



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW, SUITE 23T85
ATLANTA, GEORGIA 30303-8931

January 5, 2009

EA-08-330

Mr. Robert Van Namen
Senior Vice President – Uranium Enrichment
United States Enrichment Corporation
Two Democracy Center
6903 Rockledge Drive
Bethesda, MD 20817

SUBJECT: NRC INSPECTION REPORT NO. 70-7002/2008-004

Dear Mr. Van Namen:

This refers to the inspection conducted from September 10 and 11, and October 27 through 30, 2008, at the Portsmouth facility. The purpose of the inspection was to determine whether activities authorized by the certificate were conducted safely and in accordance with NRC requirements. On October 30, 2008, the inspector discussed the findings with members of your staff. On November 26, 2008, Jay Henson of my staff re-exited with Doug Fogel of your staff and informed him of our decision to hold an enforcement conference to discuss the apparent violation referenced below.

The inspection consisted of an examination of activities conducted under the certificate as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of the certificate. Areas examined during the inspection are identified in the enclosed report. Within these areas, the inspection consisted of a selective examination of procedures and representative records, observations of activities in progress, and interviews with personnel.

Based on the results of this inspection, an apparent violation was identified and is being considered for escalated enforcement action in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC's Web site at (<http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html>).

The apparent violation involved the movement of a cylinder containing liquid uranium hexafluoride in early September 2008 by a means other than an approved overhead crane or scale cart as required by Technical Safety Requirement 2.1.3.14. Since the NRC has not made a final determination in this matter, a Notice of Violation is not being issued for these inspection findings at this time. In addition, please be advised that the number and characterization of apparent violations described in the enclosed inspection report may change as a result of further NRC review.

An open predecisional enforcement conference to discuss this apparent violation has been scheduled for January 29, 2009. This conference will be open to public observation in accordance with Section V of the NRC Enforcement Policy.

The decision to hold a predecisional enforcement conference does not mean that the NRC has determined that a violation has occurred or that enforcement action will be taken. This conference is being held to obtain information to assist the NRC in making an enforcement decision. This may include information to determine whether a violation occurred, information to determine the significance of a violation, information related to the identification of a violation, and information related to any corrective actions taken or planned to be taken.

The conference will provide an opportunity for you to provide your perspective on these matters and any other information that you believe the NRC should take into consideration in making an enforcement decision. In presenting your corrective actions, you should be aware that the promptness and comprehensiveness of your actions will be considered in assessing any civil penalty for the apparent violation. The guidance from NRC Information Notice 96-28, "Suggested Guidance Relating to Development and Implementation of Corrective Action," may be helpful.

You will be advised by separate correspondence of the results of our deliberations on this matter. No response regarding the apparent violation is required at this time.

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/NRC/ADAMS/index.html> <http://www.nrc.gov/reading-rm/adams.html>.

Should you have any questions concerning this letter, please contact us.

Sincerely,

/RA/

Joseph W. Shea, Director
Division of Fuel Facility Inspection

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

Enclosure: Inspection Report 70-7002/2008-004

cc w/encl:
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General Manager
Portsmouth Gaseous Diffusion Plant
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Piketon, OH 45661

cc w/encl (Cont'd on page 3)

R. Van Namen

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(cc w/encl: cont'd)

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X PUBLICLY AVAILABLE NON-PUBLICLY AVAILABLE SENSITIVE X NON-SENSITIVE

ADAMS: X Yes ACCESSION NUMBER: _____

X SUNSI REVIEW COMPLETE

OFFICE	RII:DFFI	RII:DFFI	RII:DFFI	RII:EICS			
SIGNATURE	DH 11/26/08	DH for 11/26/08	JH 12/11/08	SS for 11/26/08			
NAME	DHartland	CCramer	JHenson	CEvans			
DATE	1/ /2009	1/ /2009	1/ /2009	1/ /2009	1/ /2009	1/ /2009	1/ /2009
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.: 70-7002

Certificate No.: GDP-2

Report No.: 70-7002/2008-004

Certificate Holder: United States Enrichment Corporation

Facility: Portsmouth Gaseous Diffusion Plant

Location: Piketon, OH

Dates: September 10-11, and October 27-30, 2008

Inspectors: D. Hartland, Senior Fuel Facility Inspector
C. Cramer, Fuel Facility Inspector

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

Enclosure

EXECUTIVE SUMMARY

Portsmouth Gaseous Diffusion Plant
NRC Inspection Report 70-7002/2008-004

This was an announced inspection that included observations and evaluations of a permanent plant modification and followup to an incident involving the movement of a liquid uranium hexafluoride (UF₆) cylinder by unauthorized means. The inspection involved interviews with plant personnel, review of selected records, and observation of work activities. The inspection identified the following aspects of the certificate holder's program as outlined below:

Permanent Plant Modifications

No issues were identified during a review of a modification to equipment in Building 326 to allow for the chemical treatment of cascade equipment containing high-enriched uranium.
(Paragraph 2)

Movement of Liquid UF₆ Cylinder By Mobile Equipment

One apparent violation was identified regarding movement of a cylinder containing liquid UF₆ by a means other than an approved overhead crane or scale cart as required by Technical Safety Requirement 2.1.3.14. (Paragraph 3)

Attachment:

Partial List of Persons Contacted

Inspection Procedures Used

List of Items Opened, Closed, and Discussed

REPORT DETAILS

1. Summary of Plant Status

The Portsmouth Gaseous Diffusion Plant had previously discontinued uranium hexafluoride (UF₆) enrichment and is presently processing UF₆ to remove impurities (e.g., technetium-99) and conducting other cleanup processes as part of cold shutdown efforts.

2. Permanent Plant Modifications (Inspection Procedure 88070)

a. Inspection Scope and Observations

The inspectors reviewed the implementation of the modification to equipment in Building 326 to allow for the chemical treatment of cascade equipment containing high-enriched uranium, with subsequent down blending and withdrawal. The inspectors verified that the design information and safety analyses were in compliance with required design criteria. The inspectors verified that the modification was installed and system condition was consistent with the design basis, and that post-modification testing assured implementation of design and safety system functionality.

The inspectors verified that design and licensing documents and operating procedures were updated to reflect the modification, and plant staff were properly trained prior to implementation. The certificate holder also entered issues identified during the modification review process and its operational readiness review in its corrective action system at the appropriate threshold for resolution. The operational readiness review was comprehensive and was conducted in a thorough manner.

b. Conclusions

No issues were identified during a review of the modification to equipment in Building 326 to allow for the chemical treatment of cascade equipment containing high-enriched uranium.

3. Movement of Liquid UF₆ Cylinder By Mobile Equipment

a. Inspection Scope and Observations

On September 8, 2008, during a daily review of cylinder movement lists, a process engineer identified that a full cylinder that had previously been heated to a liquid state and sampled in an autoclave in Building X-344 was not listed as being located in a liquid uranium cylinder area (LUCA). During followup, certificate holder staff determined that the cylinder had been moved to a storage pad with mobile equipment instead of an approved crane before its required 5-day cooling period had been completed, a violation of Technical Safety Requirement (TSR) 2.1.3.14.

In response, the certificate holder erected a boundary around the cylinder, established a temporary LUCA as required by plant procedure, suspended all cylinder movements, and generated Problem Report 08-2221. The certificate holder initiated an investigation into the event and determined that an operator mistakenly put the cylinder tare weight instead of the net weight on the form used to determine the cylinder cooling time. As a result, the cylinder was allowed to cool for only two days instead of the required five before it was moved with mobile equipment.

The certificate holder also noted that the governing procedure provided for a second verification that the cool down time was correct but had no such verification for the weight of the liquid UF₆ on which the cool down time was based. As immediate corrective action, the certificate holder verified that no other cylinders recently processed were affected and implemented an independent verification of cylinder net weight by a first line manager or process engineer before resuming cylinder movements. Shift briefs were conducted with all involved employees to communicate the immediate actions taken.

On September 10-11, 2008, the inspectors performed an on-site followup of the event and the certificate holder's ongoing investigation. The inspectors interviewed the building operations manager and reviewed written statements made by other plant staff involved in the incident. The inspectors also reviewed the form that was used to document the cylinder net weight and its governing procedure, as well as the documented interim compensatory actions and shift briefs. The inspectors determined that the certificate holder had taken the appropriate interim actions, and no further issues were identified.

During the week of October 27, 2008, the inspectors performed an on-site review of the certificate holder's completed investigation and determined that it was thorough. The inspectors noted that the certificate holder performed an extent of condition review which identified vulnerability (i.e, no second verification) with implementation of other TSR-related activities. In addition to the lack of second verification of the liquid UF₆ net weight, the certificate holder also identified a lack of specific instruction for determining the weight and insufficient initial training on performance of LUCA paperwork. Long-term corrective actions to prevent recurrence were pending as of the end on the inspection.

TSR 3.1.3.14 required that cylinders containing liquid UF₆ be moved by overhead cranes or scale carts. Movement of a cylinder containing liquid UF₆ by a means other than an approved overhead crane or scale cart as required by TSR 2.1.3.14 is an apparent violation. (APV 70-7002/2008-004-01)

b. Conclusions

One apparent violation was identified regarding movement of a cylinder containing liquid UF₆ by a means other than an approved overhead crane or scale cart as required by TSR 2.1.3.14.

4. **Exit Meeting**

The inspection scope and results were presented to members of the certificate holder's staff on October 30, and November 26, 2008. No dissenting comments were received from the certificate holder.

ATTACHMENT

1. PERSONS CONTACTED

Partial List of Licensee's Persons Contacted

J. Anzelmo	Director, Technical Services
T. Brooks	Director, Infrastructure Operations
D. Fogel	Nuclear Regulatory Affairs Manager
J. Tully	Manager, X-326 Cold Shutdown Operations
E. Wagner	Nuclear Safety Manager
K. Whittle	Manager, Feed Cleanup Operations

2. INSPECTION PROCEDURES USED

IP 88070, Permanent Plant Modifications

3. LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

<u>Item Number</u>	<u>Status</u>	<u>Type/Description</u>
APV 2008-004-01	Open	Movement of cylinder containing liquid UF ₆ by a means other than an approved overhead crane or scale cart as required by TSR 2.1.3.14