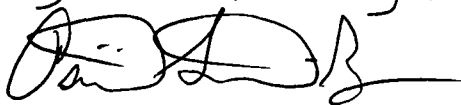




*Designated as Original by*  


*Osiris Siurako-Perez  
Project Manager  
January 13, 2014*

December 19, 2013  
GDP 13-0021

ATTN: Document Control Desk  
Ms. Catherine Haney  
Director, Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

**Paducah Gaseous Diffusion Plant (PGDP)  
Docket No. 70-7001, Certificate No. GDP-1  
Transmittal of Changes to the Decommissioning Funding Program Description for Calendar Year 2014**

INFORMATION TRANSMITTED HERewith IS PROTECTED FROM PUBLIC  
DISCLOSURE AS CONFIDENTIAL COMMERCIAL OR FINANCIAL INFORMATION  
AND/OR TRADE SECRETS PURSUANT TO 10 CFR 2.390 AND 9.17(A)(4)

Dear Ms. Haney:

Enclosure 1 provides revisions to the PGDP Decommissioning Funding Program Description (DFP) for calendar year 2014. Enclosure 2 provides a revision to the Depleted Uranium Management Plan (DU Plan) for information only. The DU Plan change has been evaluated in accordance with 10 CFR 76.68 does not require prior NRC review and approval. The United States Enrichment Corporation (USEC) will incorporate the DFP and DU Plan changes into a revision to the Application.

The DFP in this revision contains changes from the DFP submitted by USEC on December 18, 2012, (GDP 12-0037) and approved by NRC on April 3, 2013. The changes are:

- Volumes and unit disposal costs for low level radioactive waste and mixed waste have been updated. The enclosed database and spreadsheet (Enclosures 3 and 4) were used to estimate PGDP's disposal costs for 2014. The database and spreadsheet contain the most likely disposal outlet, generated volumes and disposal costs for each waste stream. These costs account for pricing, taxes, fees, and transportation. One-year generation data was used to reflect the recent effects of facility shutdown and cleanouts. An estimate of the cost for trap mix currently in inventory that requires repackaging prior to disposal is included with the LLRW estimate.
- Labor costs associated with disposal of low level radioactive waste and mixed waste have been updated with 2014 labor costs using the methodology described in USEC letter GDP 11-0015 to NRC dated June 16, 2011.

*NM5501*

Ms. Catherine Haney  
December 19, 2012  
GDP 12-0021, Page 2

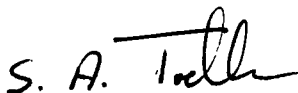
- USEC will have no remaining decommissioning liability for disposition of depleted Uranium in 2014 upon return of USEC's remaining DU to DOE under the June 12, 2012, Cooperative Agreement. The Cooperative Agreement to support continued development and demonstration of the American Centrifuge Cascade Demonstration Test Program provided for the transfer of the title and responsibility for disposition from USEC to DOE of up to 39,200 MT of DUF<sub>6</sub>. USEC previously transferred 38,317 MT DUF<sub>6</sub> to DOE under two transfers. There is a remaining balance of up to 883 MT DUF<sub>6</sub> that can be transferred to DOE under the Agreement. Converting MT DUF<sub>6</sub> to MTU results in approximately 597 MTU available under the DOE maximum limit. USEC has withdrawn tails in conjunction with the shutdown and evacuation of the cascade. The inventory of tails, including the withdrawal of the remaining material in the cascade, is approximately 234 MTU. This material will be returned to DOE under the terms of the Agreement and USEC will provide NRC with the DOE/NRC Form 741 documenting the transfer. USEC understands that approval of this DFP revision is contingent on USEC providing documentation of the transfer.

This DFP revision results in a decrease in decommissioning liability of \$1.14 million. Upon notification that the DFP revision is acceptable to NRC, USEC will submit the appropriate executed financial instruments to NRC for acceptance.

Enclosures 3 and 4 contain confidential commercial or financial information and trade secrets that are exempt from public disclosure pursuant to Section 1314 of the Atomic Energy Act of 1954, as amended, and 10 CFR 2.390 and 9.17(a)(4). USEC requests that Enclosures 3 and 4 be withheld from public disclosure. Enclosure 5 provides the affidavit required by 10 CFR 2.390(b)(4). Upon removal of Enclosures 3 and 4, this letter and Enclosure 5 are non-proprietary.

Should you have any questions, please contact me at (301) 564-3250.

Sincerely,



Steven A. Toelle  
Director, Regulatory Affairs

Enclosures:

1. GDP Decommissioning Funding Program Description
2. GDP Depleted Uranium Management Plan
3. Waste Stream Database
4. Waste Disposal Estimate Spreadsheet
5. Affidavit

cc: J. Hickey, NRC Region II  
O. Siurano-Perez, NRC Project Manager - HQ

## PGDP Decommissioning Funding Program Description

## **DECOMMISSIONING FUNDING PROGRAM DESCRIPTION**

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**LIST OF EFFECTIVE PAGES**

<u>Pages</u>	<u>Revision</u>
ii	130
iii	142
iv	130
v	142
vi	130
1	131
2	131
3	136
4	142
5	142
6	142
7	142
8	142
PSB-1	130
PSB-2	130
PSB-3	130
PSB-4	130
LOC-1	130
LOC-2	130
STA-1	130
STA-2	130
STA-3	130
STA-4	130
STA-5	130
STA-6	130
STA-7	131
STA-8	130
STA-9	130
STA-10	130

Blank Page

## CONTENTS

	<u>Page</u>
<b>1.0 INTRODUCTION .....</b>	<b>1</b>
<b>2.0 SCOPE OF USEC'S DECOMMISSIONING FINANCIAL RESPONSIBILITY .....</b>	<b>2</b>
<b>3.0 DECOMMISSIONING COST ESTIMATE .....</b>	<b>4</b>
<b>3.1 LOW LEVEL AND MIXED WASTE DISPOSAL .....</b>	<b>4</b>
<b>3.1.1 LOW LEVEL RADIOACTIVE WASTE DISPOSAL .....</b>	<b>5</b>
<b>3.1.2 MIXED WASTE DISPOSAL .....</b>	<b>6</b>
<b>3.1.3 DELETED .....</b>	<b>6</b>
<b>3.1.4 DELETED .....</b>	<b>7</b>
<b>3.2 DEPLETED URANIUM DISPOSITION .....</b>	<b>7</b>
<b>3.3 LABOR COSTS .....</b>	<b>8</b>
<b>4.0 REVIEW AND ADJUSTMENT OF DECOMMISSIONING COSTS AND FUNDING     LEVELS .....</b>	<b>8</b>
<b>5.0 DECOMMISSIONING FUNDING MECHANISM .....</b>	<b>8</b>
<b>PAYMENT SURETY BOND - NON-EXECUTED VERSION .....</b>	<b>PSB-1</b>
<b>IRREVOCABLE STANDBY LETTER OF CREDIT .....</b>	<b>LOC-1</b>
<b>NON-EXECUTED VERSION</b>	
<b>STANDBY TRUST AGREEMENT - NON-EXECUTED VERSION .....</b>	<b>STA-1</b>



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## **1.0 INTRODUCTION**

As a condition of certification, 10 Code of Federal Regulations (CFR) 76.35(n) requires the United States Enrichment Corporation (USEC) to submit, as part of its application for an NRC certificate of compliance:

A description of the funding program to be established to ensure that funds will be set aside and available for those aspects of the ultimate disposal of waste and depleted uranium, decontamination and decommissioning, relating to the gaseous diffusion plants leased to the Corporation by the Department of Energy, which are the financial responsibility of the Corporation.

Section 76.35(n) also requires USEC to establish financial surety arrangements to provide the requisite funding. The funding mechanism must ensure availability of funds for activities required to be completed both before and after the return of the gaseous diffusion plants to the Department of Energy (DOE) in accordance with the July 1, 1993 Lease Agreement between DOE and USEC (Lease Agreement). The funding program must also contain a basis for cost estimates used to establish funding levels, and means of adjusting such cost estimates and associated funding levels over the duration of the lease. Finally, USEC is not required to provide funding for "those aspects of decontamination and decommissioning . . . assigned to the Department of Energy under the Atomic Energy Act of 1954, as amended."

In accordance with 10 CFR 76.35(n), USEC hereby submits a description of its program to ensure adequate funds are available for the disposal of waste and the disposition of depleted uranium generated at PGDP and for which USEC is financially responsible under the Atomic Energy Act (AEA).

## 2.0 SCOPE OF USEC'S DECOMMISSIONING FINANCIAL RESPONSIBILITY

USEC began to operate the Paducah (PGDP) plant on July 1, 1993, in accordance with the AEA, as amended, and the July 1, 1993 Lease Agreement. Prior to July 1, 1993, DOE operated the plant for about 40 years. Section 1403(d) of the AEA provides that “[t]he payment of any costs of decontamination and decommissioning . . . with respect to conditions existing before the transition date [July 1, 1993], in connection with property of the Department leased under subsection (a), shall remain the sole responsibility of the Department.” Accordingly, USEC is not financially responsible for, and this Program Description does not provide funding assurance for, decontamination or decommissioning costs associated with any operations at PGDP prior to July 1, 1993.

Furthermore, PGDP, including the Leased Premises, will ultimately be decommissioned by DOE, which is solely responsible for the conduct of decontamination and decommissioning activities at the plant, and which also bears sole financial responsibility for the bulk of these activities. Section 4.6 of the Lease Agreement states that:

Except as provided in Section 4.5(c) of this Lease, the Department will be responsible for and will pay the costs of all Decontamination and Decommissioning, including the costs of Decontamination and Decommissioning of the Leased Premises, the Leased Personalty, any personal property found on the Leased Premises, regardless of ownership, and any Capital Improvement.

In addition, Section 4.3(b) of the Lease Agreement states that “[t]he Corporation shall be entitled, should it choose, to leave any of its personal property (including personal property contaminated by radioactive materials) on the Leased Premises at the end of the Lease Term for Decontamination and Decommissioning by the Department.”

However, USEC does have certain specific financial responsibilities with respect to some of these activities. Under Section 4.4(c) of the Lease Agreement, USEC is “responsible for the ultimate treatment and disposal of any waste generated by the Corporation, and for which the Department is not responsible . . . .” Under this provision, USEC is financially responsible for, and this Program Description addresses, the disposal of low-level radioactive waste (LLRW) and “mixed” hazardous and radioactive waste generated by USEC at PGDP after the date of privatization, July 28, 1998.<sup>1</sup>

In addition, as discussed above, Section 4.6 of the Lease Agreement provides that the Department will pay the costs of all decontamination and decommissioning, “[e]xcept as provided in Section 4.5(c) of this Lease . . . .” Section 4.5(c) authorizes USEC to remove any capital improvement at PGDP, but “if such removal increases the costs of the Department for the Decontamination and Decommissioning

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1 A more detailed description of USEC’s plans to manage and dispose of LLRW and mixed waste generated at PGDP is provided in the Radioactive Waste Management Program, which is included as part of the certificate of compliance application.

of the Leased Premises to which any such Capital Improvement was attached, the Corporation will pay any such increase in Decontamination and Decommissioning costs.” At this time, USEC does not anticipate removing any capital improvement from the plant site. Therefore, no financial assurance for Decontamination and Decommissioning cost increases arising out of such removal is currently being provided.

Finally, USEC is generating depleted uranium as a result of its operation of PGDP. Section 3109(a)(3) of the USEC Privatization Act (passed April 1996) states that:

All liabilities arising out of the disposal of depleted uranium generated by the Corporation between July 1, 1993 and the privatization date shall become the direct liabilities of the Secretary [Secretary of Energy].

Therefore, this Program Description also describes USEC's funding program to ensure funds are available for the ultimate disposition of the depleted uranium generated by USEC's operations after July 28, 1998.<sup>2</sup>

As described in the Depleted Uranium Management Plan, USEC has established agreements with the DOE that affect USEC's liability associated with the disposal of depleted uranium generated by USEC. These agreements are the "Memorandum of Agreement Between the United States Department of Energy and the United States Enrichment Corporation Relating to Depleted Uranium," dated June 30, 1998, the "Agreement Between the U.S. Department of Energy ("DOE") and USEC Inc. ("USEC")," dated June 17, 2002, the "Cooperative Agreement Between Department of Energy and USEC Inc. Concerning the American Centrifuge Demonstration Project," dated March 23, 2010, the contract between DOE and USEC for DOE acquisition of SWU, dated March 13, 2012, and the "Cooperative Agreement Between Department of Energy and USEC, Inc. and American Centrifuge Demonstration, LLC Concerning the American Centrifuge Cascade Demonstration Test Program", dated June 12, 2012.

The "Memorandum of Agreement Between the United States Department of Energy and the United States Enrichment Corporation Relating to Depleted Uranium," dated June 30, 1998 provided for the transfer to DOE of 2,026 48G cylinders containing approximately 16,674,000 Kg of depleted uranium generated by USEC's operations. In accordance with the agreement, USEC made the required full payment of over \$50M to DOE, covering the entire quantity of depleted uranium to be transferred. Therefore, the liability to dispose of the full amount of USEC's depleted uranium specified in the agreement now rests with DOE, further reducing the quantity of depleted uranium to be ultimately disposed of by USEC. Within these major parameters of the agreement, USEC and DOE agreed to implement the actual transfer of the material on a schedule covering the period of FY 1999 through 2004.

The "Agreement Between the U.S. Department of Energy ("DOE") and USEC Inc. ("USEC")," dated June 17, 2002, provided, in part, for the DOE taking title of depleted uranium from USEC operations during USEC's fiscal years 2002 and 2003 and one-half the amount of depleted uranium generated during USEC's fiscal years 2004 and 2005. Therefore, as a result of this June 17, 2002 agreement, USEC's liability associated with the disposal of USEC generated depleted uranium was reduced by the quantity of depleted uranium specified in this June 17, 2002 agreement.

The "Cooperative Agreement Between Department of Energy and USEC Inc. Concerning the American Centrifuge Demonstration Project," dated March 23, 2010, transferred title to 13,312,411 kg of DU from USEC to DOE to enable USEC to release encumbered funds to support continued development and demonstration of the American Centrifuge technology.

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2 The Depleted Uranium Management Plan describes in greater detail USEC's plans for the management and disposition of depleted uranium.

In 2012, DOE and USEC entered into a contract in which DOE acquired SWU in exchange for DOE's accepting title to, and eventual disposal responsibility for, 13,073,045 kg of DU.

The "Cooperative Agreement Between Department of Energy and USEC Inc. and American Centrifuge Demonstration, LLC Concerning the American Centrifuge Cascade Demonstration Test Program", dated June 12, 2012, transferred title and responsibility for disposition from USEC to DOE of up to 39,200 MT DUF6 (26,505 MT of DU at USEC tails purity).

The quantity of depleted uranium associated with these agreements, and the transfer schedule for this material, is specified in Table 1 of the Depleted Uranium Management Plan.

In addition to USEC's enrichment operations, USEC also performs contract work for the DOE and DOE contractors. To compensate USEC for incurred costs associated with these contracts, DOE has taken title to depleted uranium further reducing USEC's liability for the disposal of depleted uranium. The quantity of depleted uranium, and the transfer schedule for the depleted uranium associated with the compensation for these contracts, is specified in Table 1 of the Depleted Uranium Management Plan.

### 3.0 DECOMMISSIONING COST ESTIMATE

In accordance with 10 CFR 76.35(n), USEC has estimated the costs associated with the disposal of LLRW and mixed waste, and the disposition of depleted uranium generated by its operations. These costs are not considered decontamination and decommissioning costs, but rather production costs since they are incurred during the operation and maintenance of the plant. These cost estimates are cumulative, and are calculated one year in advance. The estimated cost for CY 2014 for the disposal of waste and for the disposition of depleted uranium generated by USEC is as follows:

Low Level and Mixed Waste ....	\$ 2.30 M
Depleted Uranium .....	\$ 0.0
Labor Cost .....	\$ 0.73 M
CY14 Cost .....	\$ 3.03 M

To account for uncertainties associated with either the estimated volumes or costs associated with the above cost estimates, a contingency factor of 25% is applied to the CY 2014 cost, which is consistent with the recommendations in the NRC's guidance on preparing Decommissioning Funding Plans (NUREG-1757). After application of the 25% contingency, USEC's total projected decommissioning funding liability for CY 2014 is \$ 3.79 million.

The bases for these cost estimates are described below in their respective subsection. USEC's cost estimates will be reviewed annually and revised, as necessary, to reflect any change in USEC's projected liability.

#### 3.1 LOW LEVEL AND MIXED WASTE DISPOSAL

USEC generates many types of LLRW and mixed (hazardous and radioactive) waste at PGDP as described in the Radioactive Waste Management Program (RWMP). For the most part, all wastes are routinely treated on-site or treated and disposed of off-site as the wastes are generated. The LLRW

in storage from the previous calendar year is being processed for off-site disposal. These wastes are being stored in compliance with USEC's Certificate of Compliance. USEC's LLRW and mixed waste decommissioning liability is calculated as the sum of the liability associated with the cost of disposal of that amount of waste estimated to be generated during the calendar year plus the liability associated with the estimated amount of waste that is in storage from the previous calendar year. Disposal costs include an additional percentage to cover taxes, processing fees, and transportation costs, but do not include labor, which is addressed in Section 3.3.

Estimated waste generation volumes are based on historical waste generation. Each individual LLRW and mixed waste stream has a different estimated volume and a different disposal cost. For the year, the different volumes of waste generated and their disposal cost estimates are averaged to establish an average disposal cost. USEC's cost estimate is based on the weighted average cost to manage waste. The disposal cost estimate for each waste stream in the weighted average cost is based upon existing contract prices, and historical cost of containers and transportation.

USEC will disposition all LLRW and mixed waste prior to site turnover to DOE in 2014. USEC funds this disposal cost out of accrued cash generated from operations.

### **3.1.1 Low Level Radioactive Waste Disposal**

USEC will disposition a total of approximately 61,201 ft<sup>3</sup> of LLRW from the Paducah plant in CY 2014. USEC has assumed disposal of Paducah's LLRW at various commercial disposal facilities at an average weighted cost of \$35.12/ft<sup>3</sup>. The disposal cost for LLRW at the Paducah plant for CY 2014 is therefore estimated to be:

$$\text{Paducah LLRW: } 61,201 \text{ ft}^3 \times \$35.12/\text{ft}^3 = \$2.150 \text{ million for the year}$$

The cost of disposal of USEC's LLRW for CY 2014 is \$2.150 million.

### 3.1.2 Mixed Waste Disposal

USEC will disposition a total of approximately 93 ft<sup>3</sup> of mixed waste at Paducah plant in CY 2014. The current average cost estimate for disposing of this mixed waste product at Paducah is \$1,610/ft<sup>3</sup>. The disposal cost for this mixed waste generated at Paducah plant for CY 2014 is therefore estimated to be:

$$\text{Paducah Mixed Waste: } 93 \text{ ft}^3 \times \$1,610/\text{ft}^3 = \$0.150 \text{ million for the year}$$

The cost of disposal of USEC's mixed waste for CY 2014 is \$0.150 million.

### 3.1.3 Deleted

### **3.1.4 Deleted**

## **3.2 Depleted Uranium Disposition**

The June 12, 2012, Cooperative Agreement to support continued development and demonstration of the American Centrifuge Cascade Demonstration Test Program provided for the transfer of the title and responsibility for disposition from USEC to DOE of up to 39,200 MT of  $\text{DUF}_6$ . USEC previously transferred 38,317 MT  $\text{DUF}_6$  to DOE under two transfers. There is a remaining balance of up to 883 MT  $\text{DUF}_6$  that can be transferred to DOE under the Agreement. Converting MT  $\text{DUF}_6$  to MTU results in approximately 597 MTU available under the DOE maximum limit. USEC has withdrawn tails in conjunction with the shutdown and evacuation of the cascade. The inventory of tails, including the withdrawal of the remaining material in the cascade, is approximately 234 MTU. This material will be returned to DOE under the terms of the Agreement. USEC, therefore, has no remaining decommissioning liability for disposition of depleted Uranium.



### **3.3 Labor Costs**

To account for labor costs associated with disposal of USEC generated waste, USEC has included provisions for a crew comprised of 1 first line manager, 2 technical staff, 1 health physics technician and 6 waste operators. The labor costs are calculated assuming the crew is available for a six-month duration. Labor costs were estimated based on the 2014 PGDP labor rates. To account for this work being performed by a third party, an overhead rate on direct staff labor of 110%, plus 15% profit on labor and its overheads, was applied. Based on these assumptions, the labor costs associated with disposal of USEC generated waste is \$728,895.

### **4.0 REVIEW AND ADJUSTMENT OF DECOMMISSIONING COSTS AND FUNDING LEVELS**

USEC will review the decommissioning cost estimates and associated funding levels over the duration of the lease and adjust them when necessary. These adjustments will take into account such factors as changes in volume and cost estimates, changes in plant conditions, and changes in expected decontamination and decommissioning procedures. USEC will conduct such reviews in October of each year.

### **5.0 DECOMMISSIONING FUNDING MECHANISM**

USEC utilizes payment surety bond(s) and/or letter(s) of credit in conjunction with standby trust agreement(s) to ensure that sufficient funds will be available for waste disposal and depleted uranium disposition as set forth in this Program Description. The instruments are derived from Appendix A, NUREG-1757 Volume 3, "Consolidated NMSS Decommissioning Guidance, *Financial Assurance, Recordkeeping, and Timeliness*", dated September 2003. Non-executed versions are included in this Plan. Executed documents are submitted to the NRC for review as they are revised and reissued.

**PAYMENT SURETY BOND - NON--EXECUTED VERSION**

Date bond executed: \_\_\_\_\_

Effective date: \_\_\_\_\_

Principal: United States Enrichment Corporation  
6903 Rockledge Drive  
Bethesda, MD 20817

Type of organization: Delaware Chartered Corporation

NRC certificate of compliance number: GDP-1

Name and address of facilities: Paducah Gaseous Diffusion Plant

Amount(s) for decommissioning  
activity guaranteed by this bond: Estimated at [insert amount]

Surety(ies) [name(s) and business address(es)]

Type of organization: [insert "proprietorship," "joint venture," "partnership" or "corporation"]

State of incorporation: \_\_\_\_\_ (if applicable)

Surety's qualification in jurisdiction where facility is located.

Surety's bond number \_\_\_\_\_

Total penal sum of bond: \$ \_\_\_\_\_

Know all persons by these presents, That we, the Principal and Surety(ies) hereto, are firmly bound to the U.S. Nuclear Regulatory Commission (herein called NRC), in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Sureties are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety; but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

Rev. 130

WHEREAS, the NRC, an agency of the U.S. Government, pursuant to the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, has promulgated regulations in Title 10, Chapter I of the Code of Federal Regulations, Part 76, applicable to the Principal, which require that the holder of a certificate of compliance for a gaseous diffusion plant, or an applicant for a certificate of compliance for such a facility provide financial assurance that funds will be available when needed for those aspects of the ultimate disposal of waste and disposition of depleted uranium, decontamination and decommissioning of such a facility which are the financial responsibility of such holder or applicant (collectively, "decommissioning");

NOW, THEREFORE, the conditions of the obligation are such that if the Principal shall faithfully, before the beginning of decommissioning of each facility identified above, fund the standby trust fund in the amount(s) identified above for the facility;

Or, if the Principal shall fund the standby trust fund in such amount(s) after an order to begin facility decommissioning is issued by the NRC or a U.S. district court or other court of competent jurisdiction;

Or, if the Principal shall provide alternative financial assurance and obtain the written approval of the NRC of such assurance, within 30 days after the date a notice of cancellation from the Surety(ies) is received by both the Principal and the NRC, then this obligation shall be null and void; otherwise it is to remain in full force and effect.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above. Upon notification by the NRC that the Principal has failed to perform as guaranteed by this bond, the Surety(ies) shall place funds in the amount guaranteed for the facility(ies) into the standby trust fund established by the Principal with [name of trustee] pursuant to the Standby Trust Agreement dated [date].

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said penal sum.

The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the Principal and to the NRC provided, however, that cancellation shall not occur during the 90 days beginning on the date of receipt of the notice of cancellation by both the Principal and the NRC, as evidenced by the return receipts.

The Principal may terminate this bond by sending written notice to the NRC and to Surety(ies) 90 days prior to the proposed date of termination, provided, however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization for termination of the bond from the NRC.

If any part of this agreement is invalid, it shall not affect the remaining provisions which will remain valid and enforceable.

In Witness Whereof, the Principal and Surety(ies) have executed this financial guarantee bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies).

Principal: United States Enrichment Corporation

[Signature(s)]

[Name(s)]

[Title(s)]

[Corporate Seal]

Corporate Surety(ies)

[Name and address]

State of incorporation: \_\_\_\_\_

Liability limit: \$ \_\_\_\_\_

[Signature(s)]

[Name(s) and title(s)]

[Corporate Seal]

[For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for Surety(ies) above.]

Bond premium: \$ \_\_\_\_\_

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**IRREVOCABLE STANDBY LETTER OF CREDIT NO. [INSERT NUMBER]  
NON-EXECUTED VERSION**

This Credit Expires [*insert date*]

Issued To:       U.S. Nuclear Regulatory Commission  
                    Washington, DC 20555

Dear Sir or Madam:

We hereby establish our Irrevocable Standby Letter of Credit No. \_\_\_\_\_ in your favor, at the request and for the account of the United States Enrichment Corporation, 6903 Rockledge Drive, Bethesda, MD 20817, Certificate Number GDP-1, Docket Number 70-7001, up to the aggregate amount of [*insert dollar amount in words*], U.S. dollars \$\_\_\_\_\_, available upon presentation of:

- (1)     your sight draft, bearing reference to this Letter of Credit No. \_\_\_\_\_, and
- (2)     your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to regulations issued under authority of the U.S. Nuclear Regulatory Commission."

This letter of credit is issued in accordance with regulations issued under the authority of the U.S. Nuclear Regulatory Commission (NRC), an agency of the U.S. Government, pursuant to the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974. NRC has promulgated regulations in title 10, Chapter I of the *Code of Federal Regulations*, Part 76, which require that a holder of, or an applicant for, an NRC certificate of compliance issued under 10 CFR Part 76 provide assurance that funds will be available when needed for decommissioning.

This letter of credit is effective as of [*insert date*] and shall expire on [*insert date at least 1 year later*], but such expiration date shall be automatically extended for a period of [*insert time period of at least 1 year*] on [*insert date*] and on each successive expiration date, unless, at least 90 days before the current expiration date, we notify both you and the United States Enrichment Corporation, by certified mail, as shown on the signed return receipts or overnight courier. If the United States Enrichment Corporation is unable to secure alternative financial assurance to replace this letter of credit within 30 days of notification of cancellation, NRC may draw upon the full value of this letter of credit prior to the then current expiration date. The bank shall give immediate notice to the applicant and NRC of any notice received or action filed alleging (1) the insolvency or bankruptcy of the financial institution or (2) any violation of regulatory requirements that could result in suspension or revocation of the bank's charter or license to do business. The financial institution also shall give immediate notice if the bank, for any reason, becomes unable to fulfill its obligation under the letter of credit unless a court order or other applicable law prevents the giving of such notice.

Whenever this letter of credit is drawn on, under and in compliance with the terms of this letter of credit, we shall duly honor such draft upon its presentation to us within 30 days, and we shall deposit the amount of the draft directly into the standby trust fund of the United States Enrichment Corporation in accordance with your instructions.

Each draft must bear on its face the clause: "Drawn under Letter of Credit No. \_\_\_\_\_, dated \_\_\_\_\_, and the total of this draft and all other drafts previously drawn under this letter of credit does not exceed [*insert amount of letter of credit*]."

[*Signature(s) and title(s) of official(s) of issuing institution*]

[*Name, address, and phone number of issuing institution*]

[*Date*]

This credit is subject to [*insert "the most recent edition of the Uniform Customs and Practice for Documentary Credits, published by the International Chamber of Commerce," or "the Uniform Commercial Code"*].

## STANDBY TRUST AGREEMENT - NON--EXECUTED VERSION

TRUST AGREEMENT, the Agreement entered into as of [date] by and between the United States Enrichment Corporation, a Delaware chartered corporation, herein referred to as the "Grantor," and [name and address of a national bank or other Trustee acceptable to the U.S. Nuclear Regulatory Commission], the "Trustee."

WHEREAS, the U.S. Nuclear Regulatory Commission (NRC), an agency of the U.S. Government, pursuant to the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, has promulgated regulations in Title 10, Chapter I of the Code of Federal Regulations, Part 76. These regulations, applicable to the Grantor, require that a holder of, or an applicant for, a Part 76, certificate of compliance provide assurance that funds will be available when needed for required decommissioning activities.

WHEREAS, the Grantor has elected to use a surety bond in combination with a letter of credit to provide such financial assurance for the facilities identified herein; and

WHEREAS, when payment is made under a surety bond and/or letter of credit this standby trust shall be used for the receipt of such payment; and

WHEREAS, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this Agreement, and the Trustee is willing to act as trustee,

NOW, THEREFORE, the Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:

- (a) The term "Decommissioning" means those aspects of the ultimate disposal of waste and disposition of depleted uranium, decontamination and decommissioning of the Paducah Gaseous Diffusion Plant (GDP) which are the financial responsibility of the Grantor.
- (b) The term "Grantor" means the United States Enrichment Corporation and any successors or assigns thereof.
- (c) The term "Trustee" means the trustee who enters into this Agreement and any successor Trustee.

Section 2. Costs of Decommissioning. This Agreement pertains to the costs of decommissioning the materials and activities identified in Certificate of Compliance Number GDP-1 issued pursuant to 10 CFR Part 76.

Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a standby trust fund (the Fund) for the benefit of the NRC. The Grantor and the Trustee intend that no third party have access to the Fund except as provided herein.



Section 4. Payments Constituting the Fund. Payments made to the Trustee for the Fund shall consist of cash, securities, or other liquid assets acceptable to the Trustee. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule B attached hereto. Such property and any other property subsequently transferred to the Trustee are referred to as the "Fund," together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount of, or adequacy of the Fund, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by the NRC.

Section 5. Payment for Required Activities Specified in the Plan. The Trustee shall make payments from the Fund to the Grantor upon presentation to the Trustee of the following:

a. A certificate duly executed by the Secretary of the Grantor attesting to the occurrence of the events, and in the form set forth in the attached Specimen Certificate, and

b. A certificate attesting to the following conditions:

(1)that decommissioning is proceeding pursuant to an NRC-approved plan.

(2)that the funds withdrawn will be expended for activities undertaken pursuant to that Plan, and

(3)that the NRC has been given 30 days' prior notice of the Grantor's intent to withdraw funds from the escrow fund.

No withdrawal from the fund can exceed 10 percent of the outstanding balance of the Fund unless NRC approval is attached.

In the event of the Grantor's default or inability to direct decommissioning activities, the Trustee shall make payments from the Fund as the NRC shall direct, in writing, to provide for the payment of the costs of required activities covered by this Agreement. The Trustee shall reimburse the Grantor, or other persons as specified by the NRC, from the Fund for expenditures for required activities in such amount as the NRC shall direct in writing. In addition, the Trustee shall refund to the Grantor such amounts as the NRC specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

Section 6. Trust Management. The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge its duties with respect to the Fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity

and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

- (a) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended (15 U.S.C. 80a-2(a)), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;
- (b) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal Government, and in obligations of the Federal Government such as GNMA, FNMA, and FHLM bonds and certificates or State and Municipal bonds rated BBB or higher by Standard and Poor's or Baa or higher by Moody's Investment Services; and
- (c) For a reasonable time, not to exceed 60 days, the Trustee is authorized to hold uninvested cash, awaiting investment or distribution, without liability for the payment of interest thereon.

Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

- (a) To transfer from time to time any or all of the assets of the fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and
- (b) To purchase shares in any investment company registered under the Investment Company Act of 1940 (15 U.S.C. 80a-1 et seq.), including one that may be created, managed, underwritten, or to which investment advice is rendered, or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretion conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

- (a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale, as necessary to allow duly authorized withdrawals at the joint request of the Grantor and the NRC or to reinvest in securities at the direction of the Grantor;
- (b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;
- (c) To register any securities held in the Fund in its own name, or in the name of a nominee, and to hold any security in bearer form or in book entry, or to combine

certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, to reinvest interest payments and funds from matured and redeemed instruments, to file proper forms concerning securities held in the Fund in a timely fashion with appropriate government agencies, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, where so deposited, such securities may be merged and held in bulk in the name of the nominee or such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the U.S. Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. Annual Valuation. After payment has been made into this standby trust fund, the Trustee shall annually, at least 30 days before the anniversary date of receipt of payment into the standby trust fund, furnish to the Grantor and to the NRC a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than 60 days before the anniversary date of the establishment of the Fund. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor and the NRC, shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to the matters disclosed in the statement.

Section 11. Advice of Counsel. The Trustee may from time to time consult with counsel with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting on the advice of counsel.

Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing with the Grantor. (See Schedule C.)

Section 13. Successor Trustee. Upon 90 days notice to the NRC, the Trustee may resign; upon 90 days notice to NRC and the Trustee, the Grantor may replace the Trustee; but such resignation or replacement shall not be effective until the Grantor has appointed a successor Trustee and this successor accepts the appointment. The successor Trustee shall have the same powers and duties as those conferred upon the

Trustee hereunder. Upon the successor Trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor Trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor Trustee or for instructions. The successor Trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the NRC, and the present Trustee by certified mail 10 days before such changes becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee. All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are signatories to this agreement or such other designees as the Grantor may designate in writing. The Trustee shall be fully protected in acting without inquiry in accordance with the grantor's orders, requests, and instructions. If the NRC issues orders, requests, or instructions to the Trustee these shall be in writing, signed by the NRC, or its designees, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor, or the NRC, hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instruction from the Grantor and/or the NRC, except as provided for herein.

Section 15. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee and the NRC, or by the Trustee and the NRC, if the Grantor ceases to exist.

Section 16. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 15, this trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the NRC, or by the Trustee and the NRC, if the Grantor ceases to exist. Upon termination of the trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor or its successor.

Section 17. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this trust, or in carrying out any directions by the Grantor, or the NRC, issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the trust fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 18. This Agreement shall be administered, construed, and enforced according to the laws of the United States.

Section 19. Interpretation and Severability. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement. If any part of this agreement is invalid, it shall not affect the remaining provisions which will remain valid and enforceable.

IN WITNESS WHEREOF the parties have caused this Agreement to be executed by the respective officers duly authorized and the incorporate seals to be hereunto affixed and attested as of the date first written above.

ATTEST:

[Insert name of Grantor]  
[Signature of representative  
of Grantor]  
[Title]

[Title]  
[Seal]

[Insert name of Trustee]  
[Signature of representative  
of Trustee]  
[Title]

ATTEST:

[Title]  
[Seal]

United States Enrichment Corporation  
Standby Trust Agreement

SCHEDULE A

This Agreement demonstrates financial assurance for the following cost estimates for the following licensed activities:

U.S. NUCLEAR  
REGULATORY  
COMMISSION  
CERTIFICATE OF  
COMPLIANCE NUMBER

GDP-1

NAME AND  
ADDRESS OF  
LICENSEE

United States Enrichment Corporation  
6903 Rockledge Drive  
Bethesda, Maryland 20817

5600 Hobbs Road  
Paducah, Kentucky 42001

COST ESTIMATE FOR  
REGULATORY ASSURANCES  
DEMONSTRATED BY THIS  
AGREEMENT

[Insert amount of agreement]

The cost estimates listed here were submitted to the NRC on [insert date]

The Total Cost of decommissioning the GDP, assuming no liability for decontamination, is as per the decommissioning cost estimate on file with the NRC.

United States Enrichment Corporation \_\_\_\_\_

Trustee \_\_\_\_\_

United States Enrichment Corporation  
Standby Trust Agreement

SCHEDULE B

AMOUNT:  
AS EVIDENCED BY:

United States Enrichment Corporation \_\_\_\_\_

Trustee \_\_\_\_\_

United States Enrichment Corporation  
Standby Trust Agreement

SCHEDULE C

Trustee will be paid [insert amount] annually for services being provided under the standby trust agreement. This fee will apply whether or not payment has been made to the standby trust fund.



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## PGDP Depleted Uranium Management Plan

## **DEPLETED URANIUM MANAGEMENT PLAN**

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**LIST OF EFFECTIVE PAGES**

<u>Pages</u>	<u>Revision</u>
ii	130
iii	142
iv	130
v	130
vi	130
1	130
2	130
3	136
4	134
5	142
6	130

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CONTENTS

1.0 INTRODUCTION ..... 1

2.0 DEPLETED URANIUM PRODUCTION ESTIMATES ..... 1

3.0 MANAGEMENT AND DISPOSITION PLAN ..... 2

4.0 ITEMS ADDRESSED BY COMPLIANCE PLAN ..... 4

TABLE 1 ..... 5

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## **1.0 INTRODUCTION**

Under 10 Code of Federal Regulations (CFR) 76.35(m), the United States Enrichment Corporation (USEC) is required, as part of its application for a certificate of compliance, to provide:

“A description of the program, as appropriate, for processing, management, and disposal of mixed and radioactive wastes and depleted uranium generated by operations. This description must be limited to processing, management, and disposal activities conducted during operation of the facilities while under lease to the Corporation. The application must also include a description of the waste streams generated by enrichment operations, annual volumes of depleted uranium and waste expected, identification of radioisotopes contained in the waste, physical and chemical forms of the depleted uranium and waste, plans for managing the depleted uranium and waste, and plans for ultimate disposition of the waste and depleted uranium before turnover of the facilities to the Department of Energy under the terms of the lease agreement between the United States Enrichment Corporation and the Department.”

In accordance with 10 CFR 76.35(m), this plan describes USEC's program for the management and disposition of the depleted uranium (DU) produced as part of the enrichment activities at the Paducah (PGDP) Gaseous Diffusion Plant (GDP) and formerly at the Portsmouth (PORTS) GDP. USEC's program for the processing, management, and disposal of mixed and radioactive wastes is described in the Radioactive Waste Management Plan submitted as part of this application.

## **2.0 DEPLETED URANIUM PRODUCTION ESTIMATES**

The production of depleted uranium will continue throughout the period that enrichment activities are conducted at PGDP. The production rate of depleted uranium is a function of the demand for enriched uranium, the portion of that demand supplied by the Russian enriched uranium, and the operating mode of the plant (determined by power load, power costs, enrichment levels, and other factors). USEC's projected depleted uranium production estimates cover the period of the Nuclear Regulatory Commission (NRC) Certificate of Compliance. The estimates are provided in Table 1, along with the amount of depleted uranium that USEC is responsible for, taking into account the factors discussed in Section 3.0 below.

The funds set aside for the disposition of depleted uranium will be based on the actual production rates of depleted uranium at the plant during the period that the plant is operated under the USEC/DOE Lease Agreement. USEC's funding plan for the disposition of depleted uranium is described in the Decommissioning Funding Program Description submitted as part of this application.

### 3.0 MANAGEMENT AND DISPOSITION PLAN

The depleted uranium is currently being stored as solid uranium hexafluoride (UF<sub>6</sub>) in carbon steel cylinders at PGDP (cylinder storage is described in PGDP SAR Section 3.7.2). The cylinders meet specific design requirements and special procedures and handling equipment are used for DU cylinder handling, movement, and stacking. USEC can continue to store depleted uranium in the solid state in these cylinders for an extended period without undue risk. In addition, cylinder inspections are conducted, as described below, to provide evidence of continued cylinder integrity.

The cylinders used for the storage of depleted uranium are inspected prior to being filled. After filling, the cylinder is cooled and then moved to a cylinder yard and stacked in place. After the cylinder is stacked in position, a baseline (initial) storage inspection is conducted at which point any damage to the cylinder is identified. If the cylinder is damaged, supervision is notified promptly and the damage evaluated for any actions required; the range of actions are to be commensurate with the cylinder damage. After the initial inspection, the cylinders are inspected every four years thereafter (except for any cylinders identified in the initial inspection as requiring a more frequent inspection); the condition of each cylinder is documented using a cylinder inspection data sheet.

Initial and quadrennial inspections are conducted on full cylinders that are normally single or double stacked. These inspections, conducted from ground level, with or without visual aids, are made using the following criteria:

- Cylinders positioned incorrectly (e.g., with valves in other than top center position); this often is an indication of potential stacking damage.
- Improperly stacked cylinders with potentially damaging contact (e.g., lifting lug resting on cylinder body, stiffening ring resting on stiffening ring, other criteria as described in the inspection procedure).
- Dents, bulges, cracks, metal loss, apparent by visual inspection, on the longitudinal and circumference welds.
- Dents, bulges, cracks, gouges, stacking damage, excessive scale or rust, apparent by visual inspection, on the cylinder shell.
- Bends, cracks or breaks from shell, impact damage, gouges, apparent by visual inspection, on the stiffening rings.
- Tears, dents, cracks, excessive scale or rust, or plugged weep hole, apparent by visual inspection, on the cylinder skirt (or valve protector).

Depleted uranium in the form of solid  $UF_6$  is suitable for conversion to other chemical forms. For example, the solid  $UF_6$  could be converted to  $U_3O_8$ ,  $UF_4$ , or uranium metal. There are a number of existing and potential uses for depleted uranium, including use in radiation shielding material, armor-piercing projectiles, and counterweights. It is possible that increased energy costs may make recovery of additional  $^{235}U$  from the depleted uranium economically feasible in the future and that other potential uses may also be identified. No credit for any salvage value has been taken, however, in determining USEC's decommissioning funding liabilities. The conversion of the depleted uranium to one of these other forms in the near term could either foreclose other uses and disposition options because of the difficulty of processing some of these uranium compounds and the lack of processing facilities, or increase the cost of the ultimate disposition.

Moreover, the amount of depleted uranium that will be produced by USEC in the near term will be relatively small in comparison with the DOE's existing depleted uranium inventory. DOE is currently storing approximately 500,000 MTU of depleted uranium as solid  $UF_6$  in approximately 60,000 cylinders stored at various locations on the DOE portions of the GDP plant sites. USEC presently anticipates that the bulk of its inventory of depleted uranium will ultimately be dispositioned in the same manner as the larger DOE depleted uranium inventory.

In the meantime, USEC has established agreements with the DOE that affect USEC's liability associated with the disposal of depleted uranium generated by USEC. These agreements are the "Memorandum of Agreement Between the United States Department of Energy and the United States Enrichment Corporation Relating to Depleted Uranium," dated June 30, 1998, the "Agreement Between the U.S. Department of Energy ("DOE") and USEC Inc. ("USEC"), dated June 17, 2002, the "Cooperative Agreement Between Department of Energy and USEC Inc. Concerning the American Centrifuge Demonstration Project," dated March 23, 2010, the contract between DOE and USEC for DOE acquisition of SWU, dated March 13, 2012, and the "Cooperative Agreement Between Department of Energy and USEC, Inc. and American Centrifuge Demonstration, LLC Concerning the American Centrifuge Cascade Demonstration Test Program", dated June 12, 2012.

The "Memorandum of Agreement Between the United States Department of Energy and the United States Enrichment Corporation Relating to Depleted Uranium," dated June 30, 1998 provides for the transfer to DOE of 2,026 48G cylinders containing approximately 16,674,000 Kg of depleted uranium generated by USEC's operations. In accordance with the agreement, USEC made the required full payment of over \$50M to DOE, covering the entire quantity of depleted uranium to be transferred. Therefore, the liability to dispose of the full amount of USEC's depleted uranium specified in the agreement now rests with DOE, further reducing the quantity of depleted uranium to be ultimately disposed of by USEC. Within these major parameters of the agreement, USEC and DOE agreed to implement the actual transfer of the material on a schedule covering the period of FY 1999 through 2004. Table 1 reflects the transfer.

The "Agreement Between the U.S. Department of Energy ("DOE") and USEC Inc. ("USEC"), dated June 17, 2002, provided, in part, for the DOE taking title of depleted uranium from USEC operations during USEC's fiscal years 2002 and 2003 and one-half the amount of depleted uranium generated during USEC's fiscal years 2004 and 2005. Therefore, as a result of this June 17, 2002 agreement, USEC's liability associated with the disposal of USEC generated depleted uranium was reduced by the quantity of depleted uranium specified in this June 17, 2002 agreement. The quantity of depleted uranium associated with this agreement is reflected in Table 1.

In 2010, DOE and USEC entered into the "Cooperative Agreement Between Department of Energy and USEC Inc. Concerning the American Centrifuge Demonstration Project," dated March 23, 2010, to provide support for the continued development and demonstration of the American Centrifuge technology. DOE agreed to accept title to 13,312,411 kg of DU to enable USEC to release encumbered funds. The quantity of Depleted Uranium associated with the agreement is reflected in Table 1.

In 2012, DOE and USEC entered into a contract which DOE acquired SWU in exchange for DOE's accepting title to, and eventual disposal responsibility for, 13,073,045 kg of DU. The quantity of DU associated with the agreement is reflected in Table 1.

The “Cooperative Agreement Between Department of Energy and USEC Inc. and American Centrifuge Demonstration, LLC Concerning the American Centrifuge Cascade Demonstration Test Program,” dated June 12, 2012, transferred title and responsibility for disposition from USEC to DOE of up to 39,200 MT DUF<sub>6</sub> (26,505 MT of DU at USEC tails purity).

In addition to USEC’s enrichment operations, USEC also performs contract work for the DOE and DOE contractors. To compensate USEC for incurred costs associated with these contracts, DOE has taken title to depleted uranium further reducing USEC’s liability for the disposal of depleted uranium. The quantity of depleted uranium associated with the compensation for these services is reflected in Table 1.

In addition to the foregoing outlets, USEC will, to the extent practicable, continue to market depleted uranium for uses in military applications, counterweights, and shielding applications. Efforts may also be made to develop other commercial uses that could include shielding for high-level waste storage and shipping casks, or multipurpose canisters being developed for the DOE high-level waste program.

The remaining inventory will continue to be stored as solid UF<sub>6</sub> until it can be processed in accordance with the disposition strategy established by DOE for its inventory.

The estimated cost of conversion and disposition of the depleted uranium is provided in the Decommissioning Funding Program, along with a description of the funding mechanisms that will be used to address USEC’s funding liabilities.

#### **4.0 ITEMS ADDRESSED BY COMPLIANCE PLAN**

Section deleted.

**Table 1. Estimated amount of depleted uranium (DU) generated by USEC and its disposition, in metric tons uranium (MTU) for PORTS and PGDP combined.**

Year	DU Generated by USEC <sup>1</sup>	DU Transferred to DOE <sup>5</sup>	Other DU <sup>4</sup>	Estimated net cumulative USEC DU <sup>2</sup>	USEC DU at PGDP	USEC DU at PORTS
July 28, 1998- Dec. 31, 2010	-	-	-	31,416 <sup>3</sup>	31,017	399
CY2011	5,419	-	(406)	36,429	36,429	0
CY2012	2,463	(38,823)	(5)	64	64	0
CY2013	0	0	0	64	64	0
CY2014	170	(234) <sup>6</sup>	0	0	0	0

Notes:

1. Projections are provided through the expiration date of the NRC Certificate of Compliance.
2. DOE retains liability for depleted uranium generated prior to USEC's privatization (July 28, 1998) per USEC Privatization Act (Public Law 104-134, Sec 3109, paragraph (a)(3)).
3. Reflects the cumulative amount of DU since USEC's privatization (July 28, 1998) for which USEC is responsible for disposition.
4. Includes depleted uranium refed to the cascade or sold.
5. DU transfer to DOE in 2012 includes 13,073 MTU related to DOE's acquisition of SWU in exchange for DOE's accepting title to, and eventual disposal responsibility for, a quantity of depleted uranium tails, and 25,750 MTU related to the June 12, 2012 cooperative agreement between DOE and USEC Inc., in which DOE accepted title to and responsibility for the disposition of up to 39,200 MT DUF<sub>6</sub> (26,505 MTU of DU at USEC tails purity).
6. Projected transfer of balance of USEC DU to DOE under June 12, 2012, Cooperative Agreement (see note 5).

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Affidavit

**AFFIDAVIT OF STEVEN A. TOELLE  
SUPPORTING APPLICATION TO WITHHOLD FROM  
PUBLIC DISCLOSURE  
ENCLOSURES 1 AND 2 OF USEC LETTER  
GDP 13-0008 DATED March 21, 2013**

I, Steven A. Toelle, of the United States Enrichment Corporation (USEC), having been duly sworn, do hereby affirm and state:

1. I have been authorized by USEC to (a) review the information owned by USEC which is referenced herein relating to the Paducah Gaseous Diffusion Plant and which USEC seeks to have withheld from public disclosure pursuant to section 147 of the Atomic Energy Act (AEA), as amended, 42 U.S.C. § 2167, and 10 CFR 2.390(a)(4), and 9.17(a)(4), and (b) apply for the withholding of such information from public disclosure by the Nuclear Regulatory Commission (NRC) on behalf of USEC.
2. Consistent with the provisions of 10 CFR 2.390(b)(4) of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.
  - i. The information sought to be withheld from public disclosure is owned and has been held in confidence by USEC.
  - ii. The information is of a type customarily held in confidence by USEC and not customarily disclosed to the public. USEC has a rational basis for determining the types of information customarily held in confidence by it and, in that connection, utilizes a system to determine when and whether to hold certain types of information in confidence. The application of that system and the substance of that system constitute USEC policy and provide the rational basis required. Under that system, information is held in confidence if it falls in one or more of several types,



the release of which might result in the loss of an existing or potential competitive advantage, as follows:

- a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where presentation of its use by any of USEC's competitors without license from USEC constitutes a competitive economic advantage over other companies.
- b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage (e.g., by optimization or improved marketability).
- c) Its use by a competitor would reduce their expenditure of resources or improve their competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing a similar product.
- d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of USEC, its customers or suppliers.
- e) It reveals aspects of past, present, or future USEC or customer funded development plans and programs of potential commercial value to USEC.
- f) It contains patentable ideas, for which patent protection may be desirable.
- g) It reveals information concerning the terms and conditions, work performed, administration, performance under or extension of contracts with its customers or suppliers.

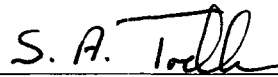
iii. There are sound policy reasons behind the USEC system which include the following:

- a) The use of such information by USEC gives USEC a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the USEC competitive position.

- b) It is information, which is marketable in many ways. The extent to which such information is available to competitors diminishes USEC's ability to sell products and services involving the use of the information.
  - c) Use by our competitors would put USEC at a competitive disadvantage by reducing their expenditure of resources at USEC expense.
  - d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components or proprietary information, any one component may be the key to the entire puzzle, thereby depriving USEC of a competitive advantage.
  - e) Unrestricted disclosure would jeopardize the position of prominence of USEC in the world market, and thereby give a market advantage to the competition of those countries.
  - f) The USEC capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.
- iv. The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR Section 2.390, it is to be received in confidence by the Commission.
- v. The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.
3. The proprietary information sought to be withheld is contained in Enclosures 3 and 4 of USEC letter GDP 13-0021. This letter provides the NRC with the PGDP waste disposal estimate spreadsheet and waste stream database. The spreadsheet and database contain financial information normally held in confidence.

Further the deponent sayeth not.

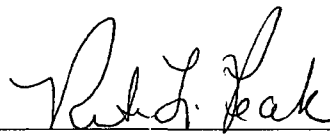
Steven A. Toelle, having been duly sworn, hereby confirms that I am the Director, Regulatory Affairs of USEC, that I am authorized on behalf of USEC to review the information attached hereto and to sign and file with the Nuclear Regulatory Commission this affidavit and the attachments hereto, and that the statements made and matters set forth herein are true and correct to the best of my knowledge, information, and belief.



Steven A. Toelle

On this 19th day of December 2013, the individual signing above personally appeared before me, is known by me to be the person whose name is subscribed to within the instrument, and acknowledged that he executed the same for the purposes therein contained.

In witness hereof I hereunto set my hand and official seal.



Rita Peak, Notary Public  
State of Maryland, Montgomery County  
My commission expires December 10, 2017

