

### INSPECTION REPORT

1. LICENSEE OR CERTIFICATE HOLDER/LOCATION INSPECTED: United States Enrichment Corporation 6903 Rockledge Drive Bethesda, MD 20817		2. NRC/REGIONAL OFFICE: U.S. Nuclear Regulatory Commission Region II 245 Peachtree Center Avenue, NE, Suite 1200 Atlanta, GA 30303-1257	
REPORT NO: 2010-002			
3. DOCKET NUMBER: 70-7002	4. LICENSE OR CERTIFICATE NUMBER: GDP-2	5. DATE(S) OF INSPECTION: June 21-25, 2010	

**LICENSEE OR CERTIFICATE HOLDER:**

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

- 1. Based on the inspection findings, no violations were identified.
- 2. Previous violation(s) closed.
- 3. Reported events reviewed
- 4. The violation(s), specifically described to you by the inspectors 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, to exercise discretion, were satisfied.  
Non-Cited Violation(s) was/were discussed involving the following requirement(s) and Corrective Action(s):
  
- 5. 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.  
(Violations and Corrective Actions)

**LICENSEE OR CERTIFICATE HOLDER STATEMENT OF CORRECTIVE ACTIONS FOR ITEM 5, ABOVE**

I hereby state that, within 30 days, the actions described by me to the inspectors will be taken to correct the violation(s) 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 the NRC will be required, unless specifically requested.

Title	Printed Name	Signature	Date
LICENSEE/CERTIFICATE HOLDER REPRESENTATIVE			
NRC INSPECTORS	Startz	/RA/	07/16/2010

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June 21-25, 2010

6. INSPECTORS(S): P. Startz

7. INSPECTION PROCEDURES USED: 88005, 88070

### EXECUTIVE SUMMARY

#### Summary of Plant Status

- The Portsmouth Gaseous Diffusion Plant (GDP) had previously discontinued most uranium hexafluoride (UF<sub>6</sub>) enrichment processes. The facility is currently supporting limited equipment operations in X-326 to complete the removal of uranium residues. During the inspection, routine cleanup and maintenance operations were being conducted and no incidents were reported. The inspection involved interviews with plant personnel, review of selected records, and observation of work activities. The inspection evaluated the following certificated program areas.

#### Permanent Plant Modifications (IP 88070)

- The inspector reviewed several ongoing and completed permanent plant modifications to evaluate the certificate holder's performance implementing changes in accordance with their procedures, certificate requirements, and regulatory requirements defined in 10 CFR 76.68. Inspection effort concentrated on ongoing and completed projects in the 705 building and other projects related to supporting the separation of facilities scheduled to be de-leased to the Department of Energy (DOE).
- The inspector reviewed Engineering Service Order (ESO) E3392 concerning modifications to the X-330 evacuation booster station recirculating cooling water system. The configuration and operation of the cooling water system required modifications to maintain service to remaining process facilities once cooling tower X-630 was deactivated. The inspector reviewed documentation associated with project ESO E3392 including a nuclear criticality safety (NCS) evaluation EVAL-DE-2010-0240, Request for Application Change 10-X0014 as applies to revising the Safety Analysis Report (SAR). The inspector attended a Plant Operations Review Committee (PORC) design evaluation meeting, and reviewed the meeting minutes from a previous PORC meeting #PORC-10-022 held on 6/16/2010 where the first revision of ESO-E3392 was rejected. The inspector evaluated a sample of the certificate holder's internal change management procedure UE2-RA-RR1036 Plant Change Reviews, for compliance with 10 CFR 76.68. No findings of significance were identified.
- The inspector selected Technical Safety Requirements (TSRs) applicable to building X-705 processes to evaluate compliance with the TSRs as system changes were implemented over time. The inspector reviewed: (1) if management measures or other required programs established for ensuring that safety related controls were available, reliable and adequately

## EXECUTIVE SUMMARY (Continued)

evaluated and developed, (2) that preventative maintenance, calibration, and periodic surveillance, as required by the TSR/SAR for the selected safety controls were developed; (3) operators were trained to properly implement and respond to the safety controls; and (4) support documentation and quality assurance functions for the safety controls were developed. The microfiltration pH shutdown system specified in TSR 2.6.3.5 was in place, three channels were confirmed to be installed and operational. Quarterly surveillance functional tests appeared adequate for the level of redundancy. The inspector evaluated the microfiltration permeate effluent bag filter system specified in TSR 2.6.3.6 and determined that the system was installed and operational. The filter system consisted of two bag filter housings in series with two channels of instrumentation in place to measure the differential pressure across the units. The inspector reviewed P&ID X-0705-1711M-Z, Rev.13 and confirmed the presence of the filter system. Quarterly surveillance functional tests appeared adequate for the level of redundancy. The inspector evaluated the Microfiltration Effluent Filter Press Operational mass limit as specified in TSR 2.6.3.9. The inspector evaluated a container filled with filter press solids and confirmed the uranium mass limit was in compliance. Operators and supervisors were knowledgeable of the expectations of the TSR requirements. No significant issues were identified.

### Management Organization and Controls (IP 88005)

- The inspector evaluated significant management and organizational changes since the last inspection and determined that a new general manager had been assigned to manage the GDP site. The inspector interviewed the new general manager and noted that the individual had commanded two Naval submarines, employed at a power reactor site for next five years, and then had been employed and progressively promoted to the plant manager position at Paducah GDP. Discussions included conduct of operations, procedure compliance, accountability expectations and policies regarding safety, adverse trends in industrial safety associated with DOE subcontractors, his responsibilities in the plant operations review committee, and a variety of other safety issues and initiatives. The new general manager had been spending time in production areas to become familiar with the facilities and personnel. The inspector determined that the new general manager possessed adequate experience and knowledge of the facility, and emphasized a high priority for all aspects of plant safety.
- The inspector verified that the certificate holder was adequately screening and tracking significant equipment failures that affected TSRs and safety equipment as defined in SARs, and entering the information as problem reports into their correction action program. Problem Reports (PRs) are tracked in the Business Priority System. The inspector evaluated samples of PRs and noted that the certificate holder was performing adequate evaluations of those reports. In addition, the certificate holder was tracking other equipment and procedural issues to identify developing trends. These trends were periodically analyzed and reviewed by management. No significant issues were identified.
- The inspector reviewed samples of internal audits performed by the certificate holder. The first audit reviewed, XP-2009-A002, QA Program Implementation, was dated March 12, 2009. The audit identified positive attributes and negative findings. Problem report PR-PTS-09-00487 was entered into the corrective action program to ensure follow up, revisions to applicable documents were completed, and the problem report was confirmed completed and closed. The inspector reviewed audit XP-2010-A004, Design Control, dated June 16, 2010. This audit involved engineering department functions including test control, configuration management, and self-assessments performed during 2008 and 2009. The audit was a comprehensive evaluation of

## EXECUTIVE SUMMARY (Continued)

project engineering activities and identified nine positive practices and twelve findings. All 12 findings were entered into the corrective action program as PRs and are currently active: PR-PTS-10-00904, 00934, 00946, 00948, and 00988.

- The inspector reviewed the Employee Concerns Program (ECP) that is managed in accordance with Operations Policy Manual UE1-OP-OP9001 Rev. 7. The manual described a safety conscience work environment (SCWE) as an environment where employees at the GDP facilities and headquarters were free to raise concerns about the safety of operations without harassment, intimidation, retaliation, or discrimination. The inspector noted a USEC memo, dated May 19, 2010, describing an ongoing 2010 SCWE survey for employees and requested that the completed survey be returned by June 25, 2010. The inspector reviewed data trends for the ECP from June 2009 to May 2010 and the data indicated an active program with an increase in ECP employee concerns for May, 2010. Long term data included a long term downward trend of ECP concerns likely related to a drop in employment levels. No issues of significance were identified.
- The inspector performed random reviews of problem reports in the certificate holder's corrective action program, referred to as the Business Priority System. The inspector evaluated the progress of a sample of problem reports and determined that the issues were being appropriately screened, adequately evaluated, responses were in accordance with policies, and resulting corrective actions were tracked to completion. No issues of significance were identified.
- The inspector reviewed samples of operating procedures and noted that the procedures were properly approved and had been reviewed within the specified periodic review dates. No issues of significance were identified.

### Exit Meeting Summary

- The inspection scope and results were summarized on Friday, June 25, 2010, with members of the certificate holder's staff. No proprietary information was identified.

### Items Opened, Closed, and Discussed

- Discussed: URI 07007002/2010-01-02: Failure to perform adequate survey to detect the presence of radioactive contamination on material associated with the fluorine pipeline neutralization and prevent its subsequent release to an unrestricted area. The inspector collected extensive information on the incident including PR-PTS-10-00451, the resulting root cause investigation, a list of corrective action items scheduled for completion by October 15, 2010, and plans to conduct an end point assessment due by June 30, 2011. This URI is scheduled for further review during a normal scheduled NRC inspection in September 2010.
- Discussed: URI 07007002/2010-01-01: Failure to provide adequate health physics monitoring of a contractor while removing an abandoned pipeline. Reference the information above.

EXECUTIVE SUMMARY (Continued)

- Key Points of Contact

Name

D. Fogel

L. Sendek

B. Lawton

B. Reep

J. Woodard

P. Potter

Title

Nuclear Regulatory Affairs Manager

Nuclear Regulatory Engineer

NS&Q Manager

Employee Concerns Program, GDP/ACP/LC

X-705 Facility Manager

Director, Infrastructure & Utilities