally Accepted Government Auditing Standards (GAGAS) is a statement of standards for audits of government organizations, programs, activities, and functions; and of government funds received by contractors, non-profit organizations, and other non-governmental organizations. These standards are to be followed by auditors and audit organizations when required by law, regulation, agreement, contract, or policy. The standards pertain to auditors' professional qualifications, the quality of audit efforts, and the characteristics of professional and meaningful audit reports.

GAGAS will be followed in conducting audits under the Title X program, due to the Federal source of funding.

C. URANIUM MILL TAILINGS RADIATION CONTROL ACT OF 1978 (UMTRCA)

This Act was passed in November of 1978 to provide DOE with the authority to undertake remedial action at "inactive" sites and at vicinity properties contaminated with residual radioactive material generated at a site. UMTRCA also established a program authorizing the Nuclear Regulatory Commission (NRC) to regulate byproduct material generated during processing operations at "active" processing sites (i.e., sites 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.

D. TITLE X OF THE ENERGY POLICY ACT OF 1992 (TITLE X)

This Title under the Energy Policy Act establishes the authority and framework for providing Federal assistance to active licensees to address the cost of remediating mill tailings that were generated under contracts with the United States Government.

E. ATOMIC ENERGY ACT OF 1954, SECTION 2022(d)

This section of the Atomic Energy Act provides the NRC with the authority to approve a plan for conducting remedial activities at an "active" mill tailings site, as developed by the site licensee.

F. ATOMIC ENERGY ACT OF 1954, SECTION 274

This section of the Atomic Energy Act provides an Agreement State with the authority to approve a reclamation plan, pursuant to a discontinuance agreement with the NRC, for an "active" mill tailings site, as developed by the site licensee.

G. 10 CFR, PART 765, "Reimbursement for Costs of Remedial Action at Active Uranium and Thorium Processing Sites; Final Rule"

This part of 10 CFR establishes regulatory requirements governing reimbursement for certain costs of remedial action at active uranium or thorium processing sites as specified by Subtitle A of Title X of the Energy Policy Act of 1992. Additional discussion on these requirements is included in the May 23, 1994 Federal Register (59 FR 26714).

APPENDIX D: GLOSSARY OF TERMS

This appendix provides a glossary of terms pertaining to remedial activities. These terms are utilized throughout this guidance document, as defined below.

Agreement State: An Agreement State is any state that is or has been a party to a discontinuance agreement with NRC under section 274 of the Atomic Energy Act of 1954.

Costs of Remedial Action: This phrase is used to denote costs incurred by the licensee to perform decontamination, decommissioning, reclamation, and other remedial action at active uranium or thorium processing sites.

Direct Costs: Direct costs are those expenses that are incurred solely to support, or that can be directly attributed and therefore charged to remediation projects, activities, or cost centers.

Federal Reimbursement Ratio: The Federal reimbursement ratio is the ratio of Federal-related tailings (i.e., tailings generated as an incident of uranium or thorium sales to the United States) to total tailings present at an active uranium or thorium processing site on October 24, 1992, or by other means of attributing costs of remediation to byproduct material generated as an incident of sales to the United States which the DOE determines is equal to or better than the tonnage-based ratio.

Financial Management Systems: Financial management systems comprise the policies, procedures, and processes used to ensure sound financial management and accounting practices and results.

GAAP: Generally Accepted Accounting Principles.

GAGAS: Generally Accepted Government Auditing Standards.

Guidance Document: The term "guidance document" is used to refer to the *Guidance for Preparation of Reimbursement Claims under Title X of the Energy Policy Act.*

Indirect Costs: Indirect costs are those expenses that support remediation activities but are not directly assignable to remediation efforts' end products or processes, or that represent costs of outside operations not directly related or attributable to remediation efforts; and therefore, cannot be directly charged to remediation projects, activities, or cost centers.

Licensees: The term "licensees" is used to denote site owners licensed under section 62 or section 81 of the Atomic Energy Act of 1954 by NRC or an Agreement State pursuant to a discontinuance agreement with NRC, for any activity at an active uranium or thorium processing site which results, or has resulted, in the production of byproduct material.

Other Direct Costs: Other direct costs are defined in this guidance document as those costs which constitute direct costs, but do not fall under any of the other cost categories identified. The licensee is not required to use the exact cost categories suggested in this document. Therefore, the other direct

cost category may be used by the licensee to gather any costs which do not fall under any of the direct cost categories included in the licensee's reimbursement claim package.

Non-Reimbursable Costs: Non-reimbursable costs are those costs which are *not* incurred to perform activities in an NRC- or Agreement State-approved reclamation plan or other written authorization, regardless of whether or not the costs are legitimate costs of business.

NRC: Nuclear Regulatory Commission.

Reasonable Documentation: 10 CFR Part 765 states that claims for reimbursement must be supported by "reasonable" documentation. "Reasonable" documentation is defined as documentation that is consistent with the guidance provided throughout this document.

Reclamation Plan: A reclamation plan is a plan approved by NRC and/or an Agreement State, for conducting remedial activities at an active uranium or thorium processing site necessary to comply with UMTRCA and/or Agreement State requirements.

Reimbursable Costs: Reimbursable costs are those costs which are incurred to perform activities in an NRC- or Agreement State-approved reclamation plan or other written authorization.

Remediation Projects, Activities, or Cost Centers: The phrase "remediation projects, activities, or cost centers" denotes the accounting cost centers or pools to which remediation costs are charged. These will be unique to each of the licensee's financial management and accounting systems.

UMTRCA: Uranium Mill Tailings Radiation Control Act of 1978.

Appendix D. Guidance for PFSRA

Part A

Guidance for Preparation of Plans for Subsequent Remedial Action under the Title X Uranium and Thorium Reimbursement Program

U.S. Department of Energy
December 2004

I. Introduction

This Department of Energy (DOE) guidance informs Title X licensees about procedures for preparing and submitting a Plan for Subsequent Remedial Action for costs of remedial action incurred after December 31, 2007 (also referred to as the "Plan").

The Plan is essentially a project management plan describing all the remaining cost, schedule and technical remedial action requirements in the licensee's approved reclamation plan not completed before December 31, 2007. The DOE will use the plan to determine the maximum amount of reimbursement that a licensee may be eligible to receive for costs incurred after December 31, 2007 in accordance with 10 CFR Part 765.30 (e).

II. General Guidance for Preparation and Submission of a Plan for Subsequent Remedial Action

If you are a Title X licensee who plans to incur remedial action costs after December 31, 2007, you may submit a Plan for Subsequent Remedial Action to DOE if you wish for those costs to be considered for reimbursement under the Title X program. If you choose not to submit a Plan, any costs of remedial action incurred after December 31, 2007 will not be reimbursed by DOE in accordance with 10 CFR Part 765. Licensees who plan to complete remedial action prior to December 31, 2007, do not need to submit a plan.

Licensees who choose to submit an initial Plan, must submit the Plan to DOE after January 1, 2005, but no later than December 31, 2006 as required by 10 CFR Part 765.30(b). We encourage licensees to submit their plans early in the submission schedule in order to optimize the review and approval time. Licensees should submit two copies of the Plan and related information by certified mail, return receipt requested, to the attention of:

Gilbert T. Maldonado, Title X Manager
U.S. Department of Energy
National Nuclear Security Administration Service Center
Office of Technical Service Center
Environmental Programs Department
P.O. Box 5400
Albuquerque, New Mexico 87185-5400

At a minimum the Plan must contain the following three items as required by 10 CFR Part 765.30(b) and supplemented by this Guidance:

i) Technical Remedial Action Requirements (i.e. decontamination, decommissioning, reclamation, and other remedial at an active uranium or thorium processing site).

The plan must identify and fully describe all applicable technical remedial action requirements established by the U.S. Nuclear Regulatory Commission (NRC), Agreement States, and other appropriate regulatory agencies, pursuant to the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA), that are included in an approved reclamation plan or other written authorization and which will not be satisfied by the licensee in full by December 31, 2007.

ii) Costs of Remedial Action

The plan must identify the total cost of remedial action required at the site after December 31, 2007 broken down by major activity and time period. The licensee must include:

- An itemized cost estimate of sufficient detail to allow DOE to assess the reasonableness of the cost estimate and anticipated remedial action activities. Licensees should itemize costs consistent with the costs centers included in the annual claim submissions (e.g., facility decommissioning, tailings impoundment reclamation, groundwater cleanup, radiological survey and environmental monitoring, project management costs, labor, supplies and equipment, etc.) cross-referenced to the applicable reclamation plan or source material license requirement.
- Include unit costs, calculations, references/data sources, and assumptions used in developing the estimate.

- Identify if a contingency amount has been added to the total anticipated costs for unforeseen requirements and the basis for the contingency.
- Present the future anticipated costs in constant year dollars (2007).

iii) Schedule for Completing the Remaining Remedial Action

The Plan must identify the schedule for completing the remaining remedial activities specified in the licensee's NRC or Agreement State approved reclamation plan or other written authorization. Schedule requirements are described in greater detail in the procedures listed in Part B below.

III. DOE Review and Approval of a Plan for Subsequent Remedial Action

As indicated in 10 CFR Part 765.30 (c) and (d) and supplemented by this Guidance, DOE will review the Plan to: 1) verify conformance with an NRC or Agreement State approved reclamation plan or other written authorization, and 2) to determine the reasonableness of anticipated future costs. During its review, DOE may request additional written information, or a site meeting at the licensee's offices, to clarify or provide support for any provision or estimate contained in the Plan. The DOE may also consult with the NRC or an Agreement State concerning any provision or estimate contained in the Plan. Upon completion of its review, DOE will notify the licensee in writing of its decision to approve, approve with suggested modifications, or reject the plan in its entirety.

As indicated in 10 CFR Part 765.30(d), in the event the DOE rejects a licensee's Plan the licensee may:

i) Prepare and submit a new Plan within 120 days of receiving notice of the Plan's rejection. If the DOE rejects the new Plan, the licensee may continue to submit additional Plans until such time as the Department approves a Plan or the December 31, 2007 deadline is reached, whichever comes first; or,

ii) File an appeal with the DOE Office of Hearings and Appeals in accordance with 10 CFR Part 765.22.

Failure to receive approval from the DOE prior to December 31, 2007, will preclude the Licensee from receiving any reimbursement for costs of remedial action incurred after that date.

Please note that the annual claim submission and review process currently being used by DOE will not change after December 31, 2007 (i.e., claims will still be accepted, reviewed, and paid in accordance with 10 CFR Part 765, Subpart C). The Plan will be used to determine the maximum reimbursement amount for which a licensee may be eligible to receive for costs incurred after December 31, 2007. As indicated in 10 CFR Part 765.30 (e), this maximum reimbursement amount shall be the smaller of the following two quantities:

i) The amount obtained by multiplying the total cost of remedial action at the site, as determined in the approved Plan by the Federal Reimbursement Ratio established at the site; or,

ii) For the uranium licensees only, $6.25, as adjusted for inflation, multiplied by the number of Federal-related dry short tons of byproduct material.

For all Licensees, the DOE will subtract form the maximum reimbursement amount any reimbursement already approved to be paid to the Licensee. The resulting sum will be the potential additional reimbursement to which the licensee may be entitled. This resulting sum will be adjusted after the approval of claims for work performed through December 31, 2007, to reflect the actual approved costs of work performed through that date.

Following approval of claims for work performed during calendar year 2007, the amount approved for reimbursement in the Plan will be adjusted to account for changes in planned versus actual work performed during 2007. The resulting amount will be the maximum Approved Cost for Subsequent Remedial Action that could be reimbursed for all work completed after December 31, 2007. This amount will be in 2007 dollars.

Adjustments for inflation will be made annually until reimbursements are completed as shown in the following example: In early 2009, following the final approval of claims for 2007 work, the Approved Cost for Subsequent Remedial Action will be adjusted based on the Cost Price Index (CPI-U) for 2008. Licensees may submit by May 1, 2009, their claim for work performed in calendar year 2008. By the end of April 2010, the final approved reimbursement amount from this claim will be determined by DOE and will be subtracted from the inflation-adjusted Approved Cost for Subsequent Remedial Action. The resulting amount will be adjusted for inflation using the 2009 CPI-U in early 2010. The remaining balance of the Approved Cost for Subsequent Remedial Action will be carried over to the next claim

review cycle. This process will be continued annually until all approved costs are reimbursed.

The following schedule shows the first two cycles of claims and inflation adjustments following the approval of a Plan – actions will be completed no later than the dates shown.

Date	Reimbursement Activity
12/31/07	DOE approves licensee's final Plan for Subsequent Remedial Action
5/01/08	Licensee submits claim for work performed in calendar year(CY) 2007
4/30/09	DOE approves claim for CY 2007 work and, if necessary, adjusts the Approved Cost for Subsequent Remedial Action (ACSRA) based on actual work performed in CY 2007
5/01/09	DOE adjusts ACSRA for inflation based on the 2008 CPI-U
5/01/09	Licensee submits claim for work performed in CY 2008
4/30/10	DOE approves claim for CY 2008 work
4/30/10	DOE subtracts CY 2008 approved claim amount fromACSRA
5/01/10	Remaining ACSRA adjusted for inflation based on CPI-U

For uranium licensees, DOE will adjust the Approved Cost for Subsequent Remedial Action if the licensee's cost exceeds $6.25 per dry short ton of byproduct material and excess reimbursement funds are made available. Title X includes a provision for the Secretary to make a decision by December 31, 2008, whether or not to make available for reimbursement any excess uranium reimbursement authority to licensees whose cost of remedial action exceeds $6.25 per dry short ton of byproduct material. 10 CFR 765.32 provides the process for making this determination and 10 CFR 765.32(c) provides the process for determining a new dry short ton reimbursement ceiling based on the amount of excess reimbursement authority. In the event there is excess authority, and the Secretary makes the decision to make excess authority available for reimbursement, the maximum amount approved in a Plan described in 10 CFR 765.30 (2) would be adjusted based on the new dry short limit determined in 10 CFR 765.32(c).

Part B

Procedures for Preparation of Plans for Subsequent Remedial Action under the Under the Title X Uranium and Thorium Reimbursement Program of the Energy Policy Act of 1992

U.S. Department of Energy
December 2004

General Instructions

Plans for subsequent remedial action should follow the same general format as the preparation of the annual reimbursement claim packages. This will ensure continuity of the plan preparation process as well as the DOE plan review process. It will also help to maintain the current knowledge of the DOE requirements without burdening anyone with another layer of procedures. The main difference is a slight change in format. For the Plans for Subsequent Remedial Action, we would have moved the narrative description and regulatory authorization matrix to the front of document instead of leaving them in the middle of the document as shown under the annual reimbursement claim instructions. This will give this information move visibility and place them in a better place within the flow of the information. We would also prefer a more expanded narrative description of the work to be performed than included in the annual claim submissions.

The primary difference between the reimbursement claim packages and the subsequent remedial action plans is one of timing. Annual reimbursement claims are prepared after-the-fact based on reclamation costs that were incurred in prior years. They are based on incurred costs. Plans for subsequent remedial action are forward looking and attempt to capture costs that will be incurred in the future. The focus of both however, is to accurately capture and submit costs of remedial action to the Department for eventual reimbursement.

As in the annual reimbursement claim packages, the following categories of information are required in the plans for subsequent remedial action. This is the minimum amount of information needed. Claimants may include other categories of information as necessary to accurately capture future costs of remedial action. Licensees may obtain additional guidance and details for preparing the Plans for Subsequent Remedial Action by referring to the same categories of costs reflected in the DOE Guidance Document for preparation of reimbursement claims.

Format and Content of
Plans for Subsequent Remedial Action

I. Introduction

The introduction should include an explanation of the contents of the Plan for Subsequent Remedial Action. It should also discuss the major categories of information and other details that will help the DOE/DCAA to review and approve your plan. The claimant may wish to add historical information in this category if it helps to explain the remaining work requirements.

II. Licensee Certification

As in the annual claim submission, the licensee should certify that the cost information submitted in the Plan for Subsequent Remedial Action is to the best of his/her knowledge accurate and complete (refer to the DOE Guidance Document for specific language). The certification should be signed by a company official with the appropriate level of authority such as the President or Accounting Manager. Of primary importance is to certify that the costs included in the plan are necessary to complete the remedial actions listed in the licensee's approved reclamation plan or other appropriate written authorization.

III. Regulatory Authorization Matrix

The authorization matrix should show how the reclamation activity ties back to the approved reclamation plan and, in turn, how the reclamation plan ties back to the source material license or other written authorization. It is the typical "paper trail" process that we hear about that ties all the costs in the plan from the bottom all the way to the top. Through this matrix DOE and DCAA must be able to trace all the activities and costs included in the plan to a source document indicating that an appropriate regulatory agency requires that the work be performed.

IV. Narrative Description

This category of information is one of the most important and should be one of the most detailed. It will help the DOE and DCAA understand the reclamation work and cost information included the Plan for Subsequent Remedial Action. It will also help to get your plan approved in record time. Experience in the annual claim review process has shown that the more detailed and clear the narrative description, the greater the chances of having your claim approved. The same logic applies here.

Specifically, we would like to see at least two major categories of descriptions in your plan: 1) an overall explanation of the work that you plan to perform broken down by period of time, and 2) an explanation of the work broken down by the

specific activity reflected in the cost accounts included in the cost summary document discussed in the next section. How you organize this write-up is up to you. You may either combine the two or keep them separate. It does not matter to us so long as all the information necessary to understand your plan is included. If there are an unusual situations or problems, we would like them highlighted and explained separately so that we can understand what is going on. The intent of the narrative is to paint a clear picture to the DOE of the remaining reclamation activities at each site in order to help us approve your plans.

V. Final Cost Summary Document

An overall cost summary document should be prepared for the Subsequent Remedial Action Plan. This document is a compilation of the summary cost documents prepared for each fiscal year. As in the annual claims, the Final Cost Summary Document is a matrix of categories of costs such as direct labor, travel, contractor services, project management, equipment, legal, etc. Each block should include the total expected reimbursable costs of remedial action for that cost category and type of work for the given year. Claimants should maintain the same cost categories and cost accounts used in the annual claims. This will help save time for the DOE and DCAA reviewers, as they are already familiar with the format of all the claims. This category of information is called the Final Cost Summary Document instead of the Cost Summary Document as required in the reimbursement claim packages to reflect the fact that these will be the final costs of reclamation approved by the DOE when the Plan for Subsequent Remedial Action is approved in final.

VI. Summary Documentation

You will notice that the instructions in the DOE Guidance Document require the inclusion of a summary level of supporting documentation in the reimbursement claim packages. This does not apply to the Plans for Subsequent Remedial Action because by their very nature the plans are forward looking, not backward looking like the reimbursement claim packages. Reimbursement claims are involved with incurred costs not future costs. Consequently, there is no requirement for including supporting documentation in Plans for Subsequent Remedial Action because these costs have not yet been incurred. This requirement applies only to the inclusion of summary cost information and not to the narrative or regulatory information described previously.

VII. Approved Reclamation Plan or Other Written Authorization

The Plan for Subsequent Remedial Action should include a copy of the current approved reclamation plan, or other written authorization, including any amendments to the radioactive material license and license conditions.

VIII. Schedule for Completing the Remaining Reclamation Work

Although reclamation plans include general schedules for completing the reclamation work, the licensee should include as a minimum an overall summary level project schedule to complete the work including milestones. Project schedule information should be submitted separately in your Plan for Subsequent Remedial Action. In the old days these schedules were prepared using Program Evaluation and Review Techniques (PERT) or Critical Path Method (CPM) techniques. Regardless of the techniques used, what we need are the major activities required to complete the work charted over the period of time required to complete the project. Included in the same schedule or another schedule should be the total project work with markers indicating work completed and work remaining. This is the same level of information included in most project management plans and can be as detailed as the claimant desires. For example, the claimant may wish to include either an overall project schedule alone, or the overall project schedule along with detailed sub-level schedules. Whichever way the claimant chooses to document his plan is acceptable to DOE. It will be up to the licensee to decide the level of schedule documentation based on his/her own project. What is important is that DOE receive sufficient information on which to approve the plan. As a rule, we prefer that the licensee err on the side of providing more information than not enough.

APPENDIX E. INDIVIDUAL APPROVED CLAIM AMOUNTS AND PAYMENTS

Exhibit E-1. 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
Uranium						
American Nuclear Corp. Site	10,834,489.84				10,834,489.84	
American Nuclear Corporation State of Wyoming		0.00	0.00	0.00	0.00	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
Total Uranium	$278,100,000.02	$103,973,558.91	$33,368,448.46	$70,605,110.45	$244,731,551.56	$3,533,266.73
Thorium						
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
Total Thorium	$41,200,000.00	$20,970,214.66	$7,000,351.53	$13,969,863.13	$34,199,648.47	$0.00
Total Uranium and Thorium	$319,300,000.02	$124,943,773.57	$40,368,799.99	$84,574,973.58	$278,931,200.03	$3,533,266.73

* 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.

Exhibit E-2. 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
Uranium							
American Nuclear Corp. Site	11,127,021.06					10,897,313.76	
American Nuclear Corporation State of Wyoming		682,499.41	682,499.41	229,707.30	452,792.11		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
Petrotomics 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
Total Uranium	$251,339,303.45	$28,436,598.28	$99,041,708.73	$30,213,035.89	$68,828,672.84	$221,126,267.56	$6,864,479.62
Thorium							
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
Total Thorium	$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
Total Uranium and Thorium	$286,462,342.43	$54,788,386.70	$139,363,360.28	$41,691,999.99	$97,671,360.29	$244,770,342.44	$12,063,092.19

* 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 E-3. FY 1996 Individual Approved Claim Amounts and Payments

Licensee	FY 96 Maximum Reimbursement Ceilings	Final Approved Claim Amounts[1]	Final Approved Claims Plus Prior Years Unpaid Claim Balances	Total FY 96 Payments[2]	Unpaid Claim Balances After Payments	Maximum Reimbursement Ceilings After Payments	Unpaid Claim Balances in Excess of Ceilings After Payments
Uranium							
American Nuclear Corp. Site	11,202,438.55					11,005,835.27	
American Nuclear Corporation		46,696.94	499,489.05	196,603.28	302,885.77		0.00
State of Wyoming		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
Total Uranium	$227,317,803.05	$22,290,767.57	$91,119,440.41	$32,282,901.63	$58,836,538.78	$195,034,901.42	$9,745,029.47
Thorium							
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
Total Thorium	$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
Total Uranium and Thorium	$251,623,912.03	$36,662,672.15	$134,334,032.44	$41,850,000.00	$92,484,032.44	$209,773,912.03	$28,653,512.52

[1] 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.

[2] 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 E-4. 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	
American Nuclear Corporation		32,474.25	335,360.02	98,628.14	236,731.88		0.00
State of Wyoming		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	147,434.04	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
Total Uranium	$280,885,948.46	$31,090,230.18	$89,926,768.96	$22,058,321.76	$67,868,447.20	$258,827,626.70	$15,510,688.66
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
Total Thorium	$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
Total Uranium and Thorium	$321,067,129.39	$47,938,974.10	$140,423,006.54	$33,945,000.00	$106,478,006.54	$287,122,129.39	$25,825,745.31

* 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 E-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
Uranium						
American Nuclear Corp. Site	14,484,304.39				14,141,318.83	
American Nuclear Corporation		236,731.88	115,670.01	121,061.87		0.00
State of Wyoming		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
Total Uranium	$264,780,662.12	$67,868,447.20	$25,756,993.96	$42,111,453.24	$239,023,668.16	$15,153,818.98
Thorium						
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
Total Thorium	$28,945,276.25	$38,609,559.34	$14,143,006.04	$24,466,553.30	$14,802,270.21	$9,664,283.09
Total Uranium and Thorium	$293,725,938.37	$106,478,006.54	$39,900,000.00	$66,578,006.54	$253,825,938.37	$24,818,102.07

* 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 E-6. 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
Uranium								
American Nuclear Corp. Site	16,220,990.53						15,908,983.67	
American Nuclear Corporation		14,167.87	135,229.74	135,229.74	45,670.66	89,559.08		0.00
State of Wyoming		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
Petrotomics 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
Total Uranium		$14,059,061.13	$56,170,514.37	$42,881,654.54	$14,482,267.59	$41,688,246.78		$13,288,859.83
Thorium								
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
Total Thorium	$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
Total Uranium and Thorium		$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 E-7A. *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	1st FY 00 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	16,258,981.31						16,075,167.73	0.00
American Nuclear Corporation		17,820.78	107,379.86	107,379.86	30,997.53	76,382.33		
State of Wyoming		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
Petrotomics 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
Total Uranium		$13,861,214.18	$55,549,460.96	$37,804,311.33	$10,913,032.37	$44,636,428.59		$17,745,149.63
Thorium								
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
Total Thorium	$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
Total Uranium and Thorium		$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 E-7B. *Second FY 2000 Individual Approved Claim Amounts and Payments (September 2000)

Licensee	Maximum Reimbursement Ceilings After 1st FY 00 Payments	Unpaid Claims	Total Unpaid Claims Within Ceilings	2nd FY 00 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	16,075,167.73					15,816,968.08	0.00
American Nuclear Corporation		76,382.33	76,382.33	43,541.66	32,840.67		
State of Wyoming		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
Total Uranium		$44,636,428.59	$26,891,278.96	$15,329,343.13	$29,307,085.46		$17,745,149.63
Thorium							
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
Total Thorium	$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
Total Uranium and Thorium		$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 E-8A. First FY 2001 Individual Approved Claim Amounts and Payments (December 2000[1])

Licensee	FY 01 Individual Reimbursement Limits[2]	Unpaid Claim Balances	Total Unpaid Claim Balances Within Limits	1st FY 01 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments	Unpaid Claim Balances in Excess of Limits After Payments
Uranium							
American Nuclear Corp. Site	14,346,036.94					14,151,293.58	0.00
American Nuclear Corporation		32,840.67	32,840.67	32,840.67	0.00		
State of Wyoming		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
Total Uranium		$29,307,085.46	$9,807,070.94	$9,807,070.94	$19,500,014.52		$19,500,014.52
Thorium							
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
Total Thorium	$30,605,419.85	$20,115,958.04	$20,115,958.04	$20,115,958.04	$0.00	$10,489,461.81	$0.00
Total Uranium and Thorium		$49,423,043.50	$29,923,028.98	$29,923,028.98	$19,500,014.52		$19,500,014.52

[1]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.

[2]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 E-8B. Second FY 2001 Individual Approved Claim Amounts and Payments (April 2001)

Licensee	FY 01 Individual Reimbursement Limits After 1st FY 01 Payments	Final Approved Claim Amounts	Final Approved Claims Plus Unpaid Claim Balances	Total Unpaid Claims Within Limits	2nd FY 01 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments	Unpaid Claim Balances in Excess of Limits After Payments
Uranium								
American Nuclear Corp. Site	14,700,850.05						14,687,331.33	0.00
American Nuclear Corporation		13,518.72	13,518.72	13,518.72	13,518.72	0.00		
State of Wyoming		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[1]	1,644,529.72[1]	1,644,529.72[1]	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
Total Uranium		$12,005,092.68	$31,505,107.20	$10,943,159.14	$10,943,159.14	$20,561,948.06		$20,561,948.06
Thorium								
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[2]	0.00	0.00
Total Thorium	$10,846,103.51	$38,232,994.63	$38,232,994.63	$10,846,103.51	$10,846,103.51	$0.00[2]	$0.00	$0.00
Total Uranium and Thorium		$50,238,087.31	$69,738,101.83	$21,789,262.65	$21,789,262.65	$20,561,948.06		$20,561,948.06

[1]Amount includes $1,183,954.92 for the Moab Mill Reclamation Trust on its approved FY 2001 claim.

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

Exhibit E-9. FY 2002 Individual Approved Claim Amounts Payments (April and September 2002[1])

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
Uranium								
American Nuclear Corp. Site	15,155,294.84						15,136,688.47	0.00
American Nuclear Corporation		13,228.94	13,228.94	13,228.94	13,228.94	0.00		
State of Wyoming		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[2]	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[3]	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
Total Uranium		$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
Thorium								
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
Total Thorium	$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
Total Uranium and Thorium		$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

[1]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.

[2]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).

[3]Formerly Quivira Mining Company.

Exhibit E-10. FY 2003 Individual Approved Claim Amounts and Payments (April 2003[1])

Licensee	FY 03 Individual Reimbursement Limits[2]	Approved Claim Amounts After FRR	Final Approved Claims Plus Unpaid Claim Balances	Total Unpaid Claims Within Limits	FY 03 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments	Unpaid Claim Balances in Excess of Limits After Payments	Total Payments Through FY 03
Uranium									
American Nuclear Corp. Site	15,411,583.60						15,411,583.60	0.00	
American Nuclear Corporation		0.00	0.00	0.00	0.00	0.00			820,406.91
State of Wyoming		0.00	0.00	0.00	0.00	0.00			1,223,850.46
Atlantic Richfield Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32,305,902.36
Utah/NRC Moab Escrow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9,694,190.01
Cotter Corporation	39,324.24	59,668.53	846,417.63	39,324.24	4,918.66	841,498.97	34,405.58	807,093.39	2,462,683.39
Dawn Mining Company	5,883,493.41	452,061.54	452,061.54	452,061.54	56,543.62	395,517.92	5,826,949.79	0.00	3,455,879.36
Homestake Mining Company	53,427,931.76	1,633,212.13	1,633,212.13	1,633,212.13	204,281.32	1,428,930.81	53,223,650.44	0.00	37,234,388.32
Pathfinder Mines Corporation	14,117,930.34	1,411,749.53	1,411,749.53	1,411,749.53	176,580.89	1,235,168.64	13,941,349.45	0.00	8,587,942.12
Petrotomics Company	3,110,811.68	57,892.31	57,892.31	57,892.31	7,241.14	50,651.17	3,103,570.54	0.00	2,643,697.72
Rio Algom Mining LLC[3]	64,115,217.08	1,040,803.44	1,040,803.44	1,040,803.44	130,183.15	910,620.29	63,985,033.93	0.00	15,422,395.24
Tennessee Valley Authority	202,863.12	0.00	12,451,068.67	202,863.12	25,374.01	12,425,694.66	177,489.11	12,248,205.55	12,704,319.06
Umetco Minerals Corp.-CO	711,706.25	3,016,035.40	10,408,393.11	711,706.25	89,019.84	10,319,373.27	622,686.41	9,696,686.86	44,570,660.27
Umetco Minerals Corp.-WY	1,903,191.52	2,993,693.50	2,993,693.50	1,903,191.52	238,050.20	2,755,643.30	1,665,141.32	1,090,501.98	15,005,900.26
Western Nuclear, Inc.	452,665.65	337,110.84	597,605.00	452,665.65	56,619.17	540,985.83	396,046.48	144,939.35	28,348,222.08
Total Uranium		$11,002,227.22	$31,892,896.86	$7,905,469.73	$988,812.00	$30,904,084.86		$23,987,427.13	$214,480,437.56
Thorium									
Kerr-McGee Chemical LLC	218,853,861.19	68,652,750.92	86,446,985.73	86,446,985.73	14,832,188.00	71,614,797.73	204,021,673.19	0.00	170,538,361.05
Total Thorium	$218,853,861.19	$68,652,750.92	$86,446,985.73	$86,446,985.73	$14,832,188.00	$71,614,797.73	$204,021,673.19	$0.00	$170,538,361.05
Total Uranium and Thorium		$79,654,978.14	$118,339,882.59	$94,352,455.46	$15,821,000.00	$102,518,882.59		$23,987,427.13	$385,018,798.61

[1] Reimbursements to the uranium licensees were issued in April 23, 2003, and the reimbursement to the thorium licensee was made in two installments consisting of $14,001,518 on April 23, 2003, and $830,670 on April 25, 2003.

[2] For uranium licensees, the 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. For 2003, the inflation-adjusted per dry short ton limit was $7.9272665636 based on a calendar year CPI-U of 1.016 for 2002. For the thorium licensee, the Individual Thorium Reimbursement Limit is equal to the unpaid claim balance at the end of 2002 multiplied by the calendar year CPI-U for 2002.

[3] Formerly Quivira Mining Company.

Exhibit E-11. FY 2004 Individual Approved Claim Amounts and Payments (February 2004[1])

Licensee	FY 04 Individual Reimbursement Limits[2]	Approved Claim Amounts After FRR	Final Approved Claims Plus Unpaid Claim Balances	Total Unpaid Claims Within Limits	FY 04 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments	Unpaid Claim Balances in Excess of Limits After Payments	Total Payments Through FY 04
Uranium									
American Nuclear Corp. Site	15,813,067.95						15,808,843.25	0.00	
American Nuclear Corporation		0.00	0.00	0.00	0.00	0.00			820,406.91
State of Wyoming		8,942.34	8,942.34	8,942.34	4,224.70	4,717.64			1,228,075.16
Atlantic Richfield Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32,305,902.36
Utah/NRC Moab Escrow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9,694,190.01
Cotter Corporation	91,838.62	0.00	841,498.97	91,838.62	43,387.97	798,111.00	48,450.65	749,660.35	2,506,071.36
Dawn Mining Company	6,040,454.86	484,437.44	879,955.36	879,955.36	415,723.56	464,231.80	5,624,731.30	0.00	3,871,602.92
Homestake Mining Company	55,304,185.33	1,465,273.31	2,894,204.12	2,894,204.12	1,367,329.42	1,526,874.70	53,936,855.91	0.00	38,601,717.74
Pathfinder Mines Corporation	14,459,523.16	657,075.27	1,892,243.91	1,892,243.91	893,966.24	998,277.67	13,565,556.92	0.00	9,481,908.36
Petrotomics Company	3,235,757.71	0.00	50,651.17	50,651.17	23,929.49	26,721.68	3,211,828.22	0.00	2,667,627.21
Rio Algom Mining LLC[3]	65,811,404.80	950,923.10	1,861,543.39	1,861,543.39	879,462.17	982,081.22	64,931,942.63	0.00	16,301,857.41
Tennessee Valley Authority	473,770.69	0.00	12,425,694.66	473,770.69	223,826.85	12,201,867.81	249,943.84	11,951,923.97	12,928,145.91
Umetco Minerals Corp.-CO	1,662,133.38	5,074,886.15	15,394,259.42	1,662,133.38	785,253.48	14,609,005.94	876,879.90	13,732,126.04	45,355,913.75
Umetco Minerals Corp.-WY	2,048,575.28	2,247,679.00	5,003,322.30	2,048,575.28	967,822.98	4,035,499.32	1,080,752.30	2,954,747.02	15,973,723.24
Western Nuclear, Inc.	1,057,164.66	399,959.00	940,944.83	940,944.83	444,537.25	496,407.58	612,627.41	0.00	28,792,759.33
Total Uranium		$11,289,175.61	$42,193,260.47	$12,804,803.09	$6,049,464.11	$36,143,796.36		$29,388,457.38	$220,529,901.67
Thorium									
Kerr-McGee Chemical LLC	208,714,171.67	22,471,029.40	94,085,827.13	94,085,827.13	44,449,635.89	49,636,191.24	164,264,535.78	0.00	214,987,996.94
Total Thorium	$208,714,171.67	$22,471,029.40	$94,085,827.13	$94,085,827.13	$44,449,635.89	$49,636,191.24	$164,264,535.78	$0.00	$214,987,996.94
Total Uranium and Thorium		$33,760,205.01	$136,279,087.60	$106,890,630.22	$50,499,100.00	$85,779,987.60		$29,388,457.38	$435,517,898.61

[1] Reimbursements to the licensees were issued on March 2004.

[2]For uranium licensees, the 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. For 2004, the inflation adjusted per dry short ton limit was $8.1095936946 based on a calendar year CPI-U of 1.023 for 2003. For the thorium licensee, the Individual Thorium Reimbursement Limit is equal to the unpaid claim balance at the end of 2003 multiplied by the CPI-U for 2003.

[3] Formerly Quivira Mining Company.

Exhibit E-12A. First FY 2005 Payments (January 2005[1])

Licensee	Initial FY 2005 Individual Reimbursement Limits	Unpaid Claim Balances from Prior Years	Total Unpaid Claims Within Limits	First FY 2005 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments	Unpaid Claim Balances in Excess of Limits After Payments	Total Payments Through First FY 2005 Payment
Uranium								
American Nuclear Corp. Site	15,808,843.25					15,804,125.61	0.00	
American Nuclear Corporation		0.00	0.00	0.00	0.00			820,406.91
State of Wyoming		4,717.64	4,717.64	4,717.64	0.00			1,232,792.80
Atlantic Richfield Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32,305,902.36
Utah/NRC Moab Escrow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9,694,190.01
Cotter Corporation	48,450.65	798,111.00	48,450.65	48,450.65	749,660.35	0.00	749,660.35	2,554,522.01
Dawn Mining Company	5,624,731.30	464,231.80	464,231.80	464,231.80	0.00	5,160,499.50	0.00	4,335,834.72
Homestake Mining Company	53,936,855.91	1,526,874.70	1,526,874.70	1,526,874.70	0.00	52,409,981.21	0.00	40,128,592.44
Pathfinder Mines Corporation	13,565,556.92	998,277.67	998,277.67	998,277.67	0.00	12,567,279.25	0.00	10,480,186.03
Petrotomics Company	3,211,828.22	26,721.68	26,721.68	26,721.68	0.00	3,185,106.54	0.00	2,694,348.89
Rio Algom Mining LLC[3]	64,931,942.63	982,081.22	982,081.22	982,081.22	0.00	63,949,861.41	0.00	17,283,938.63
Tennessee Valley Authority	249,943.84	12,201,867.81	249,943.84	249,943.84	11,951,923.97	0.00	11,951,923.97	13,178,089.75
Umetco Minerals Corp.-CO	876,879.90	14,609,005.94	876,879.90	876,879.90	13,732,126.04	0.00	13,732,126.04	46,232,793.65
Umetco Minerals Corp.-WY	1,080,752.30	4,035,499.32	1,080,752.30	1,080,752.30	2,954,747.02	0.00	2,954,747.02	17,054,475.54
Western Nuclear, Inc.	612,627.41	496,407.58	496,407.58	496,407.58	0.00	116,219.83	0.00	29,289,166.91
Total Uranium		$36,143,796.36	$6,755,338.98	$6,755,338.98	$29,388,457.38		$29,388,457.38	$227,285,240.65
Thorium								
Kerr-McGee Chemical LLC[2]	164,264,535.78	49,265,451.48	49,265,451.48	[2]49,265,451.48	0.00	114,999,084.30	0.00	$264,253,448.42
Total Thorium	$164,264,535.78	$49,265,451.48	$49,265,451.48	$49,265,451.48	0.00	$114,999,084.30	0.00	$264,253,448.42
Total Uranium and Thorium		$85,409,247.84	$56,020,790.46	$56,020,790.46	$29,388,457.38		$29,388,457.38	$491,538,689.07

[1] Reimbursements to the licensees were issued on January 24, 2005, for all outstanding approved prior year claims within the individual reimbursement limits for each licensee.

[2] The reimbursement to the thorium licensee was reduced by $370,739.76 as a result of additional disallowed costs that were identified during a re-audit of overhead costs in their 2000 and 2001 claims.

[3].Formerly Quivira Mining Company.

Exhibit E-12B. FY 2005 Individual Approved Claim Amounts and Second FY 2005 Payments (March 2005[1])

Licensee	FY 2005 Individual Reimbursement Limits After 1st Payment	Approved Claim Amounts After FRR	Final Approved Claims Plus Unpaid Claim Balances	Total Unpaid Claims Within Limits	Second FY 2005 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments	Unpaid Claim Balances in Excess of Limits After Payments	Total Payments Through FY 2005
Uranium									
American Nuclear Corp. Site	16,286,273.39						16,286,273.39	0.00	
American Nuclear Corporation		0.00	0.00	0.00	0.00	0.00			820,406.91
State of Wyoming		0.00	0.00	0.00	0.00	0.00			1,232,792.80
Atlantic Richfield Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32,305,902.36
Utah/NRC Moab Escrow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9,694,190.01
Cotter Corporation	68,972.10	21,727.87	771,388.22	68,972.10	67,637.53	703,750.69	1,334.57	702,416.12	2,622,159.54
Dawn Mining Company	5,416,900.52	960,248.31	960,248.31	960,248.31	941,668.10	18,580.21	4,475,232.42	0.00	5,277,502.82
Homestake Mining Company	54,908,522.70	1,150,341.66	1,150,341.66	1,150,341.66	1,128,083.26	22,258.40	53,780,439.44	0.00	41,256,675.70
Pathfinder Mines Corporation	13,189,560.81	52,180.37	52,180.37	52,180.37	51,170.72	1,009.65	13,138,390.09	0.00	10,531,356.75
Petrotomics Company	3,343,851.84	0.00	0.00	0.00	0.00	0.00	3,343,851.84	0.00	2,694,348.89
Rio Algom Mining LLC[3]	66,143,174.01	1,886,295.62	1,886,295.62	1,886,295.62	1,849,796.97	36,498.65	64,293,377.04	0.00	19,133,735.60
Tennessee Valley Authority	355,808.43	0.00	11,951,923.97	355,808.43	348,923.76	11,603,000.21	6,884.67	11,596,115.54	13,527,013.51
Umetco Minerals Corp.-CO	1,248,285.43	2,086,977.60	15,819,103.64	1,248,285.43	1,224,131.88	14,594,971.76	24,153.55	14,570,818.21	47,456,925.53
Umetco Minerals Corp.-WY	460,470.84	863,064.22	3,817,811.24	460,470.84	451,561.01	3,366,250.23	8,909.83	3,357,340.40	17,506,036.55
Western Nuclear, Inc.	910,165.27	499,233.82	499,233.82	499,233.82	489,573.95	9,659.87	420,591.32	0.00	29,778,740.86
Total Uranium		$7,520,069.47	$36,908,526.85	$6,681,836.58	$6,552,547.18	$30,355,979.67		$30,226,690.27	$233,837,787.83
Thorium									
Kerr-McGee Chemical LLC[2]	118,104,059.58	16,709,990.36	16,709,990.36	[2]16,709,990.36	16,386,662.36	323,328.00	101,717,397.22	0.00	280,640,110.78
Total Thorium	$118,104,059.58	$16,709,990.36	$16,709,990.36	$16,709,990.36	$16,386,662.36	$323,328.00	$101,717,397.22	$0.00	$280,640,110.78
Total Uranium and Thorium		$24,230,059.83	$53,618,517.21	$23,391,826.94	$22,939,209.54	$30,679,307.67		$30,226,690.27	$514,477,898.61

[1] Partial reimbursements to the licensees were issued on March, 29, 2005, for the claims submitted in 2004 within the individual reimbursement limits for each licensee. Partial reimbursements were made because the remaining FY 2005 funds were not sufficient to pay all eligible, approved costs.

[2] The approved claim amount for the thorium licensee was reduced by $115,370.76 as a result of additional disallowed costs that were identified during a re-audit of overhead costs in their 1994 through 1999 claims.

[3] Formerly Quivira Mining Company.

Exhibit E-13. FY 2006 Individual Approved Claim Amounts and Payments (April 2006[1])

Licensee	FY 2006 Individual Reimbursement Limits	Approved Claim Amounts After FRR	Final Approved Claims Plus Unpaid Claim Balances	Total Unpaid Claims Within Limits	FY 2006 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments	Unpaid Claim Balances in Excess of Limits After Payments	Total Payments Through FY 2006
Uranium									
American Nuclear Corp. Site	16,909,815.47						16,909,815.47	0.00	
American Nuclear Corporation		0.00	0.00	0.00	0.00	0.00			820,406.91
State of Wyoming		0.00	0.00	0.00	0.00	0.00			1,232,792.80
Atlantic Richfield Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32,305,902.36
Utah/NRC Moab Escrow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9,694,190.01
Cotter Corporation	90,533.37	0.00	703,750.69	90,533.37	79,426.35	624,324.34	11,107.02	613,217.32	2,701,585.89
Dawn Mining Company	4,806,825.42	631,640.65	650,220.86	650,220.86	570,449.02	79,771.84	4,236,376.40	0.00	5,847,951.84
Homestake Mining Company	57,011,701.35	1,290,439.84	1,312,698.24	1,312,698.24	1,151,650.87	161,047.37	55,860,050.48	0.00	42,408,326.57
Pathfinder Mines Corporation	13,943,161.49	101,147.57	102,157.22	102,157.22	89,624.14	12,533.08	13,853,537.35	0.00	10,620,980.89
Petrotomics Company	3,549,150.66	0.00	0.00	0.00	0.00	0.00	3,549,150.66	0.00	2,694,348.89
Rio Algom Mining LLC[2]	67,129,898.87	3,328,432.90	3,364,931.55	3,364,931.55	2,952,107.52	412,824.03	64,177,791.35	0.00	22,085,843.12
Tennessee Valley Authority	467,037.21	0.00	11,603,000.21	467,037.21	409,739.11	11,193,261.10	57,298.10	11,135,963.00	13,936,752.62
Umetco Minerals Corp.-CO	1,638,510.24	1,592,119.44	16,187,091.20	1,638,510.24	1,437,490.88	14,749,600.32	201,019.36	14,548,580.96	48,894,416.41
Umetco Minerals Corp.-WY	604,418.01	532,260.72	3,898,510.95	604,418.01	530,265.45	3,368,245.50	74,152.56	3,294,092.94	18,036,302.00
Western Nuclear, Inc.	1,447,368.61	483,017.49	492,677.36	492,677.36	432,233.62	60,443.74	1,015,134.99	0.00	30,210,974.48
Total Uranium		$7,959,058.61	$38,315,038.28	$8,723,184.06	$7,652,986.96	$30,662,051.32		$29,591,854.22	$241,490,774.79
Thorium									
Tronox LLC[3]	105,175,788.73	13,408,344.73	13,731,672.73	13,731,672.73	12,047,013.04	1,684,659.69	93,128,775.69	0.00	292,687,123.82
Total Thorium	$105,175,788.73	$13,408,344.73	$13,731,672.73	$13,731,672.73	$12,047,013.04	$1,684,659.69	$93,128,775.69	$0.00	$292,687,123.82
Total Uranium and Thorium		$21,367,403.34	$52,046,711.01	$22,454,856.79	$19,700,000.00	$32,346,711.01		$29,591,854.22	$534,177,898.61

[1] Partial reimbursements to the licensees were issued on April 18, 2006, for prior year unpaid claim balances and the claims submitted in 2005 within the individual reimbursement limits for each licensee. Partial reimbursements were made because the FY 2006 funds were not sufficient to pay all eligible, approved costs.
[2] Formerly Quivira Mining Company.
[3] Formerly Kerr-McGee Chemical LLC.

Exhibit E-14. FY 2007 Individual Approved Claim Amounts and Payments (April 2007[1])

Licensee	FY 2007 Individual Reimbursement Limits	Approved Claim Amounts After FRR	Final Approved Claims Plus Unpaid Claim Balances	Total Unpaid Claims Within Limits	FY 2007 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments	Unpaid Claim Balances in Excess of Limits After Payments	Total Payments Through FY 2007
Uranium									
American Nuclear Corp. Site	17,516,613.96						17,507,237.27	0.00	
American Nuclear Corporation		0.00	0.00	0.00	0.00	0.00			820,406.91
State of Wyoming		12,182.91	12,182.91	12,182.91	9,394.69	2788.22			1,242,187.49
Atlantic Richfield Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32,305,902.36
Utah/NRC Moab Escrow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9,694,190.01
Cotter Corporation	97,913.19	0.00	624,324.34	97,913.19	75,504.43	548,819.91	22,408.76	526,411.15	2,777,090.32
Dawn Mining Company	4,559,074.90	988,193.30	1,067,965.14	1,067,965.14	823,546.86	244,418.28	3,735,528.04	0.00	6,671,498.70
Homestake Mining Company	59,004,638.55	1,357,076.60	1,518,123.97	1,518,123.97	1,170,680.75	347,443.22	57,833,957.80	0.00	43,579,007.32
Pathfinder Mines Corporation	14,636,721.93	58,957.29	71,490.37	71,490.37	55,128.83	16,361.54	14,581,593.10	0.00	10,676,109.72
Petrotomics Company	3,748,942.65	156,079.32	156,079.32	156,079.32	120,358.45	35,720.87	3,628,584.20	0.00	2,814,707.34
Rio Algom Mining LLC [2]	66,938,227.65	3,812,947.21	4,225,771.24	4,225,771.24	3,258,646.28	967,124.96	63,679,581.37	0.00	25,344,489.40
Tennessee Valley Authority	505,107.72	0.00	11,193,261.10	505,107.72	389,506.98	10,803,754.12	115,600.74	10,688,153.38	14,326,259.60
Umetco Minerals Corp.-CO	1,772,073.31	2,452,236.33	17,201,836.65	1,772,073.31	1,366,510.34	15,835,326.31	405,562.97	15,429,763.34	50,260,926.75
Umetco Minerals Corp.-WY	653,687.10	1,181,262.66	4,549,508.16	653,687.10	504,081.96	4,045,426.20	149,605.14	3,895,821.06	18,540,383.96
Western Nuclear, Inc.	2,014,370.50	398,215.78	458,659.52	458,659.52	353,689.08	104,970.44	1,660,681.42	0.00	30,564,663.56
Total Uranium		$10,417,151.40	$41,079,202.72	$10,539,053.79	$8,127,048.65	$32,952,154.07		$30,540,148.93	$249,617,823.44
Thorium									
Tronox LLC[3]	96,108,896.51	13,193,318.36	14,877,978.05	14,877,978.05	11,472,951.35	3,405,026.70	84,635,945.16	0.00	304,160,075.17
Total Thorium	$ 96,108,896.51	$13,193,318.36	$14,877,978.05	$14,877,978.05	$11,472,951.35	$3,405,026.70	$84,635,945.16	$0.00	$304,160,075.17
Total Uranium and Thorium		$23,610,469.76	$55,957,180.77	$25,417,031.84	$19,600,000.00	$36,357,180.77		$30,540,148.93	$553,777,898.61

[1] Partial reimbursements to the licensees were issued in two payments on April 13 and April 26, 2007, for prior year unpaid claim balances and the claims submitted in 2006 within the individual reimbursement limits for each licensee. Partial reimbursements were made because the FY 2007 funds were not sufficient to pay all eligible, approved costs.
[2] Formerly Quivira Mining Company.
[3] Formerly Kerr-McGee Chemical LLC.

Exhibit E-15. FY 2008 Individual Approved Claim Amounts and Payments (April 2008[1])

Licensee	FY 2008 Individual Reimbursement Limits	Approved Claim Amounts After FRR	Final Approved Claims Plus Unpaid Claim Balances	Total Unpaid Claims Within Limits	FY 2008 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments	Unpaid Claim Balances in Excess of Limits After Payments	Total Payments Through FY 2008
Uranium									
American Nuclear Corp. Site	18,055,192.56						18,053,254.98	0.00	
American Nuclear Corporation		0.00	0.00	0.00	0.00	0.00			$820,406.91
State of Wyoming		0.00	2,788.22	2,788.22	1,937.58	850.64			$1,244,125.07
Atlantic Richfield Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$32,305,902.36
Utah/NRC Moab Escrow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$9,694,190.01
Cotter Corporation	100,794.74	84,635.72	633,455.63	100,794.74	70,043.87	563,411.76	30,750.87	532,660.89	$2,847,134.19
Dawn Mining Company	4,026,924.79	558,790.61	803,208.89	803,208.89	558,162.69	245,046.20	3,468,762.10	0.00	$7,229,661.39
Homestake Mining Company	60,673,520.82	1,795,255.18	2,142,698.40	2,142,698.40	1,488,995.34	653,703.06	59,184,525.48	0.00	$45,068,002.66
Pathfinder Mines Corporation	15,288,808.78	29,832.76	46,194.30	46,194.30	32,101.16	14,093.14	15,256,707.62	0.00	$10,708,210.88
Petrotomics Company	3,808,996.36	0.00	35,720.87	35,720.87	24,823.00	10,897.87	3,784,173.36	0.00	$2,839,530.34
Rio Algom Mining LLC[2]	66,172,255.35	4,447,211.53	5,414,336.49	5,414,336.49	3,762,508.91	1,651,827.58	62,409,746.44	0.00	$29,106,998.31
Tennessee Valley Authority	519,972.83	0.00	10,803,754.12	519,972.83	361,337.42	10,442,416.70	158,635.41	10,283,781.29	$14,687,597.02
Umetco Minerals Corp.-CO	1,824,224.68	3,874,067.71	19,709,394.02	1,824,224.68	1,267,682.87	18,441,711.15	556,541.81	17,885,169.34	$51,528,609.62
Umetco Minerals Corp.-WY	672,924.84	941,971.06	4,987,397.26	672,924.84	467,626.22	4,519,771.04	205,298.62	4,314,472.42	$19,008,010.18
Western Nuclear, Inc.	2,562,991.08	307,547.98	412,518.42	412,518.42	286,665.64	125,852.78	2,276,325.44	0.00	$30,851,329.20
Total Uranium		$12,039,312.55	$44,991,466.62	$11,975,382.68	$8,321,884.70	$36,669,581.92		$33,016,083.94	$257,939,708.14
Thorium									
Tronox LLC[3]	87,005,751.62	12,850,341.93	16,255,368.63	16,255,368.63	11,296,115.30	4,959,253.33	75,709,636.32	0.00	315,456,190.47
Total Thorium	$87,005,751.62	$12,850,341.93	$16,255,368.63	$16,255,368.63	$11,296,115.30	$4,959,253.33	$75,709,636.32	$0.00	$315,456,190.47
Total Uranium and Thorium		$24,889,654.48	$61,246,835.25	$28,230,751.31	$19,618,000.00	$41,628,835.25		$33,016,083.94	$573,395,898.61

[1] Partial reimbursements to the licensees were issued on April 25, 2008, for prior year unpaid claim balances and the claims submitted in 2007 within the individual reimbursement limits for each licensee. Partial reimbursements were made because the FY 2008 funds were not sufficient to pay all eligible, approved costs.
[2] Formerly Quivira Mining Company.
[3] Formerly Kerr-McGee Chemical LLC.

Exhibit E-16. FY 2009 Individual Approved Claim Amounts and Payments (April 2009[1])

Licensee	FY 2009 Individual Reimbursement Limits	Approved Claim Amounts After FRR	Final Approved Claims Plus Unpaid Claim Balances	Total Unpaid Claims Within Limits	FY 2009 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments	Unpaid Claim Balances in Excess of Limits After Payments	Total Payments Through FY 2009
Uranium									
American Nuclear Corp. Site	18,817,730.88						18,792,364.23	0.00	
American Nuclear Corporation		0.00	0.00	0.00	0.00	0.00			$820,406.91
State of Wyoming		24,516.01	25,366.65	25,366.65	25,366.65	0.00			$1,269,491.72
Atlantic Richfield Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$32,305,902.36
Utah/NRC Moab Escrow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$9,694,190.01
Cotter Corporation	140,110.50	0.00	563,411.76	140,110.50	140,110.50	423,301.26	0.00	423,301.26	$2,987,244.69
Dawn Mining Company	3,875,302.19	422,428.40	667,474.60	667,474.60	667,474.60	0.00	3,207,827.59	0.00	$7,897,135.99
Homestake Mining Company	63,146,121.55	1,614,852.33	2,268,555.39	2,268,555.39	2,268,555.39	0.00	60,877,566.16	0.00	$47,336,558.05
Pathfinder Mines Corporation	16,243,374.52	0.00	14,093.14	14,093.14	14,093.14	0.00	16,229,281.38	0.00	$10,722,304.02
Petrotomics Company	4,035,874.10	0.00	10,897.87	10,897.87	10,897.87	0.00	4,024,976.23	0.00	$2,850,428.21
Rio Algom Mining LLC [2]	65,887,382.75	4,485,842.77	6,137,670.35	6,137,670.35	6,137,670.35	0.00	59,749,712.40	0.00	$35,244,668.66
Tennessee Valley Authority	722,792.24	0.00	10,442,416.70	722,792.24	722,792.24	9,719,624.46	0.00	9,719,624.46	$15,410,389.26
Umetco Minerals Corp.-CO	2,535,777.56	3,238,784.86	21,680,496.01	2,535,777.56	2,535,777.56	19,144,718.45	0.00	19,144,718.45	$54,064,387.18
Umetco Minerals Corp.-WY	935,404.35	151,133.48	4,670,904.52	935,404.35	935,404.35	3,735,500.17	0.00	3,735,500.17	$19,943,414.53
Western Nuclear, Inc.[3]	3,535,176.31	432,228.08	723,354.49	723,354.49	723,354.49	0.00	2,811,821.82	0.00	$31,574,683.69
Total Uranium		$10,369,785.93	$47,204,641.48	$14,181,497.14	$14,181,497.14	$33,023,144.34		$33,023,144.34	$272,121,205.28
Thorium									
Tronox LLC[4]	78,586,602.50	12,729,804.13	17,689,057.46	17,689,057.46	17,689,057.46	0.00	60,897,545.04	0.00	333,145,247.93
Total Thorium	$78,586,602.50	$12,729,804.13	$17,689,057.46	$17,689,057.46	$17,689,057.46	$0.00	$60,897,545.04	$0.00	$333,145,247.93
Total Uranium and Thorium		$23,099,590.06	$64,893,698.94	$31,870,554.60	$31,870,554.60	$33,023,144.34		$33,023,144.34	$605,266,453.21

[1] Reimbursements to the uranium licensees were issued on April 29, 2009, for prior year unpaid claim balances and the claims submitted in 2008 within the individual reimbursement limits for each licensee. The thorium reimbursement was made on September 3, 2009.
[2] Formerly Quivira Mining Company.
[3] The payment for this licensee included $165,273.63 for an underpayment in a previous year.
[4] Formerly Kerr-McGee Chemical LLC.

Exhibit E-17. FY 2010 Individual Approved Claim Amounts and Payments (January 2010[1])

Licensee	FY 2010 Individual Reimbursement Limits	Approved Claim Amounts After FRR	Final Approved Claims Plus Unpaid Claim Balances	Total Unpaid Claims Within Limits	FY 2010 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments	Unpaid Claim Balances in Excess of Limits After Payments	Total Payments Through FY 2010
Uranium									
American Nuclear Corp. Site	18,792,364.23						18,788,819.76	0.00	
American Nuclear Corporation		0.00	0.00	0.00	0.00	0.00			$820,406.91
State of Wyoming		3,544.47	3,544.47	3,544.47	3,544.47	0.00			$1,273,036.19
Atlantic Richfield Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$32,305,902.36
Utah/NRC Moab Escrow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$9,694,190.01
Cotter Corporation	0.00	0.00	423,301.26	0.00	0.00	423,301.26	0.00	423,301.26	$2,987,244.69
Dawn Mining Company	3,207,827.59	662,624.57	662,624.57	662,624.57	662,624.57	0.00	2,545,203.02	0.00	$8,559,760.56
Homestake Mining Company	60,877,566.16	1,958,701.52	1,958,701.52	1,958,701.52	1,958,701.52	0.00	58,918,864.64	0.00	$49,295,259.57
Pathfinder Mines Corporation	16,229,281.38	0.00	0.00	0.00	0.00	0.00	16,229,281.38	0.00	$10,722,304.02
Petrotomics Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$2,850,428.21
Rio Algom Mining LLC[2]	59,749,712.40	3,698,459.31	3,698,459.31	3,698,459.31	3,698,459.31	0.00	56,051,253.09	0.00	$38,943,127.97
Tennessee Valley Authority	0.00	0.00	9,719,624.46	0.00	0.00	9,719,624.46	0.00	9,719,624.46	$15,410,389.26
Umetco Minerals Corp.-CO	0.00	904,699.36	20,049,417.81	0.00	0.00	20,049,417.81	0.00	20,049,417.81	$54,064,387.18
Umetco Minerals Corp.-WY	0.00	307,048.03	4,042,548.20	0.00	0.00	4,042,548.20	0.00	4,042,548.20	$19,943,414.53
Western Nuclear, Inc.	2,811,821.82	94,897.41	94,897.41	94,897.41	94,897.41	0.00	2,716,924.41	0.00	$31,669,581.10
Total Uranium		$7,629,974.67	$40,653,119.01	$6,418,227.28	$6,418,227.28	$34,234,891.73		$34,234,891.73	$278,539,432.56
Thorium									
Tronox LLC[3]	60,897,545.04	7,335,561.84	7,335,561.84	7,335,561.84	7,335,561.84	0.00	53,561,983.20	0.00	340,480,809.77
Total Thorium	$60,897,545.04	$7,335,561.84	$7,335,561.84	$7,335,561.84	$7,335,561.84	$0.00	$53,561,983.20	$0.00	$340,480,809.77
Total Uranium and Thorium		$14,965,536.51	$47,988,680.85	$13,753,789.12	$13,753,789.12	$34,234,891.73		$34,234,891.73	$619,020,242.33

[1] Reimbursements to the licensees were issued on January 22, 2010, for the claims submitted in 2009 within the individual reimbursement limits for each licensee.
[2] Formerly Quivira Mining Company.
[3] Formerly Kerr-McGee Chemical LLC.

Exhibit E-18. FY 2011 Individual Approved Claim Amounts and Payments (January 2011[1])

Licensee	FY 2011 Individual Reimbursement Limits	Approved Claim Amounts After FRR	Final Approved Claims Plus Unpaid Claim Balances	Total Unpaid Claims Within Limits	FY 2011 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments	Unpaid Claim Balances in Excess of Limits After Payments	Total Payments Through FY 2011
Uranium									
American Nuclear Corp. Site	19,122,935.97						19,119,313.88		
American Nuclear Corporation		0.00	0.00	0.00	0.00	0.00		0.00	$820,406.91
State of Wyoming		3,622.09	3,622.09	3,622.09	3,622.09	0.00		0.00	$1,276,658.28
Atlantic Richfield Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$32,305,902.36
Utah/NRC Moab Escrow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$9,694,190.01
Cotter Corporation	47,795.91	0.00	423,301.26	47,795.91	47,795.91	375,505.35	0.00	375,505.35	$3,035,040.60
Dawn Mining Company	2,722,882.44	943,809.30	943,809.30	943,809.30	943,809.30	0.00	1,779,073.14	0.00	$9,503,569.86
Homestake Mining Company	60,650,290.63	1,957,875.29	1,957,875.29	1,957,875.29	1,957,875.29	0.00	58,692,415.34	0.00	$51,253,134.86
Pathfinder Mines Corporation	16,660,506.75	43,127.27	43,127.27	43,127.27	43,127.27	0.00	16,617,379.48	0.00	$10,765,431.29
Petrotomics Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$2,850,428.21
Rio Algom Mining LLC [2]	57,571,163.18	2,297,544.73	2,297,544.73	2,297,544.73	2,297,544.73	0.00	55,273,618.45	0.00	$41,240,672.70
Tennessee Valley Authority	246,566.23	0.00	9,719,624.46	246,566.23	246,566.23	9,473,058.23	0.00	9,473,058.23	$15,656,955.49
Umetco Minerals Corp.-CO	865,030.20	0.00	20,049,417.81	865,030.20	865,030.20	19,184,387.61	0.00	19,184,387.61	$54,929,417.38
Umetco Minerals Corp.-WY	319,094.63	0.00	4,042,548.20	319,094.63	319,094.63	3,723,453.57	0.00	3,723,453.57	$20,262,509.16
Western Nuclear, Inc.	3,267,108.50	231,824.39	231,824.39	231,824.39	231,824.39	0.00	3,035,284.11	0.00	$31,901,405.49
Total Uranium		$5,477,803.07	$39,712,694.80	$6,956,290.04	$6,956,290.04	$32,756,404.76		$32,756,404.76	$285,495,722.60
Thorium									
Tronox LLC[3]	54,418,974.93	2,316,623.16	2,316,623.16	2,316,623.16	2,316,623.16	0.00	52,102,351.77	0.00	342,797,432.93
Total Thorium	$54,418,974.93	$2,316,623.16	$2,316,623.16	$2,316,623.16	$2,316,623.16	$0.00	$52,102,531.77	$0.00	$342,797,432.93
Total Uranium and Thorium		$7,794,426.23	$42,029,317.96	$9,272,913.20	$9,272,913.20	$32,756,404.76		$32,756,404.76	$628,293,155.53

[1] Reimbursements to the licensees were issued on January 26, 2011, for the claims submitted in 2010 within the individual reimbursement limits for each licensee.
[2] Formerly Quivira Mining Company.
[3] Formerly Kerr-McGee Chemical LLC.

Exhibit E-19. FY 2012 Individual Approved Claim Amounts and Payments (March & May, 2012[1])

Licensee	FY 2012 Individual Reimbursement Limits	Approved Claim Amounts After FRR	Final Approved Claims Plus Unpaid Claim Balances	Total Unpaid Claims Within Limits	FY 2012 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments	Unpaid Claim Balances in Excess of Limits After Payments	Total Payments Through FY 2012
Uranium									
American Nuclear Corp. Site	19,798,238.01						19,795,562.32		
American Nuclear Corporation		0.00	0.00	0.00	0.00	0.00		0.00	$820,406.91
State of Wyoming		4,021.67	4,021.67	4,021.67	2,675.69	1,345.98		0.00	$1,279,333.97
Atlantic Richfield Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$32,305,902.36
Utah/NRC Moab Escrow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$9,694,190.01
Cotter Corporation	97,121.30	0.00	375,505.35	97,121.30	64,616.65	310,888.70	32,504.65	278,384.05	$3,099,657.25
Dawn Mining Company	2,140,117.72	1,275,498.00	1,275,498.00	1,275,498.00	848,613.06	426,884.94	1,291,504.66	0.00	$10,352,182.92
Homestake Mining Company	62,210,672.94	4,136,265.09	4,136,265.09	4,136,265.09	2,751,935.79	1,384,329.30	59,458,737.15	0.00	$54,005,070.65
Pathfinder Mines Corporation	17,493,629.42	24,317.67	24,317.67	24,317.67	16,179.01	8,138.66	17,477,450.41	0.00	$10,781,610.30
Petrotomics Company	0.00	0.00	0.00	0.00	0.00	0.00	4,358,515.85	0.00	$2,850,428.21
Rio Algom Mining LLC [2]	58,362,075.77	710,145.15	710,145.15	710,145.15	472,473.07	237,672.08	57,889,602.70	0.00	$41,713,145.77
Tennessee Valley Authority	501,022.57	0.00	9,473,058.23	501,022.57	333,339.84	9,139,718.39	167,682.73	8,972,035.66	$15,990,295.33
Umetco Minerals Corp.-CO	1,757,741.35	0.00	19,184,387.61	1,757,741.35	1,169,458.73	18,014,928.88	588,282.62	17,426,646.26	$56,098,876.11
Umetco Minerals Corp.-WY	648,400.30	0.00	3,723,453.57	648,400.30	431,393.04	3,292,060.53	217,007.26	3,075,053.27	$20,693,902.20
Western Nuclear, Inc.	4,153,258.18	240,726.90	240,726.90	240,726.90	160,160.18	80,566.72	3,993,098.00	0.00	$32,061,565.67
Total Uranium		$6,390,974.48	$39,147,379.24	$9,395,260.00	$6,250,845.06	$32,896,534.18		$29,752,119.24	$291,746,567.66
Thorium									
West Chicago Env. Resp. Trust[3]	53,769,627.03	13,154,437.94	13,154,437.94	13,154,437.94	8,751,897.62	4,402,540.32	45,017,729.41	0.00	351,549,330.55
Total Thorium	$53,769,627.03	$13,154,437.94	$13,154,437.94	$13,154,437.94	$8,751,897.62	$4,402,540.32	$45,017,729.41	$0.00	$351,549,330.55
Total Uranium and Thorium		$19,545,412.42	$52,301,817.18	$22,549,697.94	$15,002,742.68	$37,299,074.50		$29,752,119.24	$643,295,898.21

[1] Reimbursements to the licensees were authorized on March 8, 2012 and May 30, 2012 for the claims submitted in 2011 within the individual reimbursement limits for each licensee.
[2] Formerly Quivira Mining Company.
[3] Former licensees: Kerr-McGee Chemical LLC, and Tronox LLC. The West Chicago Environmental Response Trust was appointed as the new licensee and trustee for the West Chicago Site in February of 2011.

Exhibit E-20. FY 2013 Individual Approved Claim Amounts and Payments[1]

Licensee	FY 2013 Individual Reimbursement Limits	Approved Claim Amounts After FRR	Final Approved Claims Plus Unpaid Claim Balances	Total Unpaid Claims Within Limits	FY 2013 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments	Unpaid Claim Balances in Excess of Limits After Payments	Total Payments Through FY 2013
Uranium									
American Nuclear Corp. Site	20,255,363.68		0.00				20,255,363.68		
American Nuclear Corporation		0.00		0.00	0.00	0.00		0.00	$820,406.91
State of Wyoming		0.00	1,345.98	1,345.98	0.00	1,345.98		0.00	$1,279,333.97
Atlantic Richfield Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$32,305,902.36
Utah/NRC Moab Escrow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$9,694,190.01
Cotter Corporation	98,280.05	0.00	310,888.70	98,280.05	0.00	310,888.70	98,280.05	212,608.65	$3,099,657.25
Dawn Mining Company	1,536,022.10	559,917.21	986,802.15	986,802.15	0.00	986,802.15	1,536,022.10	0.00	$10,352,182.92
Homestake Mining Company	61,841,477.12	3,475,576.83	4,859,906.13	4,859,906.13	0.00	4,859,906.13	61,841,477.12	0.00	$54,005,070.65
Pathfinder Mines Corporation	18,070,890.69	0.00	8,138.66	8,138.66	0.00	8,138.66	18,070,890.69	0.00	$10,781,610.30
Petrotomics Company	4,509,903.67	0.00	0.00	0.00	0.00	0.00	4,509,903.67	0.00	$2,850,428.21
Rio Algom Mining LLC[2]	59,981,260.42	408,369.53	646,041.61	646,041.61	0.00	646,041.61	59,981,260.42	0.00	$41,713,145.77
Tennessee Valley Authority	507,000.27	0.00	9,139,718.39	507,000.27	0.00	9,139,718.39	507,000.27	8,632,718.12	$15,990,295.33
Umetco Minerals Corp.-CO	1,778,712.96	847,985.18	18,862,914.06	1,778,712.96	0.00	18,862,914.06	1,778,712.96	17,084,201.10	$56,098,876.11
Umetco Minerals Corp.-WY	656,136.36	949,417.90	4,241,478.43	656,136.36	0.00	4,241,478.43	656,136.36	3,585,342.07	$20,693,902.20
Western Nuclear, Inc.	4,750,245.93	154,724.62	235,291.34	235,291.34	0.00	235,291.34	4,750,245.93	0.00	$32,061,565.67
Total Uranium		$6,395,991.27	$39,292,525.45	$9,777,655.51	$0.00	$39,292,525.45		$29,514,869.94	$291,746,567.66
Thorium									
West Chicago Env. Resp. Trust[3]	$45,963,101.73	10,891,684.54	15,294,224.86	15,294,224.86	0.00	15,294,224.86	45,963,101.73	0.00	351,549,330.55
Total Thorium	$45,963,101.73	$10,891,684.54	$15,294,224.86	$15,294,224.86	$0.00	$15,294,224.86	$45,963,101.73	$0.00	$351,549,330.55
Total Uranium & Thorium		$17,287,675.81	$54,586,750.31	$25,071,880.37	$0.00	$54,586,750.31		$29,514,869.94	$643,295,898.21

[1] Due to funding shortages, DOE was unable to provide reimbursements to uranium and thorium licensees in FY 2013.
[2] Formerly Quivira Mining Company.
[3] Former licensees: Kerr-McGee Chemical LLC, and Tronox LLC. The West Chicago Environmental Response Trust was appointed as the new licensee and trustee for the West Chicago Site in February of 2011.

Exhibit E-21. FY 2014 Individual Approved Claim Amounts and Payments[1]

Licensee	FY 2014 Individual Reimbursement Limits	Approved Claim Amounts After FRR	Final Approved Claims Plus Unpaid Claim Balances	Total Unpaid Claims Within Limits	FY 2014 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments	Unpaid Claim Balances in Excess of Limits After Payments	Total Payments Through FY 2014
Uranium									
American Nuclear Corp. Site	20,590,690.25	0.00	0.00				20,590,690.25		
American Nuclear Corporation		0.00	0.00	0.00	0.00	0.00		0.00	820,406.91
State of Wyoming		0.00	1,345.98	1,345.98	0.00	1,345.98		0.00	1,279,333.97
Atlantic Richfield Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32,305,902.36
Utah/NRC Moab Escrow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9,694,190.01
Cotter Corporation	146,249.11	0.00	310,888.70	146,249.11	0.00	310,888.70	146,249.11	164,639.59	3,099,657.25
Dawn Mining Company[4]	1,714,345.17	775,305.97	1,762,108.12	1,714,345.17	0.00	1,762,108.12	1,714,345.17	47,762.95	10,352,182.92
Homestake Mining Company[4]	63,579,175.33	3,372,101.13	8,232,007.26	8,232,007.26	0.00	8,232,007.26	63,579,175.33	0.00	54,005,070.65
Pathfinder Mines Corporation	18,503,678.20	0.00	8,138.66	8,138.66	0.00	8,138.66	18,503,678.20	0.00	10,781,610.30
Petrotomics Company	4,620,308.65	0.00	0.00	0.00	0.00	0.00	4,620,308.65	0.00	2,850,428.21
Rio Algom Mining LLC [2]	61,506,676.51	0.00	646,041.61	646,041.61	0.00	646,041.61	61,506,676.51	0.00	41,713,145.77
Tennessee Valley Authority	754,459.71	0.00	9,139,718.39	754,459.71	0.00	9,139,718.39	754,459.71	8,385,258.68	15,990,295.33
Umetco Minerals Corp.-CO[4]	2,646,876.79	505,096.48	19,368,010.54	2,646,876.79	0.00	19,368,010.54	2,646,876.79	16,721,133.75	56,098,876.11
Umetco Minerals Corp.-WY	976,386.93	123,376.46	4,364,854.89	976,386.93	0.00	4,364,854.89	976,386.93	3,388,467.96	20,693,902.20
Western Nuclear, Inc.	5,302,423.11	155,553.20	390,844.54	390,844.54	0.00	390,844.54	5,302,423.11	0.00	32,061,565.67
Total Uranium		4,931,433.24	44,223,958.69	15,516,695.76	0.00	44,223,958.69		28,707,262.93	291,746,567.66
Thorium									
West Chicago Env. Resp. Trust[34]	46,652,548.26	12,560,975.91	27,855,200.77	27,855,200.77	0.00	27,855,200.77	46,652,548.26	0.00	351,549,330.55
Total Thorium	46,652,548.26	12,560,975.91	27,855,200.77	27,855,200.77	0.00	27,855,200.77	46,652,548.26	0.00	351,549,330.55
Total Uranium & Thorium		17,492,409.15	72,079,159.46	43,371,896.53	0.00	72,079,159.46		28,707,262.93	643,295,898.21

[1] Due to funding shortages, DOE was unable to provide reimbursements to uranium and thorium licensees in FY 2014.
[2] Formerly Quivira Mining Company.
[3] Former licensees: Kerr-McGee Chemical LLC, and Tronox LLC. The West Chicago Environmental Response Trust was appointed as the new licensee and trustee for the West Chicago Site in February of 2011.
[4] Financial reviews were conducted and amounts have been updated as appropriate.

Exhibit E-22. FY 2015a Individual Approved Claim Amounts and Payments

Licensee	FY 2015 Individual Reimbursement Limits	Approved Claim Amounts After FRR[3]	Final Approved Claims Plus Unpaid Claim Balances	Total Unpaid Claims Within Limits	FY 2015 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments	Unpaid Claim Balances in Excess of Limits After Payments	Total Payments Through FY 2015
Uranium									
American Nuclear Corp. Site	20,953,737.15		0.00				20,953,259.21	0.00	
American Nuclear Corporation		0.00	0.00	0.00	0.00	0.00		0.00	$820,406.91
State of Wyoming		0.00	1,345.98	1,345.98	477.94	868.04		0.00	$1,279,811.91
Atlantic Richfield Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$32,305,902.36
Utah/NRC Moab Escrow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$9,694,190.01
Cotter Corporation	198,183.61	0.00	310,888.70	198,183.61	70,372.13	240,516.57	127,811.48	112,705.09	$3,170,029.38
Dawn Mining Company	1,907,409.62	0.00	986,802.15	986,802.15	350,399.15	636,403.00	1,557,010.47	0.00	$10,702,582.07
Homestake Mining Company	65,460,523.27	0.00	4,859,906.13	4,859,906.13	1,725,682.25	3,134,223.88	63,734,841.02	0.00	$55,730,752.90
Pathfinder Mines Corporation	18,972,242.82	0.00	8,138.66	8,138.66	2,889.92	5,248.74	18,969,352.90	0.00	$10,784,500.22
Petrotomics Company	4,739,840.44	0.00	0.00	0.00	0.00	0.00	4,739,840.44	0.00	$2,850,428.21
Rio Algom Mining LLC [1]	63,158,193.67	0.00	646,041.61	646,041.61	229,400.00	416,641.61	62,928,793.67	0.00	$41,942,545.77
Tennessee Valley Authority	1,022,375.79	0.00	9,139,718.39	1,022,375.79	363,030.83	8,776,687.56	659,344.96	8,117,342.60	$16,353,326.16
Umetco Minerals Corp.-CO	3,586,808.84	0.00	18,862,914.06	3,586,808.84	1,273,623.85	17,589,290.21	2,313,184.99	15,276,105.22	$57,372,499.96
Umetco Minerals Corp.-WY	1,323,111.56	0.00	4,241,478.43	1,323,111.56	469,817.74	3,771,660.69	853,293.82	2,918,366.87	$21,163,719.94
Western Nuclear, Inc.	5,900,246.93	0.00	235,291.34	235,291.34	83,548.55	151,742.79	5,816,698.38	0.00	$32,145,114.22
Total Uranium	187,222,673.70	0.00	39,292,525.45	12,868,005.67	4,569,242.36	34,723,283.09		26,424,519.78	296,315,810.02
Thorium									
West Chicago Env. Resp. Trust[2]	47,398,989.03	0.00	15,294,224.86	15,294,224.86	5,430,757.64	9,863,467.22	41,968,231.39	0.00	356,980,088.19
Total Thorium	47,398,989.03	0.00	15,294,224.86	15,294,224.86	5,430,757.64	9,863,467.22	41,968,231.39	0.00	356,980,088.19
Total Uranium & Thorium		0.00	54,586,750.31	28,162,230.53	10,000,000.00	44,586,750.31	224,621,662.73	26,424,519.78	653,295,898.21

[1] Formerly Quivira Mining Company.

[2] Former licensees: Kerr-McGee Chemical LLC, and Tronox LLC. The West Chicago Environmental Response Trust was appointed as the new licensee and trustee for the West Chicago Site in February of 2011.

[3] 2015a reimbursements were based on already approved claims from FY 2013 in Exhibit D-20 since at the time of available appropriations, DOE was in the process of conducting a financial review on claims shown in Exhibit D-21 (claims submitted to DOE in FY 2013 that were reported in the FY 2014 Title X Annual Report) and Exhibit D-23 (claims submitted to DOE in FY 2014 that are newly being reported in this year's Title X Annual Report).

Exhibit E-23. FY 2015b Individual Approved Claim Amounts and Payments

Licensee	FY 2015 Individual Reimbursement Limits	Approved Claim Amounts After FRR	Final Approved Claims Plus Unpaid Claim Balances	Total Unpaid Claims Within Limits	FY 2015 Payments[3]	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments	Unpaid Claim Balances in Excess of Limits After Payments	Total Payments Through FY 2015
Uranium									
American Nuclear Corp. Site	20,953,259.21		0.00				20,953,259.21	0.00	
American Nuclear Corporation		0.00	0.00	0.00	0.00	0.00			$820,406.91
State of Wyoming		0.00	868.04	868.04	0.00	868.04			$1,279,811.91
Atlantic Richfield Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$32,305,902.36
Utah/NRC Moab Escrow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$9,694,190.01
Cotter Corporation	127,811.48	0.00	240,516.57	127,811.48	0.00	240,516.57	127,811.48	112,705.09	$3,170,029.38
Dawn Mining Company	1,557,010.47	3,548,582.17	4,960,291.14	1,557,010.47	0.00	4,960,291.14	1,557,010.47	3,403,280.67	$10,702,582.07
Homestake Mining Company	63,734,841.02	3,606,612.92	10,112,937.93	10,112,937.93	0.00	10,112,937.93	63,734,841.02	0.00	$55,730,752.90
Pathfinder Mines Corporation	18,969,352.90	0.00	5,248.74	5,248.74	0.00	5,248.74	18,969,352.90	0.00	$10,784,500.22
Petrotomics Company	4,739,840.44	0.00	0.00	0.00	0.00	0.00	4,739,840.44	0.00	$2,850,428.21
Rio Algom Mining LLC [1]	62,928,793.67	3,165,542.31	3,582,183.92	3,582,183.92	0.00	3,582,183.92	62,928,793.67	0.00	$41,942,545.77
Tennessee Valley Authority	659,344.96	0.00	8,776,687.56	659,344.96	0.00	8,776,687.56	659,344.96	8,117,342.60	$16,353,326.16
Umetco Minerals Corp.-CO	2,313,184.99	0.00	18,094,386.69	2,313,184.99	0.00	18,094,386.69	2,313,184.99	15,781,201.70	$57,372,499.96
Umetco Minerals Corp.-WY	853,293.82	0.00	3,895,037.15	853,293.82	0.00	3,895,037.15	853,293.82	3,041,743.33	$21,163,719.94
Western Nuclear, Inc.	5,816,698.38	278,378.03	585,674.02	585,674.02	0.00	585,674.02	5,816,698.38	0.00	$32,145,114.22
Total Uranium	182,653,431.34	10,599,115.43	50,253,831.76	19,797,558.37	0.00	50,253,831.76		30,456,273.39	296,315,810.02
Thorium									
West Chicago Env. Resp. Trust[2]	41,968,231.39	5,483,930.15	27,908,373.28	27,908,373.28	0.00	27,908,373.28	41,968,231.39	0.00	356,980,088.19
Total Thorium	41,968,231.39	5,483,930.15	27,908,373.28	27,908,373.28	0.00	27,908,373.28	41,968,231.39	0.00	356,980,088.19
Total Uranium & Thorium		16,083,045.58	78,162,205.04	47,705,931.65	0.00	78,162,205.04	224,621,662.73	30,456,273.39	653,295,898.21

[1] Formerly Quivira Mining Company.
[2] Former licensees: Kerr-McGee Chemical LLC, and Tronox LLC. The West Chicago Environmental Response Trust was appointed as the new licensee and trustee for the West Chicago Site in February of 2011.
[3] FY 2015 appropriations provided reimbursements that were applied to Exhibit D-22.

Exhibit E-24. FY 2016 Individual Approved Claim Amounts and Payments

Licensee	FY 2016 Individual Reimbursement Limits	Approved Claim Amounts After FRR	Final Approved Claims Plus Unpaid Claim Balances	Total Unpaid Claims Within Limits	FY 2016 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments	Unpaid Claim Balances in Excess of Limits After Payments	Total Payments Through FY 2016
Uranium									
American Nuclear Corp. Site	20,976,312.69						20,966,282.29	0.00	
American Nuclear Corporation		0.00	0.00	0.00	0.00	0.00		0.00	820,406.91
State of Wyoming		18,563.73	19,431.77	19,431.77	10,030.40	9,401.37		0.00	1,289,842.31
Atlantic Richfield Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32,305,902.36
Utah/NRC Moab Escrow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9,694,190.01
Cotter Corporation	131,109.32	0.00	240,516.57	131,109.32	67,676.78	172,839.79	63,432.54	109,407.25	3,237,706.16
Dawn Mining Company	1,569,270.06	3,487,709.98	8,448,001.12	1,569,270.06	810,035.04	7,637,966.08	759,235.02	6,878,731.06	11,512,617.11
Homestake Mining Company	63,854,306.61	7,235,108.43	17,348,046.36	17,348,046.36	8,954,816.52	8,393,229.84	54,899,490.09	0.00	64,685,569.42
Pathfinder Mines Corporation	18,999,106.75	0.00	5,248.74	5,248.74	2,709.33	2,539.41	18,996,397.42	0.00	10,787,209.55
Petrotomics Company	4,747,430.71	0.00	0.00	0.00	0.00	0.00	4,747,430.71	0.00	2,850,428.21
Rio Algom Mining LLC [1]	63,033,665.01	2,385,899.36	5,968,083.28	5,968,083.28	3,080,640.30	2,887,442.98	59,953,024.71	0.00	45,023,186.07
Tennessee Valley Authority	676,357.63	0.00	8,776,687.56	676,357.63	349,126.26	8,427,561.30	327,231.37	8,100,329.93	16,702,452.42
Umetco Minerals Corp.-CO	2,372,870.67	1,738,828.81	19,833,215.50	2,372,870.67	1,224,842.33	18,608,373.17	1,148,028.34	17,460,344.83	58,597,342.29
Umetco Minerals Corp.-WY	875,310.83	148,666.80	4,043,703.95	875,310.83	451,823.09	3,591,880.86	423,487.74	3,168,393.12	21,615,543.03
Western Nuclear, Inc.	5,854,660.19	199,981.54	785,655.56	785,655.56	405,544.30	380,111.26	5,449,115.89	0.00	32,550,658.52
Total Uranium	183,090,400.47	15,214,758.65	65,468,590.41	29,751,384.22	15,357,244.35	50,111,346.06	167,733,156.12	35,717,206.19	311,673,054.37
Thorium									
West Chicago Env. Resp. Trust[2]	42,010,199.62	6,191,272.68	34,099,645.96	34,099,645.96	17,601,755.65	16,497,890.31	24,408,443.97	0.00	374,581,843.84
Total Thorium	42,010,199.62	6,191,272.68	34,099,645.96	34,099,645.96	17,601,755.65	16,497,890.31	24,408,443.97	0.00	374,581,843.84
Total Uranium & Thorium		21,406,031.33	99,568,236.37	63,851,030.18	32,959,000.00	66,609,236.37	192,141,600.09	35,717,206.19	686,254,898.21

[1] Formerly Quivira Mining Company.
[2] Former licensees: Kerr-McGee Chemical LLC, and Tronox LLC. The West Chicago Environmental Response Trust was appointed as the new licensee and trustee for the West Chicago Site in February of 2011.

Exhibit E-25. FY 2017 Individual Approved Claim Amounts and Payments

Licensee	FY 2017 Individual Reimbursement Limits	Approved Claim Amounts After FRR	Final Approved Claims Plus Unpaid Claim Balances	Total Unpaid Claims Within Limits	FY 2017 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments	Unpaid Claim Balances in Excess of Limits After Payments	Total Payments Through FY 2017
Uranium									
American Nuclear Corp. Site	21,266,277.20						21,191,525.70	0.00	
American Nuclear Corporation		0.00	0.00	0.00	0.00	0.00		0.00	820,406.91
State of Wyoming		110,076.11	119,477.48	119,477.48	74,751.50	44,725.98		0.00	1,364,593.81
Atlantic Richfield Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32,305,902.36
Utah/NRC Moab Escrow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9,694,190.01
Cotter Corporation	106,347.35	0.00	172,839.79	106,347.35	66,536.59	106,303.20	39,810.76	66,492.44	3,304,242.75
Dawn Mining Company	918,769.10	0.00	7,637,966.08	918,769.10	574,831.05	7,063,135.03	343,938.05	6,719,196.98	12,087,448.16
Homestake Mining Company	56,454,095.87	10,782,797.95	19,176,027.79	19,176,027.79	11,997,547.78	7,178,480.01	44,456,548.09	0.00	76,683,117.20
Pathfinder Mines Corporation	19,383,584.31	0.00	2,539.41	2,539.41	1,588.79	950.62	19,381,995.52	0.00	10,788,798.34
Petrotomics Company	4,846,202.88	0.00	0.00	0.00	0.00	0.00	4,846,202.88	0.00	2,850,428.21
Rio Algom Mining LLC [1]	61,317,715.45	170,456.81	3,057,899.79	3,057,899.79	1,913,185.53	1,144,714.26	59,404,529.92	0.00	46,936,371.60
Tennessee Valley Authority	548,617.26	0.00	8,427,561.30	548,617.26	343,244.28	8,084,317.02	205,372.98	7,878,944.04	17,045,696.70
Umetco Minerals Corp.-CO	1,924,718.16	448,703.71	19,057,076.88	1,924,718.16	1,204,206.54	17,852,870.34	720,511.62	17,132,358.72	59,801,548.83
Umetco Minerals Corp.-WY	709,995.14	234,142.33	3,826,023.19	709,995.14	444,210.90	3,381,812.29	265,784.24	3,116,028.05	22,059,753.93
Western Nuclear, Inc.	5,943,112.96	302,768.21	682,879.47	682,879.47	427,245.88	255,633.59	5,515,867.08	0.00	32,977,904.40
Total Uranium	173,419,435.68	12,048,945.12	62,160,291.18	27,247,270.95	17,047,348.84	45,112,942.34	156,372,086.84	34,913,020.23	328,720,403.21
Thorium									
West Chicago Env. Resp. Trust [2]	24,725,753.74	4,204,706.85	20,702,597.16	20,702,597.16	12,952,651.16	7,749,946.00	11,773,102.58	0.00	387,534,495.00
Total Thorium	24,725,753.74	4,204,706.85	20,702,597.16	20,702,597.16	12,952,651.16	7,749,946.00	11,773,102.58	0.00	387,534,495.00
Total Uranium & Thorium		16,253,651.97	82,862,888.34	47,949,868.11	30,000,000.00	52,862,888.34	168,145,189.42	34,913,020.23	716,254,898.21

Exhibit E-26. FY 2018 Individual Approved Claim Amounts and Payments

Licensee	FY 2018 Individual Reimbursement Limits	Approved Claim Amounts After FRR	Final Approved Claims Plus Unpaid Claim Balances	Total Unpaid Claims Within Limits	FY 2018 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments	Unpaid Claim Balances in Excess of Limits After Payments	Total Payments Through FY 2018
Uranium									
American Nuclear Corp. Site	21,682,432.75						21,561,541.20	0.00	
American Nuclear Corporation State of Wyoming		0.00	0.00	0.00	0.00	0.00		0.00	820,406.91
		76,165.57	120,891.55	120,891.55	120,891.55	0.00		0.00	1,485,485.36
Atlantic Richfield Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32,305,902.36
Utah/NRC Moab Escrow	0.00	0.00	0.00	0.00	0.00	.00	0.00	0.00	9,694,190.01
Cotter Corporation	110,035.88	0.00	106,303.20	106,303.20	106,303.20	0.00	3,732.68	0.00	3,410,545.95
Dawn Mining Company	604,997.16	0.00	7,063,135.03	604,997.16	2,343,009.55	4,720,125.48	0.00	4,720,125.48	14,430,457.71
Homestake Mining Company	47,000,481.06	6,200,297.58	13,378,777.59	13,378,777.59	13,378,777.59	0.00	33,621,703.47	0.00	90,061,894.79
Pathfinder Mines Corporation	20,015,582.19	0.00	950.62	950.62	950.62	0.00	20,014,631.57	0.00	10,789,748.96
Petrotomics Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,850,428.21
Rio Algom Mining LLC [1]	61,637,688.85	0.00	1,144,714.26	1,144,714.26	1,144,714.26	0.00	60,492,974.59	0.00	48,081,085.86
Tennessee Valley Authority	567,645.44	0.00	8,084,317.02	567,645.44	2,305,657.83	5,778,659.19	0.00	5,778,659.19	19,351,354.53
Umetco Minerals Corp.-CO	1,991,474.89	521,361.45	18,374,231.79	1,991,474.89	3,729,487.28	14,644,744.51	0.00	14,644,744.51	63,531,036.11
Umetco Minerals Corp.-WY	734,620.55	68,541.48	3,450,353.77	734,620.55	2,472,632.94	977,720.83	0.00	977,720.83	24,532,386.87
Western Nuclear, Inc.	6,324,236.28	325,383.14	581,016.73	581,016.73	581,016.73	0.00	5,743,219.55	0.00	33,558,921.13
Total Uranium	160,669,195.05	7,191,749.22	52,304,691.56	19,231,391.99	26,183,441.55	26,121,250.01	141,537,803.06	26,121,250.01	354,903,844.76
Thorium									
West Chicago Env. Resp. Trust [2]	12,020,337.73	1,798,612.45	9,548,558.45	9,548,558.45	9,548,558.45	0.00	2,471,779.28	0.00	397,083,053.45
Total Thorium	12,020,337.73	1,798,612.45	9,548,558.45	9,548,558.45	12,952,651.16	0.00	2,471,779.28	0.00	397,083,053.45
Total Uranium & Thorium		8,990,361.67	61,853,250.01	28,779,950.44	35,732,000.00	26,121,250.01	143,909,582.34	26,121,250.01	751,986,898.21

Exhibit E-27. FY 2019 Individual Approved Claim Amounts and Payments

Licensee	FY 2019 Individual Reimbursement Limits	Approved Claim Amounts After FRR	Final Approved Claims Plus Unpaid Claim Balances	Total Unpaid Claims Within Limits	FY 2019 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments[1]	Unpaid Claim Balances in Excess of Limits After Payments	Total Payments Through FY 2019
Uranium									
American Nuclear Corp. Site	22,134,359.61						22,134,359.61	0.00	
American Nuclear Corporation		0.00	0.00	0.00	0.00	0.00		0.00	820,406.91
State of Wyoming		0.00	0.00	0.00	0.00	0.00		0.00	1,485,485.36
Atlantic Richfield Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32,305,902.36
Utah/NRC Moab Escrow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9,694,190.01
Cotter Corporation	85,675.37	0.00	0.00	0.00	0.00	0.00	85,675.37	0.00	3,410,545.95
Dawn Mining Company	0.00	0.00	4,720,125.48	0.00	1,410,863.39	3,309,262.09	0.00	3,309,262.09	15,841,321.10
Homestake Mining Company	36,590,109.83	4,487,179.14	4,487,179.14	4,487,179.14	4,487,179.14	0.00	32,102,930.69	0.00	94,549,073.93
Orano (Pathfinder)	20,753,936.70	0.00	0.00	0.00	0.00	0.00	20,753,936.70	0.00	10,789,748.96
Petrotomics Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,850,428.21
Rio Algom Mining LLC [1]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48,081,085.86
Tennessee Valley Authority	0.00	0.00	5,778,659.19	0.00	1,410,863.39	4,367,795.80	0.00	4,367,795.80	20,762,217.92
Umetco Minerals Corp.-CO	0.00	73,581.93	14,718,326.44	0.00	1,410,863.38	13,307,463.06	0.00	13,307,463.06	64,941,899.49
Umetco Minerals Corp.-WY	0.00	3,976.82	981,697.65	0.00	981,697.65	0.00	0.00	0.00	25,514,084.52
Western Nuclear, Inc.	6,686,470.93	77,184.91	77,184.91	77,184.91	77,184.91	0.00	6,609,286.02	0.00	33,636,106.04
Total Uranium	86,250,552.44	4,641,922.80	30,763,172.81	4,564,364.05	9,778,651.86	20,984,520.95	81,686,188.39	20,984,520.95	364,682,496.62
Thorium									
West Chicago Env. Resp. Trust[2]	2,531,101.98	1,221,348.14	1,221,348.14	1,221,348.14	1,221,348.14	0.00	1,309,753.84	0.00	398,304,401.59
Total Thorium	2,531,101.98	1,221,348.14	1,221,348.14	1,221,348.14	1,221,348.14	0.00	1,309,753.84	0.00	398,304,401.59
Total Uranium & Thorium	88,781,654.42	5,863,270.94	31,984,520.95	5,785,712.19	11,000,000.00	20,984,520.95	79,192,517.81	20,984,520.95	762,986,898.21

Exhibit E-28. FY 2020 Individual Approved Claim Amounts and Payments

Licensee	FY 2020 Individual Reimbursement Limits	Approved Claim Amounts After FRR	Final Approved Claims Plus Unpaid Claim Balances	Total Unpaid Claims Within Limits	FY 2020 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments[1]	Unpaid Claim Balances in Excess of Limits After Payments	Total Payments Through FY 2020
Uranium									
American Nuclear Corp. Site	22,574,284.14			0.00	0.00		22,574,284.14	0.00	0.00
American Nuclear Corporation		0.00	0.00	0.00	0.00	0.00		0.00	820,406.91
State of Wyoming		0.00	0.00	0.00	0.00	0.00		0.00	1,485,485.36
Atlantic Richfield Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32,305,902.36
Utah/NRC Moab Escrow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9,694,190.01
Cotter Corporation							52,152.82	193,770.26	3,410,545.95
Colorado Legacy Land	148,607.35	342,377.61	342,377.61	148,607.35	96,454.53	245,923.08	0.00	0.00	96,454.53
Dawn Mining Company	0.00	0.00	3,309,262.09	0.00	0.00	3,309,262.09	0.00	3,309,262.09	15,841,321.10
Homestake Mining Company	34,382,666.77	6,606,730.65	6,606,730.65	6,606,730.65	4,288,139.71	2,318,590.94	30,094,527.06	0.00	98,837,213.64
Orano (Pathfinder)	21,321,723.05	0.00	0.00	0.00	0.00	0.00	21,321,723.05	0.00	10,789,748.96
Petrotomics Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,850,428.21
Rio Algom Mining LLC [1]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48,081,085.86
Tennessee Valley Authority	0.00	0.00	4,367,795.80	0.00	0.00	4,367,795.80	0.00	4,367,795.80	20,762,217.92
Umetco Minerals Corp.-CO	0.00	0.00	13,307,463.06	0.00	0.00	13,307,463.06	0.00	13,307,463.06	64,941,899.49
Umetco Minerals Corp.-WY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25,514,084.52
Western Nuclear, Inc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33,636,106.04
Total Uranium	78,427,281.31	6,949,108.26	27,933,629.21	6,755,338.00	4,384,594.24	23,549,034.97	74,042,687.07	21,178,291.21	369,067,090.86
Thorium									
West Chicago Env. Resp. Trust[2]	1,333,329.41	1,607,052.49	1,607,052.49	1,333,329.41	865,405.76	741,646.73	467,923.65	273,723.08	399,169,807.35
Total Thorium	1,333,329.41	1,607,052.49	1,607,052.49	1,333,329.41	865,405.76	741,646.73	467,923.65	273,723.08	399,169,807.35
Total Uranium & Thorium	79,760,610.72	8,556,160.75	29,540,681.70	8,088,667.41	5,250,000.00	24,290,681.70	74,510,610.72	21,452,014.29	768,236,898.21

Exhibit E-29. FY 2021 Individual Approved Claim Amounts and Payments

Licensee	FY 2021 Individual Reimbursement Limits	Approved Claim Amounts After FRR	Final Approved Claims Plus Unpaid Claim Balances	Total Unpaid Claims Within Limits	FY 2021 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments	Unpaid Claim Balances in Excess of Limits After Payments	Total Payments Through FY 2021
Uranium									
American Nuclear Corp. Site	22,872,846.26			0.00	0.00		22,872,846.26	0.00	
American Nuclear Corporation		0.00	0.00	0.00	0.00	0.00		0.00	820,406.91
State of Wyoming		0.00	0.00	0.00	0.00	0.00		0.00	1,485,485.36
Atlantic Richfield Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32,305,902.36
Utah/NRC Moab Escrow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9,694,190.01
Cotter Corporation							35,894.53	832,056.88	3,410,545.95
Colorado Legacy Land	94,862.66	680,996.46	926,919.54	94,862.66	58,968.13	867,951.41	0.00	0.00	155,422.66
Dawn Mining Company	0.00	0.00	3,309,262.09	0.00	0.00	3,309,262.09	0.00	3,309,262.09	15,841,321.10
Homestake Mining Company	31,641,707.95	4,910,455.37	7,229,046.31	7,229,046.31	4,493,689.28	2,735,357.03	27,148,018.67	0.00	103,330,902.92
Orano (Pathfinder)	21,707,060.71	0.00	0.00	0.00	0.00	0.00	21,707,060.71	0.00	10,789,748.96
Petrotomics Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,850,428.21
Rio Algom Mining LLC [1]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48,081,085.86
Tennessee Valley Authority	0.00	0.00	4,367,795.80	0.00	0.00	4,367,795.80	0.00	4,367,795.80	20,762,217.92
Umetco Minerals Corp.-CO	246,106.11	1,170,285.00	14,477,748.05	246,106.11	152,983.44	14,324,764.61	93,122.67	14,231,641.94	65,094,882.94
Umetco Minerals Corp.-WY	0.00	320,489.17	320,489.17	0.00	0.00	320,489.17	0.00	320,489.17	25,514,084.52
Western Nuclear, Inc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33,636,106.04
Total Uranium	76,562,583.69	7,082,226.00	30,631,260.97	7,570,015.08	4,705,640.85	25,925,620.12	71,856,942.84	23,061,245.89	373,772,731.71
Thorium									
West Chicago Env. Resp. Trust [2]	473,538.73	0.00	741,646.73	473,538.73	294,359.15	447,287.58	179,179.58	268,108.00	399,464,166.50
Total Thorium	473,538.73	0.00	741,646.73	473,538.73	294,359.15	447,287.58	179,179.58	268,108.00	399,464,166.50
Total Uranium & Thorium	77,036,122.42	7,082,226.00	31,372,907.70	8,043,553.81	5,000,000.00	26,372,907.70	72,036,122.42	23,329,353.89	773,236,898.21

Exhibit E-30. FY 2022 Individual Approved Claim Amounts and Payments

Licensee	FY 2022 Individual Reimbursement Limits	Approved Claim Amounts After FRR	Final Approved Claims Plus Unpaid Claim Balances	Total Unpaid Claims Within Limits	FY 2022 Payments	Unpaid Claim Balances After Payments	Individual Reimbursement Limits After Payments	Unpaid Claim Balances in Excess of Limits After Payments	Total Payments Through FY 2022
Uranium									
American Nuclear Corp. Site	25,541,732.33						25,541,732.33		
American Nuclear Corporation								0.00	820,406.91
State of Wyoming		0.00	0.00	0.00	0.00	0.00		0.00	1,485,485.36
Atlantic Richfield Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32,305,902.36
Utah/NRC Moab Escrow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9,694,190.01
Cotter Site/Canon City, CO	205,182.10						0.00		
Cotter Corporation									3,410,545.95
Colorado Legacy Land		449,224.06	1,317,175.47	205,182.10	1,317,175.47	0.00		0.00	1,472,598.13
Dawn Mining Company	0.00	0.00	3,309,262.09	0.00	1,457,950.08	1,851,312.01	0.00	1,851,312.01	17,299,271.18
Homestake Mining Company	33,280,527.98	4,063,568.13	6,798,925.16	6,798,925.16	6,798,925.16	0.00	26,481,602.82	0.00	110,129,828.08
Orano (Pathfinder)	23,234,410.77	0.00	0.00	0.00	0.00	0.00	23,234,410.77	0.00	10,789,748.96
Petrotomics Company	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,850,428.21
Rio Algom Mining LLC [1]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48,081,085.86
Tennessee Valley Authority	0.00	0.00	4,367,795.80	0.00	1,457,950.08	2,909,845.72	0.00	2,909,845.72	22,220,168.00
Umetco Minerals Corp.-CO	3,156,958.93	0.00	14,324,764.61	3,156,958.93	4,614,909,02	9,709,855.59	0.00	9,709,855.59	69,709,791.96
Umetco Minerals Corp.-WY	0.00	0.00	320,489.17	0.00	320,489.17	0.00	0.00	0.00	25,834,573.69
Western Nuclear, Inc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33,636,106.04
Total Uranium	85,418,812.11	4,512,792.19	30,438,412.30	10,161,066.19	15,967,398.98	14,471,013.32	75,257,745.92	14,471,013.32	389,740,130.70
Thorium									
West Chicago Env. Resp. Trust[1]	187,601.02	0.00	447,287.58	187,601.02	187,601.02	0.00	0.00	0.00	399,651,767.52
Total Thorium	187,601.02	0.00	447,287.58	187,601.02	187,601.02	0.00	0.00	0.00	399,651,767.52
Total Uranium & Thorium	85,606,413.13	4,512,792.19	30,885,699.88	10,348,667.21	16,155,000.00	14,471,013.32	75,257,745.92	14,471,013.32	789,391,898.22

[1] West Chicago Environmental Response Trust claims have exceeded the Thorium statutory ceiling (as adjusted) – claims in excess of the ceiling cannot be paid.

APPENDIX F. STATUS OF REMAINING COSTS ELIGIBLE FOR FUTURE CLAIMS

Licensee	Federal Share of Total Costs in Approved Plans for Subsequent Remedial Action[1]	Maximum Federal Share of Potential Future Claims End of FY 2007[2]	Maximum Federal Share of Potential Future Claims End of FY 2008[3]	Maximum Federal Share of Potential Future Claims End of FY 2009[4]	Maximum Federal Share of Potential Future Claims End of FY 2010[5]	Maximum Federal Share of Potential Future Claims End of FY 2011[6]
Uranium						
State of Wyoming (ANC Site)	$2,820,674.07	$755,291.45	$755,291.45	$758,544.91	$755,000.44	$763,400.40
Cotter Corporation	$6,220,297.23	$2,894,387.00	$2,809,751.28	$2,916,521.83	$2,916,521.83	$2,963,186.18
Dawn Mining Company	$18,056,205.96	$11,140,288.98	$10,581,498.37	$10,545,114.63	$9,882,490.06	$9,081,699.65
Homestake Mining Company	$132,143,076.35	$88,216,625.81	$86,421,370.63	$88,029,166.00	$86,070,464.48	$85,458,390.61
Pathfinder Mines Corporation	$11,037,356.70	$344,885.44	$315,052.68	$327,024.68	$327,024.68	$288,439.77
Rio Algom Mining Company	$47,107,063.51	$20,795,449.15	$16,348,237.62	$12,313,165.85	$8,614,706.54	$6,418,236.40
Umetco Minerals Corporation-CO	$87,924,859.06	$21,828,606.00	$17,954,538.29	$15,274,952.06	$14,370,252.70	$14,600,176.74
Umetco Minerals Corporation-WY	$26,518,489.35	$3,932,679.19	$2,990,708.13	$2,947,478.49	$2,640,430.46	$2,682,677.34
Western Nuclear, Incorporated	$33,430,218.28	$2,760,584.28	$2,453,036.30	$1,926,044.90	$1,831,147.49	$1,624,912.27
Total Uranium	$365,258,240.51	$152,668,797.30	$140,629,484.75	$135,038,013.35	$127,408,038.68	$123,881,119.36
Thorium						
West Chicago	$401,391,628.45	$93,826,526.58	$80,976,184.65	$70,839,742.98	$63,504,181.14	$62,166,558.91
Total Thorium	$401,391,628.45	$93,826,526.58	$80,976,184.65	$70,839,742.98	$63,504,181.14	$62,166,558.91
Total Uranium and Thorium	$766,649,868.96	$246,495,323.88	$221,605,669.40	$205,877,756.33	$190,912,219.82	$186,047,678.27

Notes:
[1] Federal share of total costs in Plans for Subsequent Remedial Action approved by DOE in 2007.
[2] Total amount each licensee would be eligible to claim after FY 2007. It is the number in column to the left minus all amounts approved through FY 2007.
[3] Total amount each licensee would be eligible to claim after FY 2008. It is the number in column to the left minus final amount approved in FY 2008.
[4] Total amount each licensee would be eligible to claim after FY 2009. It is the number in column to the left minus final amount approved in FY 2009 multiplied by 1.038 (CPI-U increase for 2008).
[5] Total amount each licensee would be eligible to claim after FY 2010. It is the number in column to the left minus final amount approved in FY 2010 multiplied by 1.000 (CPI-U increase for 2009).
[6] Total amount each licensee would be eligible to claim after FY 2011. It is the number in column to the left minus final amount approved in FY 2011 multiplied by 1.016 (CPI-U increase for 2010).

Appendix F. Status of Remaining Costs Eligible for Future Claims (cont.)

Licensee	Maximum Federal Share of Potential Future Claims End of FY 2012[7]	Maximum Federal Share of Potential Future Claims End of FY 2013[8]	Maximum Federal Share of Potential Future Claims End of FY 2014[9]	Maximum Federal Share of Potential Future Claims End of FY 2015[10]	Maximum Federal Share of Potential Future Claims End of FY 2016[11]	Maximum Federal Share of Potential Future Claims End of FY 2017[12]
Uranium						
State of Wyoming (ANC Site)	$783,678.85	$800,136.11	$812,138.15	$825,132.36	$807,375.20	$706,363.97
Cotter Corporation	$3,058,008.14	$3,122,226.31	$3,169,059.70	$3,219,764.66	$3,222,984.42	$3,264,883.22
Dawn Mining Company	$8,056,000.10	$7,653,500.63	$7,468,941.69	$3,487,709.98	$0.00	$0.00
Homestake Mining Company	$83,924,433.54	$82,138,282.70	$79,933,027.11	$77,562,518.35	$70,397,737.33	$60,389,933.59
Pathfinder Mines Corporation	$272,574.01	$278,298.06	$282,472.53	$286,992.09	$287,279.08	$291,013.71
Rio Algom Mining Company	$5,890,750.17	$5,597,510.63	$5,681,473.29	$2,556,185.88	$170,456.81	$0.00
Umetco Minerals Corporation-CO	$15,067,382.40	$14,518,004.56	$14,208,891.03	$14,450,671.33	$12,724,554.36	$12,435,436.71
Umetco Minerals Corporation-WY	$2,768,523.01	$1,857,306.32	$1,759,938.81	$1,788,097.83	$1,641,070.46	$1,425,218.20
Western Nuclear, Incorporated	$1,428,479.30	$1,300,503.53	$1,162,124.59	$897,886.50	$698,602.86	$400,980.51
Total Uranium	$121,249,829.52	$117,265,768.85	$114,478,066.90	$105,074,958.98	$89,950,060.53	$78,913,829.91
Thorium						
West Chicago	$50,580,508.84	$40,522,289.61	$28,375,567.63	$23,263,152.11	$17,088,951.31	$4,023,156.58
Total Thorium	$50,580,508.84	$40,522,289.61	$28,375,567.63	$23,263,152.11	$17,088,951.31	$4,023,156.58
Total Uranium and Thorium	$171,830,338.36	$157,788,058.46	$142,853,634,53	$128,338,111.09	$107,039,011.84	$82,936,986.49

Notes Cont.:

[7] Total amount each licensee would be eligible to claim after FY 2012. It is the number in column to the left (previous page) minus final amount approved in FY 2011 multiplied by 1.032 (CPI-U increase for 2011).
[8] Total amount each licensee would be eligible to claim after FY 2013. It is the number in column to the left minus final amount approved in FY 2012 multiplied by 1.021 (CPI-U increase for 2012).
[9] Total amount each licensee would be eligible to claim after FY 2014. It is the number in column to the left minus final amount approved in FY 2013 multiplied by 1.015 (CPI-U increase for 2013).
[10] Total amount each licensee would be eligible to claim after FY 2015. It is the number in column to the left minus final amount approved in FY 2014 multiplied by 1.016 (CPI-U increase for 2014)
[11] Total amount each licensee would be eligible to claim after FY 2016. It is the number in column to the left minus final amount approved in FY 2015 multiplied by 1.001 (CPI-U increase for 2015).
[12] Total amount each licensee would be eligible to claim after FY 2017. It is the number in column to the left minus final amount approved in FY 2016 multiplied by 1.013 (CPI-U increase for 2016).

Appendix F. Status of Remaining Costs Eligible for Future Claims (cont.)

Licensee	Maximum Federal Share of Potential Future Claims End of FY 2018[13]	Maximum Federal Share of Potential Future Claims End of FY 2019[14]	Maximum Federal Share of Potential Future Claims End of FY 2020[15]	Maximum Federal Share of Potential Future Claims End of FY 2021[16]	Maximum Federal Share of Potential Future Claims End of FY 2022[17]
Uranium					
State of Wyoming (ANC Site)	$643,432.57	$658,874.95	$670,734.70	$678,783.52	$710,686.34
Cotter Corporation	$3,333,445.77	$3,413,448.47			
Colorado Legacy Land			$3,126,350.13	$2,474,697.92	$2,120,671.13
Dawn Mining Company	$0.00	$0.00	$0.00	$0.00	$0.00
Homestake Mining Company	$55,327,618.37	$52,060,609.77	$46,272,048.95	$41,857,932.70	$39,570,699.70
Pathfinder Mines Corporation	$297,125.00	$304,256.00	$309,732.61	$313,449.40	$328,181.52
Rio Algom Mining Company	$0.00	$0.00	$0.00	$0.00	$0.00
Umetco Minerals Corporation-CO	$12,164,270.84	$12,380,865.44	$12,603,721.02	$11,570,637.25	$12,114,457.20
Umetco Minerals Corporation-WY	$1,385,166.93	$1,414,338.67	$1,439,796.77	$1,132,739.29	$1,185,978.04
Western Nuclear, Incorporated	$77,184.91	$0.00	$0.00	$0.00	$0.00
Total Uranium	**$73,228,244.39**	**$70,232,393.30**	**$64,422,384.18**	**$58,028,240.08**	**$56,030,673.93**
Thorium					
West Chicago	$2,471,779.28	$1,309,753.84	$0.00	$0.00	$0.00
Total Thorium	**$2,471,779.28**	**$1,309,753.84**	**$0.00**	**$0.00**	**$0.00**
Total Uranium and Thorium	**$75,700,023.67**	**$71,542,147.14**	**$64,422,384.18**	**$58,028,240.08**	**$56,030,673.93**

Notes Cont.:

[13] Total amount each licensee would be eligible to claim after FY 2018. It is the number in column to the left (previous page) minus final amount approved in FY 2017 multiplied by 1.021 (CPI-U increase for 2017).
[14] Total amount each licensee would be eligible to claim after FY 2019. It is the number in column to the left minus final amount approved in FY 2018 multiplied by 1.024 (CPI-U increase for 2018).
[15] Total amount each licensee would be eligible to claim after FY 2020. It is the number in column to the left minus final amount approved in FY 2019 multiplied by 1.018 (CPI-U increase for 2019).
[16] Total amount each licensee would be eligible to claim after FY 2021. It is the number in column to the left minus final amount approved in FY 2020 multiplied by 1.012 (CPI-U increase for 2020)
[17] Total amount each licensee would be eligible to claim after FY 2022. It is the number in column to the left minus final amount approved in FY 2021 multiplied by 1.047 (CPI-U increase for 2021)

APPENDIX G. TITLE X SITE REMEDIAL ACTION STATUS

FY 2022 Title X Site Remedial Action Status

SITE	LICENSE STATUS	ESTIMATED COMPLETION DATE	REFERENCE
TITLE X LIABILITY COMPLETED			
Atlantic Richfield Co. Bluewater Mill Site Grants, NM	Licensee completed reclamation of the site in 1995 and the disposal cells were transferred to DOE in 1997 for long-term stewardship	Completed 9/97	U.S. Nuclear Regulatory Commission, "2002 Annual Update - Status of Decommissioning Program," SECY-02-0169, September 18, 2002. http://www.doegjpo.com/
Petrotomics Co. Shirley Basin Mill Site Shirley Basin, WY	The license was terminated and the disposal cell transferred to DOE in 2005 for long-term stewardship.	Completed 6/05	Licensee
Rio Algom Mining LLC Ambrosia Lake Mill Site Grants, NM	Physical remediation of the site is complete. Groundwater monitoring continues.	2030	Licensee
Western Nuclear, Inc. Split Rock Mill Site Jeffrey City, WY	Physical remediation of the site is complete. Activities include inspection of the site and groundwater monitoring. WNI is working with the NRC and DOE to address final transfer actions.	2022	Licensee
West Chicago Environmental Response Trust West Chicago Mill Site West Chicago, IL	All Rare Earth Facilities and Residential Sites D&D activities are complete. Groundwater cleanup and/or monitoring will continue until license termination.	2048	Licensee
CLEANUP COMPLETED BUT STILL ELIGIBLE FOR TITLE X REIMBURSEMENT			
Tennessee Valley Authority Edgemont Mill Site Edgemont, SD	Licensee completed remediation in 1989 and the disposal cell was transferred to DOE in 1996 for long-term stewardship.	Completed 6/96	Licensee

SITE	LICENSE STATUS	ESTIMATED COMPLETION DATE	REFERENCE
CLEANUP ONGOING/INCURRING COSTS ELIGIBLE FOR TITLE X REIMBURSEMENT			
American Nuclear Corp. Gas Hills West Mill Site Gas Hills Uranium Mining District, WY	Licensee did not have assets to complete cleanup. State completing cleanup under NRC Confirmatory Order. The state conducted a groundwater plume study and NRC agreed to discontinue groundwater remediation. State is working with the NRC on how to prioritize remaining funds toward stabilizing tailings pond one.	2030	Licensee
Cotter Corp./Colorado Legacy Land Canon City Mill Site Canon City, CO	Cleanup and monitoring are continuing under the Radioactive Materials License with State and U.S. Environmental Protection Agency oversight. Cleanup planning to remove soils continues and a new Remedial Investigation Plan is being developed. Closure date is dependent upon the success of interim cleanup activities and achieving compliance with groundwater requirements.	2047	Licensee's Plan for Subsequent Remedial Action
Homestake Mining Co. Grants Mill Site Grants, NM	Continuing operations and maintenance of the extraction/injection well field, reverse osmosis treatment plant, and zeolite-based water treatment system in accordance with the site Groundwater Corrective Action Plan with the intent of pulling back the contaminated plume. A new groundwater model is being developed to support the Groundwater Corrective Action Plan. Initial results suggest groundwater standards may not be met and licensee is considering submitting Alternate Concentration Limits (ACLs).	2035	Licensee
Pathfinder Mines Corp. Gas Hills North Lucky Mc Mill Site, Riverton, WY	Remedial action construction is complete. Monitoring and surveillance activities are ongoing. Work continues toward site transfer to DOE.	2025	Licensee
Umetco Minerals Corp. Gas Hills East Mill Site Gas Hills Uranium Mining District, WY	Environmental monitoring of the disposal cell cover and rock quarry continue. The licensee is working with the State of Wyoming and NRC to resolve remaining items for transfer to DOE.	2026	Licensee
Umetco Minerals Corp. Uravan Mill Site Uravan, CO	Groundwater monitoring continues. Remaining compliance issues are being worked among the licensee, the State of Colorado, EPA, and DOE.	2026	Licensee
CLEANUP ONGOING BUT PFSRA AMOUNT EXCEEDED			
Dawn Mining Co. Ford Mill Site Ford, WA	Evaluation and monitoring of contaminated groundwater beneath the unlined tailings facilities and the former ore stockpile area continue.	2028	Licensee

Notes:

[1] Estimated completion dates from DOE Office of Legacy Management Site Management Guide (Blue Book), Update #27, March 2022. Estimated completion dates are subject to change.