

## U.S. NUCLEAR REGULATORY COMMISSION

**CERTIFICATE OF COMPLIANCE**

## FOR OPERATION OF GASEOUS DIFFUSION PLANTS

Pursuant to the Atomic Energy Act of 1954, as amended, Title II of the Energy Reorganization Act of 1974, as amended (88 Stat 1242), and Title 10, *Code of Federal Regulations*, Part 76, and in reliance on statements and representations heretofore made by the applicant, a certificate is hereby issued. This certificate is issued to certify that operation of the Gaseous Diffusion Plant identified in No. 5 below is in compliance with the standards set forth in 10 CFR, Part 76, "Certification of Gaseous Diffusion Plants." This certificate shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations and orders of the U.S. Nuclear Regulatory Commission (NRC) now or hereafter in effect and to any conditions specified below.

1. CERTIFICATE NUMBER  GDP-1	2. AMENDMENT NUMBER  16	3. EXPIRATION DATE  ON TIMELY RENEWAL PER TITLE 10 OF THE <i>CODE OF FEDERAL REGULATIONS</i> PART 76.55
4. ISSUED TO  United States Enrichment Corporation 2 Democracy Center 6903 Rockledge Drive Bethesda, MD 20817	5. FACILITY AND LOCATION  Paducah Gaseous Diffusion Plant Paducah, KY	6. DOCKET NUMBER  70-7001
7. CONDITIONS  This certificate is conditional upon fulfilling the requirements of 10 CFR Part 76, as applicable, and the conditions below.		

8. The United States Enrichment Corporation (USEC) shall conduct its operations in accordance with:
- a) The statements and representations contained in the Certification Application through Revision 143, dated April 1, 2014.
  - b) Technical Safety Requirements contained in Volume 4, Revision 112, dated August 11, 2008, as modified by letter(s) dated November 4, 2008; November 21, 2008; April 17, 2009; August 10, 2009; October 5, 2009; June 7, 2010; December 15, 2010; February 14, 2011; March 15, 2011; August 17, 2012; November 9, 2012; December 16, 2013; and March 6, 2014. Changes to the Technical Safety Requirements shall require NRC's approval prior to implementation (except for changes made under 10 CFR 76.68).

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- c) Operations Security Plan dated September 24, 2009, as modified by revision dated January 18, 2012 (Revision 1).
9. USEC is hereby granted the special authorizations and exemptions in Chapter 1, Section 1.8 of the Safety Analysis Report, Revision 24, dated April 15, 1998, as modified by Revision 119, dated April 1, 2010.
10. If, at any time after the privatization date, the Corporation obtains information reasonably indicating changes described in the National Industrial Security Program Operating Manual (NISPOM), DOD 5520.22-M, January 1995, Chapter 1, Section 3, 1-302(h), to the information previously submitted to the NRC, described in the NISPOM, Chapter 2, Section 3, 2-302b (1) through (11), the Corporation shall notify the NRC in writing within 15 days.
11. If the corporation enters into negotiations for the proposed merger, acquisition, or takeover by a foreign person, the Corporation shall submit notification to the NRC, in writing, within 15 days of the commencement of such negotiations. The submission shall include the type of transaction under negotiation (stock purchase, asset purchase, etc.); the identity of the potential foreign person investor; a plan to negate foreign ownership, control, or domination, and copies of any related loan, purchase and shareholder agreements, annual reports, bylaws, articles of incorporation, partnership agreements and reports filed with other Federal agencies.
12. USEC, or its successors, as the Executive Agent for the United States for implementing the Russian Highly Enriched Uranium Agreement, shall notify NRC in writing within 15 days, of any termination or material change in the provisions of the "Memorandum of Agreement Between the United States Acting By and Through the United States Department of State, and the United States Department of Energy and the United States Enrichment Corporation, for USEC to Serve as the United States Government's Executive Agent. Under the Agreement between the United States and the Russian Federation Concerning the Disposition of Highly Enriched Uranium Extracted from Nuclear Weapons" entered into as of April 18, 1997.
13. USEC shall review the decommissioning cost estimates and associated funding levels in October of each year and adjust the estimates and funding levels as necessary. If USEC determines that the existing financial instruments do not adequately cover the adjusted decommissioning cost estimate, USEC shall submit financial instruments to cover the new cost estimates by December 31 of each calendar year.

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14. Notwithstanding the requirements of TSR 2.4.4.4, USEC shall use the safe mass curve in TSR 2.5 Appendix B, instead of the safe mass curve in TSR 2.4 Appendix B, for determining entry into TSR 2.4.4.4 Condition C. The combined mass of all deposits in the affected equipment shall be used in making this determination, if double batching is not considered.
  
15. Revisions of NCSE 041 and NCSA 310-003 that modify nuclear criticality safety controls for the Normetex pumps (i.e., the uranium to oil structural barrier, the High Oil Pressure Detection System (HOPDS) and HOPDS pump trip, and the weekly oil sampling program) shall be submitted to the NRC for review and approval prior to implementation.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date: 5/28/2014 By: TGrice /RA/  
Thomas Grice, Acting Chief  
Uranium Enrichment Branch  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Material Safety  
and Safeguards

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List of GDP-1 Amendments Since Last Renewal (12/31/2008)

AMENDMENT NUMBER	APPLICABLE DOCUMENT	SUBJECT	APPLICATION DATE	ISSUANCE DATE	IMPLEMENTATION DATE
1	TSR	CAAS Amendment	11/21/2008	3/17/2009	60 days from date of issuance
2	TSR	Normetex Pump UF <sub>6</sub> Release Detection System	11/4/2008	4/23/2009	30 days from date of issuance
3	CAR	Helicopter Flyover Radiological Survey	4/17/2009	8/26/2009	30 days from date of issuance
4	TSR	Allow Heating of 48OM, 30A, 48A, and 48F UF <sub>6</sub> Cylinders	8/10/2009	2/22/2010	60 days from date of issuance
5	TSR	Fire Protection System – Building Sprinkler System	10/5/2009	4/14/2010	60 days from date of issuance
6	TSR	Allow Individual Worker to Work 26 Hours in Any 48-Hour Period	6/7/2010	10/28/2010	Immediately upon issuance
7	TSR	R-114 Coolant Overpressure Control System	6/22/2010	11/17/2010	30 days from date of issuance
8	TSR	De-lease of C-728 Motor Cleaning Facility	3/15/2011	3/25/2011	3/31/2011
9	TSR	C-360 Minimum Staffing Requirements and Operations Modes	12/15/2010	6/20/2011	30 days from date of issuance
10	TSR	Allow Use of C-745-X for Storage of Process Equipment Containing Potentially Fissile Material	2/14/2011	6/21/2011	30 days from date of issuance
11	TSR	Revise Title of Corporate Officer Responsible for Overall Gaseous Diffusion Plant Safety	08/17/2012	1/17/2013	30 days from date of issuance
12	TSR	Revise Section 3.0, Administrative Requirements, Table 3.2.2-1, Minimum Staffing Requirements.	11/09/2012	5/28/2013	Effective immediately
13	TSR	Deletion of TSRs for C-331, C-333, C-333-A, C-337-A, C-310, C-315, C-335, C-337, and Criticality Accident Alarm System for Non-Cascade Facilities	3/19/2012	9/27/2013	Effective at time of release of each individual facility.
14	TSR	Revision of frequency of performance of TSR SR 2.4.4.3-1	3/06/2014	3/27/2014	Effective immediately
15	TSR	Revision of TSR Table 3.2.2-1, Minimum Staffing Requirements	12/16/2013	4/22/2014	Effective immediately
16	SAR	Revision of Table 1-4, Authorized Uses of NRC-Regulated Materials, and Application to Downgrade	01/17/2014		Effective immediately