



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION II  
SAM NUNN ATLANTA FEDERAL CENTER  
61 FORSYTH STREET, SW, SUITE 23T85  
ATLANTA, GEORGIA 30303-8931

January 11, 2008

Mr. Russell B. Starkey, Jr.  
Vice President - Operations  
United States Enrichment Corporation  
Two Democracy Center  
6903 Rockledge Drive  
Bethesda, MD 20817

SUBJECT: NRC INSPECTION REPORT NO. 70-7002/2007-006 AND NOTICE OF VIOLATION

Dear Mr. Starkey:

This refers to the inspection conducted on December 3 - 6, 2007, at the Portsmouth Gaseous Diffusion Plant. It was noted that cover letter to the original inspection report, dated January 2, 2008, incorrectly indicated that no violations were identified during the inspection period and did not require a response. Please disregard the January 2, 2008 cover letter and its enclosure.

Therefore, please refer to the enclosed NRC Form 591FF, Parts 1 and 3, that have been revised to clarify the violation noted during the inspection of your programs. Please acknowledge receipt of this form by signing and dating it in the appropriate spaces. You are requested to retain the original and return a signed and dated copy to this office within ten days. Please retain the form in your files.

No other acknowledgment of this letter is required. However, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation," and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001 with a copy to the Regional Administrator, Region II, within 30 days of the date of this letter.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

R. Starkey, Jr.

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We apologize for any inconvenience that may have resulted from this error. Should you have any questions concerning this letter, please contact us.

Sincerely,

*/RA/*

Jay L. Henson, Chief  
Fuel Facility Inspection Branch 2  
Division of Fuel Facility Inspection

Docket No. 70-7002  
Certificate No. GDP-2

Enclosure: NRC Form 591FF Parts 1 and 3

cc w/encl:  
S. Penrod, Paducah General Manager  
P. O. Box 1410  
Paducah, KY 42001

V. Shanks, Paducah Regulatory Affairs Manager  
P. O. Box 1410  
Paducah, KY 42001

W. Jordan, Portsmouth General Manager  
Portsmouth Gaseous Diffusion Plant  
United States Enrichment Corporation  
P. O. Box 628  
Piketon, OH 45661

D. Fogel, Portsmouth Regulatory Affairs Manager  
Portsmouth Gaseous Diffusion Plant  
United States Enrichment Corporation  
P. O. Box 628  
Piketon, OH 45661

S. A. Toelle, Director, Nuclear Regulatory Affairs, USEC  
United States Enrichment Corporation  
Two Democracy Center  
6903 Rockledge Drive  
Bethesda, MD 20817

cc w/emcl: (cont'd on page 3)

R. Starkey, Jr.

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(cc w/encl: cont'd)

R. M. DeVault, Regulatory Oversight Manager  
Department of Energy  
P. O. Box 2001  
Oak Ridge, TN 37831

Carol O'Claire  
State Liaison Officer  
Ohio Emergency Management Agency  
Columbus, OH 43235-2206

Distribution w/encl:

M. Raddatz, NMSS  
J. Henson, RII  
D. Hartland, RII  
PUBLIC

\*see previous concurrence

PUBLICLY AVAILABLE       NON-PUBLICLY AVAILABLE       SENSITIVE       NON-SENSITIVE

ADAMS: X Yes      ACCESSION NUMBER: \_\_\_\_\_

OFFICE	RII:DFFI	RII:DFFI	RII:DFFI				
SIGNATURE	MC 1/10/08	JP 1/10/08	DH 1/10/08				
NAME	MCrespo*	JPelchat*	DHartland				
DATE							
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

**SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION**

1. LICENSEE/LOCATION INSPECTED: United States Enrichment Corporation 6903 Rockledge Drive Bethesda, MD 20817		2. NRC/REGIONAL OFFICE U.S. Nuclear Regulatory Commission Region II, Division of Fuel Facilities Inspection 61 Forsyth Street, Suite 23T85 Atlanta, GA 30303	
INSPECTION 70-7002/2007-006			
3. DOCKET NUMBER(S) : 70-7002	4. LICENSEE NUMBER(S): GDP-2	5. DATE(S) OF INSPECTION: 12/3-6/2007	

**LICENSEE:**

The inspection was an examination of the activities conducted under your license as they relate to radiation safety and to compliance with the Nuclear Regulatory Commission (NRC) rules and regulations and the conditions of your license. The inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector. The inspection findings are as follows:

1. Based on the inspection findings, no violations were identified.

2. Previous violation(s) closed.

3. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy, NUREG-1600, to exercise discretion, were satisfied. Non-Cited Violation(s) was/were discussed involving the following requirement(s) and Corrective Action(s):

\_\_\_\_\_

4. During this inspection certain of your activities, as described below and/or attached, were in violation of NRC requirements and are being cited. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11.

See Part 2.

Licensee's Statement of Corrective Actions for Item 4, above.

I hereby state that, within 30 days, the actions described by me to the inspector will be taken to correct the violations identified. This statement of corrective actions is made in accordance with the requirements of 10 CFR 2.201 (corrective steps already taken, corrective steps which will be taken, date when full compliance will be achieved). I understand that no further written response to NRC will be required, unless specifically requested.

Title	Printed Name	Signature	Date
LICENSEE'S REPRESENTATIVE			
NRC INSPECTOR	Manuel Crespo, John Pelchat	/RA/	1/11/08

**SAFETY INSPECTION REPORT  
AND COMPLIANCE INSPECTION**

1. LICENSEE

United States Enrichment Corporation  
6903 Rockledge Drive  
Bethesda, MD 20817

2. NRC/REGIONAL OFFICE

U.S. Nuclear Regulatory Commission  
Region II, Division of Fuel Facilities Inspection  
61 Forsyth Street, Suite 23T85  
Atlanta, GA 30303

REPORT NUMBER(S) 70-7002/2007-006

3. DOCKET NUMBER(S)

70-7002

4. LICENSE NUMBER(S)

GDP-2

5. DATE(S) OF INSPECTION

12/3-6/2007

**SUPPLEMENTAL INSPECTION INFORMATION**

(Continued)

On December 6, 2007, while observing a surveillance in the Extended Range Product (ERP) area, the inspectors noted that Procedure XP4-TO-CX6135, "Gamma Spectrometer Automatic Block Valve Test," was not implemented as required. The reset to the gamma spectrometer alarm was pressed prior to verifying that the automatic liquid drain shutoff valve had closed. The valve was required to close when a high assay value was detected and, since it then automatically re-opened when the alarm was reset, the valve was not verified to have closed. In addition, the technician, who was also a first line manager (FLM)-in-training, determined that he could repeat the necessary steps without informing supervision.

Technical Safety Requirement 3.9.1 required, in part, that approved written procedures be implemented for activities described in Safety Analysis Report (SAR) Section 6.11.4.1. SAR Section 6.11.4.1 specified, in part, that a procedure was required for any task described in the SAR. SAR Section 3.2.2.1.2.3.2 indicated that automatic operation of the ERP Station gamma spectrometer and liquid drain shutoff valve were tested semiannually.

Step 8.2.8 of Procedure XP4-TO-CX6135, "Gamma Spectrometer Automatic Block Valve Test," required that the automatic shutoff valve be verified closed prior to pressing the "alarm reset" per Step 8.2.12 of the procedure. In addition, the note prior to Step 8.2.8 of the procedure required that components that did not perform as required be immediately identified to supervision.

Contrary to the above, on December 6, 2007, certificatee personnel did not verify that the automatic shutoff valve was closed, as required by Step 8.2.8 of Procedure XP4-TO-CX6135, prior to pressing the "alarm reset" button. In addition, personnel did not identify to supervision that the valve had not been verified as having performed, as required by the note prior to Step 8.2.8 of the procedure, prior to repeating the procedure steps. This is a Severity Level IV violation (VIO 2007-006-01).

The issue was captured in the certificatee's corrective action system as Problem Reports PR-PTS-07-03576 and 03587. In response, the certificatee will add clarification to the procedure to emphasize the importance of the procedure sequence. Also, training will be conducted for affected staff regarding these changes prior to being authorized to perform the revised procedure. In addition, personnel who were in training to be FLMs were made aware of the limitations of their position.

**SAFETY INSPECTION REPORT  
AND COMPLIANCE INSPECTION**

1. LICENSEE

**United States Enrichment Corporation  
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2. NRC/REGIONAL OFFICE

**U.S. Nuclear Regulatory Commission  
Region II, Division of Fuel Facilities Inspection  
61 Forsyth Street, Suite 23T85  
Atlanta, GA 30303**

REPORT NUMBER(S): **70-7002/2007-006**

3. DOCKET NUMBER(S):

**70-7002**

4. LICENSE NUMBER(S):

**GDP-2**

5. DATE(S) OF INSPECTION:

**12/3-6/2007**6. INSPECTOR(S): **Manuel Crespo, John Pelchat**

7. INSPECTION PROCEDURES USED: 88020, 88025, 88010

**SUPPLEMENTAL INSPECTION INFORMATION**

**Executive Summary**

The Portsmouth Gaseous Diffusion Plant had previously discontinued uranium hexafluoride (UF<sub>6</sub>) enrichment and is presently processing UF<sub>6</sub> to remove impurities like technetium-99, and conducting other cleanup processes as part of cold shutdown efforts. During the period of the inspection, routine cleanup operations were conducted without incident.

This was a routine, announced inspection that included observations and evaluations of operations, maintenance and surveillance, and operator training programs. The inspection involved interviews with plant personnel, review of selected records, and observation of work activities. The inspection identified the following aspects of licensee's program as outlined below:

**Operations (IP 88020)**

- The inspectors reviewed several of the applicable safety-related controls from the technical safety requirements for the active portions of the facility. The inspectors noted no deficiencies in their implementation.
- Certificatee personnel demonstrated adequate knowledge of process operations, safety controls, and applicable operations procedures for their assigned areas.
- The inspectors observed no issues in operations involving Extended Range Product and other cylinder processing activities.

**Maintenance and Surveillance (IP 88025)**

- Personnel performing maintenance activities were qualified for their positions and tasks. However, the inspectors identified a violation regarding personnel that did not perform a surveillance in accordance with procedural requirements. Details of the violation (VIO 70-7002/2007-006-01) are documented in Part 1 of the report.

**Operator Training (IP 88010)**

- The certificatee's program for initial and refresher training in nuclear criticality safety, radiation protection, and general emergency areas was in compliance with regulatory requirements.
- Based on the interviews, the inspectors concluded that training for changes to the facility and operating procedures was effective in that operators were knowledgeable of changes in their assigned areas.
- Formal training was developed and updated in accordance with certificatee procedures by qualified instructors.
- Training material and examinations were current and adequate in measuring the knowledge level of plant workers.
- Lessons learned from past facility events were appropriately communicated in morning meetings to improve worker safety.

**Permanent Plant Modifications (IP 88070)**

- NRC headquarters staff performed a review of the certificatee's latest annual submittal that provided a brief summary of all changes to the facility. Regional inspection staff also performed a review of the scope of plant modifications implemented by the certificatee during the last calendar year. Based on those reviews and recommendations from headquarters staff, the inspectors have determined that no significant modifications have been made to risk-significant processes. Therefore, no on-site inspection of plant modifications is required per this inspection module.

**Items Opened, Closed, And Discussed**

<b><u>Item Number</u></b>	<b><u>Status</u></b>	<b><u>Type</u></b>	<b><u>Description</u></b>
2007-006-01	Opened	VIO	Failure to follow surveillance procedure.