NRC FORM 591FF PART 1
(12-2007)
10 CFR 2.201

U.S. NUCLEAR REGULATORY COMMISSION

INSPECTION REPORT

1. LICENSEE OR CERTIFICATE HOLDER/LOCATION INSPECTED:	2. NRC/REGIONAL OFFICE:
United States Enrichment Corporation 6903 Rockledge Road Bethesda, MD 20817 REPORT NO: 2008-03	U.S. Nuclear Regulatory Commission Region II 61 Forsyth Street, Suite 23T85 Atlanta, GA 30303-8931

3. DOCKET NUMBER:	4. LICENSE OR CERTIFICATE NUMBER:	5. DATE(S) OF INSPECTION:
70-7001	GDP-1	July 1, 2008 – September 30, 2008

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 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 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 inspector 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 INSPECTOR	Michael O. Miller	J. Henson for	10/20/08

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6. INSPECTOR(S): Michael O. Miller, Mark Chitty ,John Pelchat, David Hartland

7. INSPECTION PROCEDURES USED: 88005, 88010, 88051, 88100, 88101, 88102, 88103

EXECUTIVE SUMMARY

Summary of Plant Status

- The certificate holder performed routine operations throughout the inspection period. Plant load was adjusted according to seasonal plans 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.

Configuration Management

- Inspectors observed final acceptance testing and implementation of a modification to allow controlled feeding of category 'C' (damaged or overfilled) cylinders. Observations included a review of the engineering records and procedures. Inspectors also observed feeding of the first damaged cylinder using this modification. Inspectors determined that the procedures, modifications, and additional safety systems were adequate for feeding category 'C' cylinders safely.

Maintenance / 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 inspectors reviewed recent organizational changes and verified that affected personnel met the qualifications required by the SAR Section 6.1.

- The inspectors reviewed recent Assessment and Tracking Reports initiated to document deficiencies in the training program, including those identified during audits and self-assessments. The inspectors noted that corrective actions taken in response to the findings were commensurate with the safety significance. The inspectors also reviewed corrective action program trending reports and verified that adverse trends were being adequately identified and addressed.

Operator Training/Retraining

- The inspectors reviewed the qualification training for cascade operators and uranium material handlers and observed on-the-job training conducted for cascade operators. The inspectors verified that those training programs were being implemented in accordance with certificate requirements. Discussions with selected staff participating in the training indicated that the training was adequate.

- The inspectors reviewed procedures that implemented training program requirements and verified that they were adequate. The inspectors also verified that the certificate holder had a mechanism in place to update the training program through the incorporation of management-approved enhancements resulting from facility changes.

Emergency Preparedness Exercise

- The inspectors determined that the exercise objectives and scenario adequately and thoroughly exercised major elements of the Emergency Plan. The scenario involved a simulated tornado striking the facility, resulting in personnel injuries and a fire that required the assistance of off-site fire departments. The extent and number of simulated injuries permitted participation by all three of the area medical facilities that might receive injured personnel. The inspectors noted that a weakness observed in a previous exercise, involving the pre-staging of equipment before the exercise, did not recur. The inspectors concluded that the scenario was realistic and posed multiple challenges to the certificate holder and to off-site response agencies.

- The inspectors determined that the Incident Commander (IC) and other responding personnel performed in a manner that would have protected the workers' safety and resulted in timely mitigation of the chlorine release. The inspectors observed that the IC and the field staff, along with personnel in the Emergency Operations Center were successful in managing a large amount of verbal and written communications.

- It was observed that at the onset of the simulated weather emergency, plant personnel were directed to seek shelter and that building-specific personnel accountabilities were begun. The inspectors noted however that the all-clear was sounded before the building accountabilities were completed and reported. The inspectors further observed a weakness in the certificate holder's procedures to assure that all site personnel were accounted for following a weather emergency.

- The general emergency response by EOC management and staff was successful in appropriately addressing the declared Emergency Action Level created by the simulated chlorine release and the warehouse fire. Emergency conditions were properly evaluated and protective actions appropriately recommended by the EOC. Emergency classification and external notifications were performed according to procedural requirements. The inspectors noted that during a public critique, local emergency response agency personnel expressed concern regarding the quantity and quality of information received during the drill. However, the inspectors did observe subsequent discussions between representatives of USEC and local government agencies that indicated that the information received during the drill was sufficient to determine appropriate protective actions.

- The inspectors observed several critiques and concluded that they were effective in identifying exercise problems and suggestions for improvements. On numerous occasions, licensee personnel were heard

making references to “lessons learned” from earlier exercises and measures made to prevent the recurrence of previously-observed problems. Members of the certificate holder staff were observed documenting and later discussing critique findings.

Exit Meeting Summary

- The inspection scope and results were summarized on Tuesday, September 30 with Steve Penrod, and members of his staff. The inspectors asked the certificate holder staff whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

Key Points of Contact

Name	Title
Steve Penrod	General Manager
Jim Lewis	Plant Manager
Jim Wittman	Maintenance Manager
Sherrill Gunn	Operations Manager
Robert Helme	Engineering Manager
Keith Ahern	Production Support
David Clayton	Training Manager
Vernon Shanks	Regulatory Affairs Manager
April Tilford	Emergency Management

List of Items Opened, Closed, Discussed

Item Number	Status	Description
43686 CER	Closed	PROCESS GAS LEAK DETECTION SYSTEM (PGLD) DECLARED INOPERABLE On October 2, 2007 in building C-333 Unit 6 Cell 4.
43696 CER	Closed	PGLD SYSTEM INOPERABLE On October 5, 2007 in building C-333 Unit 6 Cell 8.
43670 CER	Closed	TEMPORARY LOSS OF SMOKE DETECTOR PGLD FUNCTION On September 27, 2007 in building C-333 Unit 6 Cell 4. In each of the CERs listed above, operators responded to alarm actuations and found that the READY and MANUAL lights for these systems were not illuminated. Troubleshooting efforts revealed issues related to wiring. PGDP: ATRC-07-2615, 2636, 2655 The licensee inspected the connections in C-333 and all locations in C-331, C-335, and C-337 that will be operated above atmospheric pressure where new wiring has not been installed since 1995. The inspected PGLD connection boxes were connected correctly. The inspectors had no further questions. These three event reports are closed

Item Number	Status	Description
44202 CER	Closed	UF6 RELEASE DETECTION SYSTEM FAILURE On April 12, 2008, the C-331 Unit 3 Cell 5 PGLD system alarmed. Operators found that the READY and MANUAL lights for this system were not illuminated. Engineering determined that the system would not have been able to perform its intended safety function when this alarm came in. PGDP: ATRC-08-1412 and PAD-2008-14 The certificate holder determined that the direct cause was due to loss of the 200-volt DC voltage to the smoke detector heads due to a short circuit caused by a pinched wire. It was determined that the wire was pinched when the head was reinstalled into its base following maintenance activities. The work package related to this activity was revised to include the installation of shielding. Inspectors had no further questions. This event report is closed.
3434 SID	Closed	IMPROPER PROTECTION OF CLASSIFIED MATTER On May 29, 2008, the plant shift superintendent was notified by plant security that classified matter was improperly protected. PGDP: ATRC-08-1577 and PAD 2008-18 A reactive inspection was performed by the security branch resulting in an NCV for failure to control classified equipment. This item was closed under inspection report number 07007001/2008402 as item 70-70012008402-01.
44310 CER	Closed	NOTIFICATION TO KENTUCKY DUE TO EXCEEDING PERMIT LIMITS AT OUTFALL On June 21, 2008, the C-637 RCW (Recirculating Water) 'H' Supply loop was being repaired and a residual RCW leak from the valve vault was being pumped back to the pump house basin when the portable pump shutdown causing an overflow at outfall 002 that exceeded the Commonwealth of Kentucky's permit limit. The limit for the outfall is 1 mg/L total phosphorus and the chlorine level is to be below detectable limits. Contrary to this, the total phosphorus level was slightly above 1 mg/L and residual chlorine was approximately 0.1to 0.3 mg/L. Control of the RCW leak in the valve vault was re-established. The Kentucky Emergency Response Team (Report Number 2008-2125) was notified. PGDP ATRC-08-1840: PGDP Event Report No. PAD-2008-20 The certificate holder determined that the evacuation pump suction hose sealed itself to the wall of the vault causing a loss of pump suction. Strainers were purchased and installed on each size suction hose and monitoring times for pumping activities will be included in shift briefings. The inspectors had no further questions. This event report is closed.

Item Number	Status	Description
44356 CER	Open	FAILURE OF PGLD SYSTEM On July 20 building C-315 received an audible PGLD alarm with no visual indications. Moments later an alarm was received in C-331 for the C-315 PGLD System. C-315 operators found that the READY light for this system was not illuminated and that the system heads would not test fire. Engineering determined that the system would not have been able to perform its intended safety function when this alarm came in. PGDP: ATRC-08-2090 and PAD-2008-23
44448 CER	Open	LEAK IN HIGH PRESSURE FIRE WATER (HPFW) SYSTEM On August 28 the plant experienced a large leak on HPFW header A-12 in building C-333 due to a piping rupture. A-12 is one of 66 HPFW headers that provide water for fire suppression in this process building. PGDP: ATRC-08-2528
44515 CER	Open	SAFETY EQUIPMENT FAILURE DUE TO LOSS OF POWER On September 23 the tails withdrawal facility (C-315) lost power due to a fault on a 14 KV feeder. As a result of the power loss, the C-315 High Voltage PGLD System also lost power. These detectors provide coverage for the C-315 UF6 condensers, accumulators, and piping heated housing. TSR LCO 2.3.4.4.A.1 was entered and a continuous smoke watch was put in place within one hour. Once the source of the fault was identified, power was restored to the C-315 facility. The High Voltage PGLD system was tested, and the system was declared operable. PGDP: ATRC-08-2736 and 2731 and PAD-2008-29