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:
USEC Inc. 6903 Rockledge Drive Bethesda, MD 20817 REPORT NO: 2010-001	U.S. Nuclear Regulatory Commission Region II 245 Peachtree Center Avenue, NE, Suite 1200 Atlanta, GA 30303-1257

3. DOCKET NUMBER:	4. LICENSE OR CERTIFICATE NUMBER:	5. DATE(S) OF INSPECTION:
70-7003	SNM-7003	March 15-18 and 22-26, 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 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	Pelchat/Startz	/RA	04/23/2010

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6. INSPECTOR(S): J. Pelchat, P. Startz

7. INSPECTION PROCEDURES USED: 88010, 88025, 88050

EXECUTIVE SUMMARY

Summary of Plant Status

- The USEC Inc. Lead Cascade is a gas centrifuge test and demonstration facility that is located in existing buildings on the site of the Portsmouth Gaseous Diffusion Plant (GDP) in Piketon, Ohio. The Portsmouth GDP is operated by United States Enrichment Corporation (USEC), who leases the property from the Department of Energy. The area within Portsmouth that houses the Lead Cascade is subleased from USEC to USEC Inc. During the period of the inspection, centrifuge demonstration operations were in progress.

- This routine, announced inspection was to evaluate the adequacy and performance of the licensee's activities in three areas: maintenance and surveillance programs specific to safety-related equipment, implementation of adequate training/retraining programs, and emergency preparedness. The inspection involved interviews and discussions with plant personnel from the Gaseous Diffusion Plant and the Lead Cascade facilities, reviews of selected records, and observation of work activities.

Maintenance / Surveillance of Safety Controls (IP 88025)

- The inspector performed a walk-through survey of all process equipment lines and auxiliary support infrastructure evaluating safety related items including safety related equipment on uranium hexafluoride (UF_6) feed cart in the production area, and the hydrogen detection and alarm systems in the power supply battery room. No significant issues were identified.

- The inspectors reviewed documentation of recent surveillance activities including daily, weekly, and annual battery room inspections as specified in procedure AC4-OP-013. The most significant evaluations included the operation of the hydrogen detectors and the operation of the ventilation system to prevent hydrogen accumulation. No significant issues were identified.

- The inspectors reviewed issues related to maintenance and surveillance activities entered into the licensee's corrective action program. The inspectors determined that the issues were resolved in a timely manner, and the appropriate licensee staff members were responsible for ensuring that adequate corrective actions were implemented. No significant issues were identified.

- The inspectors reviewed internal audits ACP-2009-08 and ACP-2009-20 performed by the licensee. The inspectors also reviewed quality assurance program revisions that resulted from significant equipment manufacturing and assembly failures experienced in 2009. The equipment problems led to a program stand down and reassessment. Significant programmatic changes included expansion of

the corrective action program responsibilities to include supply chain vendors, top-down reviews of drawings and assembly specifications, incorporation of 17 final assembly hold points, added parallel quality assurance checklists of all assembly steps and hold points, and other quality assurance enhancements. No significant issues were identified

Operator Training/Retraining (IP 88010)

- The licensee adequately performed initial and refresher training related to nuclear criticality safety, radiation protection, plant emergency response, and operational safety as required by the license.

- The inspector reviewed the licensee's training program through interviews, document review, and visual inspection of operations to ensure that the employees were aware of safety controls. The inspector reviewed work order #P1000326-01, recently used to perform work activities on safety related equipment defined as an item relied upon for safety. The inspector reviewed the licensee's Task-to-Training matrix that allows supervisors to review the employee's training status relative to the specific task the employee will be assigned to perform. The use of the task/training matrix was designed to prevent unqualified employees from performing certain tasks. No significant issues were identified.

- Formal training was developed and updated in accordance with the licensee's procedures by qualified instructors.

- The licensee identified operators whose training had expired, and work restrictions were placed on the employees until the training had been successfully completed.

- Training material and examinations were current and adequate in evaluating the performance and understanding of the operators. Significant changes within the previous year included shifting from a computer based general employee training process to a classroom based process. No significant issues were identified.

- A functional system was in place to update training requirements and methods based on lessons learned from previous facility events/issues.

- The inspector observed the licensee conduct a tornado drill on March 24, 2010. The licensee performed adequately. No significant issues were identified.

Emergency Preparedness (IP 88050)

- Revisions to the emergency response plans and procedures were completed in accordance with emergency planning standards and NRC regulatory guidance. The emergency procedures continued to effectively implement the Emergency Response Plan. The annual independent audit was a detailed compliance-based assessment. No significant issues were identified.

- Based on interviews and review of training documentation, as well as the observation of a GDP quarterly emergency drill the inspectors determined that emergency response personnel were trained and familiar with their roles and responsibilities. While the drill was not conducted on the lead cascade/ACP side of the facility, the emergency preparedness program shared essentially the same procedures, personnel and resources, therefore the findings from that drill were applicable to the licensee as well. No significant issues were identified.

- Based on interviews, the inspectors determined that the licensee's interface with offsite support groups was properly maintained. The licensee offered training and tours of the facility to the offsite groups in accordance with the E- Plan and applicable Mutual Assistance Agreement. No significant issues were identified.

- The Emergency Preparedness inspection was interrupted by another inspection activity and remains to be completed in the future.

Exit Meeting Summary

- The inspection scope and results were summarized on Thursday, March 18 and Friday, March 26, 2010, with members of the licensee staff. No proprietary information was identified.

Key Points of Contact

Name	Title
T. Sensue	Regulatory Services Manager
J. Oppy	Manager of Operations Enrichment
G. Workman	Plant Services Manager
F. Dawkins	Training Manager
R. Pennenga	Regulatory Compliance Engineer
M. Ford	Work Control Supervisor
T. Teulbee	Radiation Protection Manager
S. Howie	Health Physics Technician