

SAFETY AND COMPLIANCE INSPECTION REPORT

1. LICENSEE OR CERTIFICATEE/LOCATION INSPECTED: United States Enrichment Corporation 6903 Rockledge Road Bethesda, MD 20817		2. NRC/REGIONAL OFFICE: U.S. Nuclear Regulatory Commission Region II 61 Forsyth Street, Suite 23T85 Atlanta, GA 30303	
REPORT NO: 2008-001			
3. DOCKET NUMBER(S): 70-7001	4. LICENSE OR CERTIFICATEE NUMBER: GDP-1	5. DATE(S) OF INSPECTION: January 1, 2008 – March 31, 2008	

6. INSPECTION PROCEDURE(S) COMPLETED: 88100, 88102, 88103, 88105

LICENSEE OR CERTIFICATEE:

The inspection was an examination of the activities conducted under your license or certificate as they related 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 observation 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. Reported events reviewed
- 4. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were non-repetitive, licensee-identified, and corrective action was 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)

Statement of Corrective Actions

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/CERTIFICATEE			
NRC INSPECTOR	Michael O. Miller	John Pelchat for	04/16/2008

**DOCKET FILE INFORMATION
SAFETY AND COMPLIANCE INSPECTION REPORT**

1. LICENSEE OR CERTIFICATEE/LOCATION INSPECTED: United States Enrichment Corporation 6903 Rockledge Road Bethesda, MD 20817 REPORT NO: 2008-001		2. NRC/REGIONAL OFFICE: U.S. Nuclear Regulatory Commission Region II 61 Forsyth Street, Suite 23T85 Atlanta, GA 30303	
3. DOCKET NUMBER(S): 70-7001	4. LICENSE OR CERTIFICATEE NUMBER: GDP-1	5. DATE(S) OF INSPECTION: January 1, 2008 – March 31, 2008	

6. INSPECTOR(S): Michael O. Miller, Mark Chitty

7. INSPECTION PROCEDURES USED: 88100, 88102, 88103, 88105

SUPPLEMENTAL INSPECTION INFORMATION

EXECUTIVE SUMMARY

Summary of Plant Status

- The certificate holder performed routine operations throughout the inspection period. Plant load was maintained at high power and assay was adjusted according to the production schedule.

Plant Operations

- The inspectors observed routine operations in the cascade buildings and area control rooms, the feed vaporization facilities, product and tails withdrawal facilities, and the central control facility. The operations staff was alert and generally knowledgeable of the current status of equipment associated with their assigned facilities.

Maintenance and Surveillance

- During the observation of maintenance and surveillance activities, the inspectors verified that: activities observed were performed in a safe manner; testing was performed in accordance with procedures; measuring and test equipment was within calibration; technical safety requirement (TSR) limiting conditions for operations were entered when appropriate; removal and restoration of the affected components were properly accomplished; test and acceptance criteria were clear and conformed with the TSR and the safety analysis report; and, any deficiencies or out-of-tolerance values identified during the testing were documented, reviewed, and resolved by appropriate management personnel.

Management Organization and Controls

- The plant staff experienced a number of personnel changes. These changes did not appear to impact the responsibilities and functions specified in the certificate. The certificate holder's system for reviewing and issuing procedures adequately ensured that safety procedures were properly controlled and approved.
- The certificate holder adequately assessed the issues presented at plant operations review committee meetings. Actions described from the meetings were implemented accordingly.

Executive Summary (Cont.)

PI & R Inspection - Corrective Action Program Trend Review For Procedure Adherence

a. Inspection Scope

- The NRC identified “procedure adherence” as a function needing improvement during each of the last three Licensee Performance Reviews (LPRs). These LPRs spanned a total of six years. The most recent LPR covered the time from September 26, 2004, through October 4, 2006, and the results were presented at a public meeting in Paducah, Kentucky, in January 2007.
- The NRC inspectors conducted an inspection of the certificate holder corrective action program to assess whether the certificate-holder has taken effective corrective actions to resolve procedure adherence issues.
- The NRC inspectors reviewed procedure violations documented in the certificate holder’s corrective action database (ATR) for calendar year 2007 and the period from January through March, 2008. The inspectors also reviewed the certificate holder’s trend analysis of procedure violations for the same period.
- The NRC inspectors reviewed memorandum NS&Q Surveillance KP-PS-S07021, “Evaluate the Quality Elements of Procedures,” dated September 28, 2007.
- The NRC inspectors also observed the certificate-holder weekly breakout meetings that had human performance as the sole topic. These meetings were attended by senior plant management and direct reports. In this meeting, the certificate-holder discussed human performance for the previous week and the status of the metrics they had established for human performance.

b. Observations and Findings

The inspector review of the ATRs found over 70 documented procedure violations, and that some of them fit into the following categories:

- NRC-identified procedure violations during routine inspections (five)
 - Technical Safety Requirements manual violation (one)
 - NRC notice of violation (one)
 - Nuclear criticality safety procedure violations (four)
 - Cell shutdown (four; one instance shutdown 29 cells)
 - Injury (one; a laboratory technician received acid burns on his forearm when he didn’t wear a long sleeved lab coat as required by the “Chemical Hygiene Plan”)
- The NRC inspectors found that the certificate-holder had developed performance indicators for violations associated with each of the three procedure types (in-hand, general intent, and information use) and that those performance indicators allowed for focused intervention.

Executive Summary (Cont.)

- The NRC inspectors determined that the certificate holder had established an improving trend in procedure adherence.
- The NRC inspectors found that the September 2007 NS&Q surveillance of procedure quality, use, and human performance issues, was generally critical and presented findings in an impartial manner.

c. Conclusions

- The certificate-holder was proficient in identifying procedure violations in its corrective action program and in assessing and applying corrective actions following individual procedure violations. The inspectors concluded that the certificate holder continued to experience procedure adherence issues at a rate of one to four each month, but the overall trend indicated that the performance in this area was improving.
- The NRC inspectors will continue to monitor the certificate-holders performance as it specifically relates to procedure adherence and assess certificate holder procedure adherence during routine inspections."

Exit Meeting Summary

- The inspection scope and results were summarized on Monday, March 31, 2008 with Mr. Steve Penrod, General Manager, and members of his staff. Inspectors had received USEC proprietary information related to EN-44056 and PAD-2008-07 for an NCS incident related to a weight change of ORGDP strategic reserve cylinders. Inspectors returned that information during the exit meeting. The inspectors asked the certificate holder staff whether any other materials examined during the inspection should be considered proprietary. No other proprietary information was identified.

List of Items Opened, Closed, Discussed

<u>Item Number</u>	<u>Status</u>	<u>Description</u>
43312 CER	Closed	UF6 RELEASE DETECTION SYSTEM INOPERABLE On April 22, 2007, a fuse for the programmable logic controller (PLC) that supplies power to the local autoclave area audible and visible alarms for the process gas leak detection (PGLD) system in the C-337A feed facility failed. The PGLD system for this building was modified to add a separate alarm circuit to ensure the system will alarm if the PLC loses control power. The system tested satisfactorily. Inspectors had no further questions. This event report is closed.
43662 CER	Closed	LEAKING SULFURIC ACID TANK On September 24, 2007 at the C-616 facility, a sulfuric acid tank leaked approximately 420 gallons of sulfuric acid into a concrete containment dike. The amount that leaked exceeded the quantity reportable to Kentucky. PGDP Problem Report No. ATRC-07-2542: PGDP Event Report No. PAD-2007-12 The tank was taken out of service. Inspectors had no further questions. This event report is closed.

43708 CER	Closed	<p>FREEZER/SUBLIMER SAFETY SYSTEM VALVE FAILURE On October 9, 2007, the building C-333 Unit 4 Cell 3 freezer/sublimator computer indicated that the 'B' outlet valve failed electrically in the open position.</p> <p>PGDP Assessment and Tracking Report No. ATR-07-2675; PGDP Event Report No. PAD-2007-16 The failed motor control coil and associated fuses were replaced and the system tested satisfactorily. The certificate holder determined this to be a routine, end-of-life failure. Inspectors had no further questions. This event report is closed.</p>
43787 CER	Closed	<p>SAFETY SYSTEM ACTUATION DUE TO INCIDENTAL UF₆ RELEASE On November 15, 2007, the incident occurred when instrument mechanics were performing a cell datum calibration in C-333 Unit 4 Cell 2. The release was from the sealing surface between the valve body and valve bellows of a ¼ inch instrument line valve. The bellows was replaced, the system tested, and returned to service. Inspectors had no further questions. This event report is closed.</p>
43864 CER	Closed	<p>SMALL UF₆ PROCESS LEAK On December 23, 2007, the C-333 Unit 3 Cell 1 PGLD system actuated due to a UF₆ release caused by the failure of the stage 7A seal.</p> <p>PGLD Problem Report Nos. ATRC-07-3433; PGLD Event Report No. PAD-2007-022 The failure was attributed to an end-of-life failure of the seal components. The seal was repaired and the cell returned to service. Inspectors had no further questions. This event report is closed.</p>
43953 CER	Open	<p>RELEASE DETECTION SYSTEM FAILURE On January 31, 2008, the C-333 Unit 3 Cell 5 UF₆ PGLD system initiated a false alarm then failed the subsequent TSR test fire surveillance.</p>
43987 CER	Open	<p>ALARM RECEIVED FROM UF₆ RELEASE DETECTION SYSTEM On February 14, 2008, the C-333 Unit 5 Cell 8 UF₆ PGLD system initiated a false alarm then failed the subsequent TSR test fire surveillance.</p>
44056 CER	Open	<p>TWO CYLINDERS IDENTIFIED WITH WEIGHT CHANGE PRIOR TO WASH On March 11, 2008, two non-fissile cylinders were identified in the ORGDP strategic reserve category that had a weight change while stored at ORGDP in violation of the NCSE for the C-400 cylinder wash operation.</p> <p>PGDP Problem Report No. ATRC-08-0730; PGDP Event Report No. PAD-2008-06</p>

44100 CER

Open

DEGRADED CRITICALITY CONTROL

On March 26, 2008, in C-337 Unit 3 Cell 10 Stage 2 converter, the pre-removal NDA inspection was improperly performed resulting in a violation of NCSA GEN-10.

PGDP Problem Report No. ATRC-08-0906; PGDP Event Report No. PAD-2008-08