April 19, 2001

Mr. J. Morris Brown
Vice President - Operations
United States Enrichment Corporation
Two Democracy Center
6903 Rockledge Drive
Bethesda, MD 20817

SUBJECT: NRC INSPECTION REPORT 07007001/2001-004(DNMS) (PADUCAH)

Dear Mr. Brown:

On April 3, 2001, the NRC completed a routine resident inspection at the Paducah Gaseous Diffusion Plant. The purpose of the inspection was to determine whether activities authorized by the certificate were conducted safely and in accordance with NRC requirements. At the conclusion of the inspection, the inspectors discussed the findings with members of your staff.

Areas examined during the six week inspection period are identified in the report. Within these areas, the inspection consisted of a selective examination of procedures and representative records, interviews with personnel, and observations of activities in progress.

No cited violations were identified during this inspection.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, and its enclosure, will be available **electronically** for public inspection in the NRC Public Document Room **or** from the *Publicly Available Records (PARS) component of NRC's document system (ADAMS)*. *ADAMS is accessible from* the NRC Web site at http://www.nrc.gov/NRC/ADAMS/index.html (the Public Electronic Reading Room).

We will gladly discuss any questions you have concerning this inspection.

Sincerely,

/RA/

Heather M. Astwood, Acting Chief
Fuel Cycle Branch

Docket No. 70-7001
Certificate No. GDP-1

Enclosure: Inspection Report No. 07007001/2001-004(DNMS)

See Attached Distribution

DOCUMENT NAME: C:\PAD2001-004.wpd

To receive a copy of this document, indicate in the box:"C" = Copy without enclosure "**E**"= Copy with enclosure"**N**"= No copy

OFFICE	RIII		RIII		RIII			
NAME	Blanchard:js		Phillips		Astwood			
DATE	04/19/01		04/19/01		04/19/01			

OFFICIAL RECORD COPY

cc w/encl: H. Pulley, Paducah General Manager
L. L. Jackson, Paducah Regulatory Affairs Manager
P. D. Musser, Portsmouth General Manager
S. A. Toelle, Manager, Nuclear Regulatory Assurance and Policy, USEC
Paducah Resident Inspector Office
Portsmouth Resident Inspector Office
R. M. DeVault, Regulatory Oversight Manager, DOE
W. D. Seaborg, Paducah Site Manager, DOE
J. Volpe, State Liaison Officer

Distribution
Docket File w/encl
PUBLIC IE-07 w/encl
G. Mulley, OIG w/encl
E. Leeds, NMSS w/encl
T. Sherr, NMSS w/encl
W. Schwink, NMSS w/ encl
W. Troskoski, NMSS w/encl
H. Astwood, NMSS w/encl
R. Wescot, NMSS w/encl
J. L. Caldwell, RIII w/encl
C. D. Pederson, RIII w/encl
RIII Enf. Coordinator w/encl
R. Bellamy, RI w/encl
EJM, RII w/encl
D. B. Spitzberg, RIV w/encl

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No:	07007001
Certificate No:	GDP-1
Report No:	07007001/2001-004(DNMS)
Licensee:	United States Enrichment Corporation
Facilities:	Paducah Gaseous Diffusion Plant
Location:	5600 Hobbs Road P.O. Box 1410 Paducah, KY 42001
Dates:	February 20, through April 3, 2001
Inspectors:	Courtney A. Blanchard, Senior Resident Inspector David J. Hartland, Portsmouth Senior Resident Inspector
Approved By:	Heather M. Astwood, Acting Chief Fuel Cycle Branch Division of Nuclear Materials Safety

EXECUTIVE SUMMARY

United States Enrichment Corporation
Paducah Gaseous Diffusion Plant
NRC Inspection Report 07007001/2001-004 (DNMS)

Plant Operations

- The inspectors identified a weakness in communications between engineering groups regarding a July 2000 spring-pin failure that resulted in a similar failure occurring in February 2001. Plant staff were in the progress of increasing the safety factor for the spring-pin, retraining personnel on the handling of the cylinder valve closure mechanism, and implementing a process to enhance interdepartmental communications. (Section O1.1)

Maintenance

- The inspectors concluded that the maintenance activities observed were conducted in accordance with regulatory and certificatee requirements. (Section M1.1)

Engineering

- The inspectors identified a weakness in that engineering failed to review and revise the February 2000 operability evaluation after similar failures occurred in February 2001 until intervention by the inspectors. Plant staff took appropriate corrective action in response to the issue. (Section E1.1)

Plant Support

- The inspectors identified a weakness in the plant staff's plant change review documentation to support changing the Physical Security Plan and Transportation Security Plan. (Section S1.1)

- The inspectors identified a Non-Cited Violation with the plant staff's failure to take the appropriate action to comply with 10 CFR 20.1101 in a timely manner. Corrective actions were being addressed in the plant's corrective action program. (Section R5.1)

Report Details

I. Operations

O1 Conduct of Operations

O1.1 Valve Closure Mechanism Failure Review

a. Inspection Scope (88100 and 88015)

The inspectors reviewed plant staff's response to a valve closure mechanism failure.

b. Observation and Findings

On February 16, 2001, the Plant Shift Superintendent (PSS) was notified that the No. 3 withdrawal position cylinder valve closure mechanism failed in Building C-310. The operators noted an unusually long closing time while performing a routine cylinder valve closure from mode 2, "Withdrawal," to mode 3, "Standby," and upon visual inspection, the operators observed that the cylinder valve closure shaft had disengaged from the drive air motor. The inspectors determined that the operators manually completed the closure of the cylinder valve, and there was no breech of the uranium hexafluoride (UF_6) system, no outleakage of process gases, and the UF_6 Detection and Isolation System were not actuated.

The inspectors reviewed plant staff's immediate corrective actions to address the failed valve closure mechanism. The cylinder valve closure mechanism was a component of the low voltage UF_6 detection and isolation system and was required to be operable per Technical Safety Report (TSR) 2.3.4.1, "UF_6 Release Detection and Isolation System - Low Voltage ("New") System at the UF_6 Withdrawal Station." The inspectors noted that the PSS declared the Building C-310 No. 3 withdrawal position inoperable, and the cognizant system engineer performed a detailed inspection of the remaining withdrawal positions in Building C-310 and C-315. The cognizant system engineer identified that the valve closure mechanism failure was caused when a spring pin broke which held the telescoping section of the assembly to the air motor drive coupling. During the walkdown, the system engineer identified two suspect valve closure mechanisms and the two associated withdrawal positions were declared inoperable. The system engineer provided the PSS with reasonable assurance that inspection of the assemblies for proper spring-pin engagement prior to each use would ensure that the cylinder valve closure could perform its intended safety function. The system engineer briefed the Building C-310 and C-315 operators on the event and provided instructions to these operators on how to inspect the spring-pin for proper engagement prior to connecting the cylinder valve's closure mechanism to the cylinder valve. These instructions were recorded in shift turnover logs until a long-term order was issued to formally implement these compensatory actions to avoid further failures.

The inspectors reviewed plant staff's evaluation of the equipment failure. A metallurgical evaluation of the spring pin determined that a brittle fracture occurred, but the spring pin met specified material requirements. This report stated that the valve closure mechanism design would be enhanced by increasing the spring pin's diameter. The inspectors noted that a previous metallurgical report recommended the same design considerations after a spring pin broke during handling in July 2000. The July

2000 spring pin failure had been entered into the plant staff's corrective action program, and design engineering performed an evaluation against the regulatory reporting requirements at that time. The evaluation concluded that the failure resulted from a shape transverse blow to the cylinder valve closure mechanism shafts but that the assembly met design requirements. The corrective action implemented as a result of the July 2000 event involved providing crew briefings to all UF_6 handling personnel, which included the summary of the failure, the potential consequences, and guidance on handling the valve closure mechanism. Following the February 16, 2001, spring-pin failure, the Engineering Manager requested that the safety factor for the spring-pin be increased. The factor increase was currently under development at the conclusion of the inspection period.

The inspectors discussed lessons learned from the valve closure mechanism's spring pin failure with Engineering Management. The Engineering Manager explained that inconclusive communication between system and design engineers clearly inhibited the plant staff's opportunity to identify a valve closure mechanism enhancement after the July 2000 event. In addition to the corrective actions committed to in the 30-day written Event Report for the February event, ER 01-002, the Engineering Manager's corrective actions documented in ATR-01-1748 included initiatives to improve communication between system and design engineering, including system walkdowns. The inspectors determined that the corrective actions implemented were acceptable and consider Certificatee Event Report 01-02 (NRC Event No. 37758) closed.

b. Conclusions

The inspectors identified a weakness in communications between engineering groups regarding a July 2000 spring-pin failure that resulted in a similar failure occurring in February 2001. Plant staff were in the process of increasing the safety factor for the spring-pin, retraining personnel on the handling of the cylinder valve closure mechanism, and implementing a process to enhance interdepartmental communications.

O8 Miscellaneous Operations Issues

08.01 Certificatee Event Reports

No reports this period.

08.02 Bulletin 91-01 Reports

Number	Status	Title
37878	Open	Failure to perform R-114 moisture sampling in accordance with the time requirements per NCSA CAS - 011.

O8.1 (Closed) CER 97003-08: Uranium hexafluoride release from buffer panel in Building C-337 and TSR violation due to failure to maintain a fire watch. Plant staff determined that the cause of the release was a failed o-ring gasket on a buffer pressure photohelic gauge/switch. As corrective action, engineering recommended that the o-rings be replaced with a more UF_6 compatible material (such as Viton). Plant staff also revised

applicable procedures to provide guidance regarding the conditions and requirements for entry into TSR 1.6.4. The inspectors have no further issues and this item is closed.

O8.2 (Closed) CER 97004-05: High autoclave steam pressure safety actuation on Autoclave No. 1 in Building C-360. Plant staff determined that actuation was due to a rupture of a flexible plastic tube inside a transducer due to aging. As corrective action, plant staff developed a preventative maintenance task to periodically inspect the transducers. In addition, plant staff issued Procedure CP2-EG-EG1039 to implement requirements for component failure analysis and trending. The inspectors have no other issues and this item is closed.

O8.3 (Closed) CER 97004-07: Loss of West Normetex Pump UF_6 release detection system in Building C-310. Plant staff determined that the cause was inattention to detail when leads were reversed during a surveillance activity. As corrective action, maintenance revised applicable TSR surveillance procedures to include checkoffs for independent verification and conducted training to enhance TSR-related system knowledge. The inspectors have no further issues and this item is closed.

O8.4 (Closed) CER 97008-05: Safety equipment failure resulting in steam leak on Autoclave No. 2 South in Building C-333A. Plant staff determined that the cause of the failure was that the locking ring was not rotated far enough to establish an adequate seal. As corrective action, plant staff revised applicable procedures to require that obstructions be checked prior to closing autoclaves. In addition, engineering upgraded the design of the articulating arms of the capture ventilation system to prevent damage to limit switches which controlled the amount of locking ring rotation. The inspectors have no further issues and this item is closed.

O8.5 (Closed) CER 97008-06: Actuation of a process gas leak detector in Building C-333A. Plant staff determined that the cause was a leak from an autoclave purge air pressure bleed line. As corrective action, tubing on other autoclaves was inspected for damage and repairs were made as necessary. In addition, maintenance management conducted crew briefings to emphasize exercise of caution when working in the vicinity of piping which was brazed/soldered to preclude inadvertent damage. The inspectors have no further issues and this item is closed.

O8.6 (Closed) CER 97008-07: Actuation of the autoclave steam pressure control system in Building C-333A. Plant staff determined that the cause was failure to follow procedure when setting the steam controller to automatic. As corrective action, operations management conducted crew briefings to ensure that expectations regarding procedure adherence were being met. The inspectors have no further issues and this item is closed.

II. Maintenance

M1 Conduct of Maintenance

M1.1 Maintenance Activities Review

a. Inspection Scope (88102 and 88103)

The inspectors observed selected safety system surveillance and maintenance activities to verify that the activities were performed safely and in accordance with the TSRs and procedural requirements.

b. Observations and Findings

For the maintenance and surveillance activities listed below, the inspectors verified one or more of the following: activities observed were performed safely; testing was performed in accordance with procedures; test instrumentation was calibrated; limiting conditions for operation were met; removal and restoration of the affected components were properly accomplished; test results conformed with TSRs, procedural requirements, and were reviewed by personnel other than the individual directing the test; and any deficiencies identified during testing were properly reviewed and resolved by appropriate management personnel.

Maintenance and Surveillance Activity

- Work Order No. P 0012685-01, Replace the relief valve with a calibrated valve and replace the vacuum breaker valve for Autoclave No. 3 East in Building C-337A.

- Work Order No. R 9904967-01, Replace steam temperature controller for Autoclave No. 5 West in Building C-337A.

- Work Order No. R 0001456-14, Installation of Quick Exhaust valves on containment valves XV-516, XV-524, XV-528, and FV-529 for Autoclave No. 3 East in Building C-337A.

- Work Order No. R 0103012-01, Find leaks in stainless steel uranium recovery floor containment pan in Building C-400.

- Work Order No. R 0008647-01, Repair stainless steel uranium recovery floor containment pan in Building C-400.

The inspectors observed that plant staff surveyed thoroughly when exiting a contamination area, performed required fit-test when donning a respirator, and appropriately donned and doffed personal protective equipment. In discussions with the inspectors, plant staff were knowledgeable of the health risk associated with a uranium uptake, symptoms of heat exhaustion, and hazardous chemicals involved with the maintenance activities being performed.

c. Conclusions

The inspectors concluded that the maintenance activities observed were conducted in accordance with regulatory and certificatee requirements.

III. Engineering

E1 Conduct of Engineering

E1.1 Review of CAAS Operability Issue

a. Inspection Scope (88100)

The inspectors reviewed plant staff's response to a Criticality Accident Alarm System (CAAS) operability issue to determine if the response was in accordance with regulatory requirements.

b. Observations and Findings

On February 27, during a review of Event Report ER-01-01 and discussion with engineering staff regarding a CAAS safety system failure, the inspectors identified an issue regarding the staff's disposition of system operability. The event report documented the failure of the CAAS horns in Building C-337-A to properly sound during surveillance testing on February 2, 2001.

During followup troubleshooting, as discussed in the event report, plant staff identified that debris had clogged the openings in the horns and did not allow for adequate airflow to generate sound in the horns. The debris was examined and determined to be iron filings and silicon-based material; however, no corrosion products were identified. In response, plant staff performed a blow down of the affected piping systems, installed new horns, and returned the system to service later that day. Plant staff concluded that the problem appeared to be isolated to the Building C-337-A horns based on previous blowdown and testing of other systems. The event report documented that the root cause and corrective actions for the event had not been determined and that a revised report would be submitted at a later date.

During the discussion on February 27, the inspectors queried the engineering staff regarding the basis for operability of the system, as a similar failure of one of the horns had occurred in the same building in February 2000. The inspectors learned that engineering had not documented their basis in an operability evaluation because they believed that the system was not degraded. The inspectors took exception to the staff's position, and in response, engineering agreed to prepare an operability evaluation.

On February 29, engineering staff provided to the inspectors a copy of an operability evaluation, dated February 14, 2000, which was prepared in response to the failure of the horn that occurred the previous year. The evaluation documented that the system was degraded but was capable of performing its intended safety function. The basis for operability was that the source of the debris was from original construction and that system blow downs performed at that time did not reveal any significant amount of debris. The evaluation concluded that no compensatory actions were required to maintain the system operable, but as a prudent matter, the horns would be inspected and the systems blown down "in a programmatic method."

As a result, engineering agreed that the system was degraded and committed to revise the operability evaluation, as the actions taken for the February 2000 event had not prevented the latest failure from occurring. The revised evaluation, dated March 2,

came to the same conclusion as the original evaluation but documented some required compensatory actions. The latest evaluation required that the Building C-337A horns be removed and inspected upon completion of each quarterly surveillance until a permanent modification could be installed to prevent debris from entering the horns.

The inspectors considered engineering staff's failure to review and revise the original operability evaluation in response to the latest failures a weakness. The evaluation was not reviewed and revised until after the inspectors intervened to ensure that the certificatee's engineering staff took appropriate action to address the second horn failure in February 2001. As corrective actions, plant staff enhanced procedural guidance for performing operability evaluations and conducted training for engineering and PSS staff. The inspectors will use the event report to track the effectiveness of the latest actions taken to address the debris in the CAAS.

c. Conclusions

The inspectors identified a weakness in that engineering failed to review and revise the February 2000 operability evaluation after similar failures occurred in February 2001 until intervention by the inspectors. Plant staff took appropriate corrective action in response to the issue.

IV. Plant Support

S1 Conduct of Security and Safeguards Activities

S1.1 Security Force Staffing Review

a. Inspection Scope (86740)

The inspectors reviewed changes made to the security plans regarding guard staffing to ensure regulatory requirements were met.

b. Observations and Findings

The inspectors reviewed the regulatory, certificatee, and procedural requirements for the required number of guards at the Paducah Gaseous Diffusion Plant (GDP). The inspectors noted that Title 10 to the Code of Federal Regulation, Part 73.67 (10 CFR 73.67), "Licensee Fixed Site and In-transit Requirements for the Physical Protection of Special Nuclear Material of Moderate and Low Strategic Significance," required, in part, a security organization that consisted of at least one watchman per shift. Technical Safety Report, Section 3.0, "Administrative Controls," required a minimum of four security services personnel to be onsite at all times but did not specify whether the number could be made up of both guards and supervisors, or required all four individuals to be guards. The Transportation Security Plan (TSP), Section 4.1, "Police Operations," and the Physical Security Plan (PSP), Section 4.1, "Security Police Operations," specified that the minimum staffing for shift operations was four security services personnel. Again, there was no distinction between guards and supervision regarding the four security services personnel. The inspectors reviewed staffing levels for select shifts during year 2000 and 2001 and verified that a minimum of four security services personnel were onsite each shift.

The inspectors reviewed plant staff's plant change review (PCR) documentation to support changing from two officers and four police operations members to four security services personnel in the PSP and TSP. As discussed in the proceeding paragraph, the NRC's regulatory requirement for the GDPs was one watchman per shift. However, the inspectors noted that prior to Revision 44 both the PSP and TSP delineated that the minimum staffing included two officers and four police operations members for shift operations. Revision 44 to the PSP and TSP changed the minimum staffing to match the TSR requirement. As required by 10 CFR 76.68, "Plant Changes," plant staff performed a PCR in accordance with Procedure UE2-RA-RR1036, "Plant Change Reviews." The inspectors noted that this process required, in part, that the plant staff submit to the NRC any change to the PSP and TSP that would decrease the effectiveness of the programs. Plant staff documented in PCR C-99-0613, Revision 0, that the effectiveness of the PSP and TSP was not decreased when minimum staffing was changed from two officers and four police operations members to four security services personnel. However, the inspectors identified that plant staff did not provide sufficient documented justification to conclude that the change would not result in a decrease in effectiveness of either the PSP or the TSP.

In response to the inspectors review of PCR C-99-0613, plant staff issued Assessment and Tracking Report (ATR) 01-1512 that identified the documentation weakness for specifying that the effectiveness of the PSP or the TSP was not reduced by changing from two officers and four police operations members to four security services personnel per shift. In discussions with the inspectors, security services personnel and a security force commander explained that the security force's effectiveness was not reduced when the number of security personnel was changed from two officers and four police operations members to four security services personnel. Security services personnel explained that the present staffing for the security staff included a security force commander in addition to the four security service personnel per shift. The inspectors noted that a security force commander and dispatcher were the two officers previously included in the PSP and TSP. The inspectors noted that the dispatcher's responsibilities were divided between the plant shift superintendent and the security force commander. To facilitate the added responsibilities of the security force commander, the off-going security force commander remained after shift turnover to assist in completing these added responsibilities. Plant staff were revising PCR C-99-0613 to clarify that Revision 44 did not decrease the effectiveness of the PSP or the TSP. The inspectors will track the corrective actions with ATR 01-1512.

c. Conclusions

The inspectors identified a weakness in the plant staff's plant change review documentation to support changing the PSP and TSP.

R5 Staff Training and Qualification in Radiation Protection

R5.1 Control of Site Access Training

a. Inspection Scope (83822)

The inspectors reviewed the plant staff's actions to ensure that the Department of Energy (DOE) contractors' received the appropriate radiological training in accordance with 10 CFR 20.1101, "Radiation Protection Programs." The inspectors reviewed the

Safety Analysis Report (SAR), the flow down agreements between DOE and USEC, and implementation of the radiation protection program agreements between DOE and USEC.

b. Observations and Findings

The inspectors reviewed the SAR, the flow down agreements between DOE and USEC, and implementation of the radiation protection program between DOE and USEC. The inspectors noted that Procedure USEC-100, "Joint Policy Statement on USEC and DOE Directives and Management Expectation for Shared Site Issues," stated, in part, that the radiation protection program for leased space must be conducted according to USEC commitments to NRC. The inspectors noted that there was conflicting guidance within the Procedure CP2-PO-PO1033, "PGDP Shared Site Interface," which implemented Procedure USEC-100. Specifically, one section of CP2-PO-PO1033 stated that activities in leased spaces would be conducted in accordance with commitments made to the NRC, whereas another section stated that the DOE contractor personnel ingress and egress through USEC space to DOE-retained spaces will be accomplished in accordance with DOE requirements. The inspectors determined that the guidance in Procedure CP2-PO-PO1033, specifically allowing DOE contractors access through USEC radiological areas in order to gain access to DOE areas, led the Lease Administrator and the Bechtel Jacobs Training Manager to conclude that USEC requirements were not applicable; thus, the Bechtel Jacobs Training Manager did not provide USEC-specific training.

The inspectors noted that an assessment and tracking report ATR 00-4853 dated September 27, 2000, documented that the Bechtel Jacobs Training Manager did not allow a USEC employee to attend and evaluate the DOE contractor's radiation worker training class. The ATR stated that, without USEC verifying that the training met USEC standards, USEC would not have confirmation that DOE's contractors entering USEC spaces were trained to USEC radiological requirements specified in the SAR.

The inspectors determined that the DOE contractor's radiation worker training class course content (the issue addressed by ATR 00-4853) deviated from commitments in the SAR and with 10 CFR 20.1101 regarding the required radiation protection training for personnel entering the certificatee controlled areas of the facility. The inspectors also determined that the DOE Lease Administrator, the Operations Manager of Field Services, and DOE's Director of Field Services were not aware of the ATR and thus, had not taken any actions to resolve the ATR.

The USEC training organization was provided a copy of the Bechtel Jacobs lesson plans and handout materials for the Radiation Worker Training Program. This material was reviewed by cognizant USEC personnel, including the Manager of Production Support Training, the Radiation Protection Manager, and Health Physics Operations Manager. The USEC Manager of Production Support Training and Health Physics Operations Manager also attended a session of the Bechtel Jacobs Training. Comments on training materials developed by USEC were provided to Bechtel Jacobs for consideration on November 9, 2000. By December 5, 2000, Bechtel Jacobs had apparently not acted on the USEC comments and USEC Manager of Production Support Training initiated a second ATR 00-6086 regarding the inadequacy of the Bechtel Jacobs radiation worker training.

In a letter dated December 6, 2000, the Bechtel Jacobs Manager of Projects notified the DOE Site Manager that personnel access restrictions would be applied due to the concerns raised regarding the radiological worker training provided by Technical and Field Engineering, Inc. (TFE) for Bechtel Jacobs, i.e., the TFE training did not fully meet USEC requirements for personnel access to leased space where radiation worker qualifications were required. The letter stated that until these concerns were resolved, all personnel that had obtained Radworker I or Radworker II qualifications from Bechtel Jacobs via TFE would be restricted from accessing USEC-leased space that required individual qualification as a radiation worker. The letter indicated that Bechtel Jacobs and USEC were in the process of resolving the specific concerns raised. The letter further stated that when the concerns were resolved, the applicable lesson plans would be revised, as appropriate, and affected personnel would be provided supplemental information satisfying the additional training needs. The inspectors noted that the TRI training had been revised.

The SAR states, in part, in Section 5.3.1.1, "ALARA Policy," that the certificatee will establish a Radiation Protection (RP) Program in accordance with 10 CFR 20.1101. The purpose of this commitment was to protect personnel entering USEC-leased spaces from unnecessary exposure to ionizing radiation and radioactive materials. The certificatee had an additional commitment in the SAR, in Section 5.3.1.3, "Radiation Protection Program Elements," to include personnel radiological training to support the RP program. Due to conflicting information in the USEC-100 implementing procedure CP2-PO-PO1033, the Bechtel Jacobs Training Manager misinterpreted the requirements and thus, did not provide training on USEC radiation protection requirements to DOE contractors. In addition, no corrective action had been initiated at the time to address the issue because Bechtel Jacobs was not aware of the contents of the ATR describing the inadequacies of the training program.

Title 10 of the Code of Federal Regulations, Part 76.93, "Quality Assurance," requires, in part, that the Corporation establish, maintain, and execute a Quality Assurance Program. Section 2.16 of the Quality Assurance Program, "Corrective Action," requires, in part, that conditions adverse to quality are promptly identified and corrected as soon as practical. Contrary to the above, from September 27, 2000 to December 6, 2000, plant staff did not correct as soon as practical a condition adverse to quality. Specifically, the Corporation failed to ensure that a DOE contractor's training program met the requirements of 10 CFR 20.1101. This issue was identified by the certificatee, and the issue was entered into the certificatee's corrective action program and was being resolved. Since the violation and its associated issues were identified by the certificatee's staff and were being addressed in the certificatee's corrective action system, the violation is being treated as a **Non-Cited Violation (NCV 07007001/2001004-01)**, consistent with Section VI.A.8 of the NRC Enforcement Policy.

c. Conclusions

The inspectors identified a NCV with the plant staff's failure to take the appropriate action to comply with 10 CFR 20.1101 in a timely manner. Actions to correct the violation were being addressed in the plant staff's corrective action program.

S8 Miscellaneous Security Issues

S8.1 Certificatee Security Reports (90712)

The certificatee made the following security-related 24 hour loggable reports pursuant to 10 CFR 95 during the inspection period. The inspectors reviewed any immediate security concerns associated with the reports at the time of the initial verbal notification.

Date	Title
3/10/01	Classified information in an open source document. Information was reviewed by Technical Security personnel. Appropriate authorities to be contacted for guidance.

X1 Exit Meeting Summary

The inspectors presented the inspection results to members of plant staff and management at the conclusion of the inspection on April 3, 2001. The plant staff present for the exit meeting acknowledged the findings. The inspectors asked the plant staff whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

PARTIAL LIST OF PERSONS CONTACTED

United States Department of Energy

W. D. Seaborg, Paducah Site Manager

United States Enrichment Corporation

*M. A. Buckner, Operations Manager
*L. L. Jackson, Nuclear Regulatory Affairs Manager
*J. A. Labarraque, Safety, Safeguards and Quality Manager
*S. R. Penrod, Enrichment Plant Manager
*H. Pulley, General Manager
*R. Helme, Director of Engineering
*K. Ahern, Engineering Manager
*R. Starkey, Training Manager
*J. Whittman, Work Control Manager
*T. Canterbury, Maintenance Manager
*P. Jenny, Plant Services Manager
*M. Mack, Cascade Operations Manager
*S. Cowne, Nuclear Regulatory Affairs
*G. Bassell, Department of Energy
L. Albritton, Nuclear Regulatory Affairs

U.S. Nuclear Regulatory Commission

*C. A. Blanchard, Senior Resident Inspector
D. J. Hartland, Portsmouth Senior Resident Inspector

*Denotes those present at the exit meeting on February 20, 2001.

INSPECTION PROCEDURES USED

IP 83822:	Radiation Protection
IP 86740:	Transportation of Radiological Materials
IP 88015:	Criticality Control
IP 88100:	Plant Operations
IP 88102:	Surveillance Observations
IP 88103:	Maintenance Observations
IP 90712:	In office Review of Events

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

37878	CER	Failure to perform R-114 moisture sampling in accordance with the time requirements per NCSA CAS - 011.

Closed

07007001/97003-08	CER	Use of TSR 1.6.4 during small outgassing.
07007001/97004-05	CER	Actuation of High autoclave steam pressure safety actuation on Autoclave No. 1 in Building C-360.
07007001/97004-07	CER	Building C-310 west Normatex pump detection system modified.
07007001/97008-05	CER	Safety System failure of autoclave head-to-shell gasket on Autoclave No. 2 South in Building C-333A.
07007001/97008-06	CER	Safety system actuation of Building C-333A process gas leak detection head following minor release.
07007001/97008-07	CER	Safety system actuation of two Building C-333A Autoclave Steam Pressure isolation systems. 70-7001/2000009-01IFI Cutting and capping the Cold Trapping System at C-360.
37758	CER	Safety System failure of the cylinder valve closure mechanism in Building C-315
07007001/2001004-01	NCV	Failure to ensure that radiological training for DOE contractor's met certificatee and NRC regulatory requirements.

Discussed

None

LIST OF ACRONYMS USED

ATR	Assessment and Tracking Report
CAAS	Criticality Accident Alarm System
CART	Corrective Action Review Team
CFR	Code of Federal Regulations
DOE	Department of Energy
GDP	Gaseous Diffusion Plant
NCSA/E	Nuclear Criticality Safety Analysis/Evaluation
NCV	Non-Cited Violation
NOV	Notice of Violation
NRC	Nuclear Regulatory Commission
PCR	Plant Change Review
PDR	Public Document Room
PSP	Physical Security Plan
PSS	Plant Shift Superintendent
RP	Radiation Protection
SAR	Safety Analysis Report
TFI	Technical and Field Engineering, Inc.
TSP	Transportation Security Plan
TSR	Technical Safety Requirement
UF_6	Uranium Hexafluoride
USEC	United States Enrichment Corporation