UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET SW SUITE 23T85
ATLANTA, GEORGIA 30303-8931

March 8, 2004

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

SUBJECT: NRC INSPECTION REPORT 70-7002/2004-001 AND NOTICE OF VIOLATION

Dear Mr. Brown:

On February 13, 2004, the NRC completed a routine inspection at the Portsmouth 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 on February 13, 2004, the NRC inspectors discussed the findings with members of your staff.

This inspection consisted of an examination of activities conducted under the certificate as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of the certificate. Areas examined during the routine inspection are identified in the enclosed report. Within these areas, the inspection consisted of a selective examination of procedures and representative records, observations of activities in progress, and interviews with personnel.

Based on the results of this inspection, the NRC has determined that a Severity Level IV violation of NRC requirements occurred. The violation was evaluated in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, which is included on the NRC's web site at http://www.nrc.gov/what-we-do/regulatory/enforcement.html. The violation is cited in the enclosed Notice of Violation (Notice), and the circumstances surrounding the violation are described in detail in the subject inspection report. The violation involves multiple examples of failure to follow procedural requirements for radiation protection practices.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response to this letter will be available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so it can be made available to the Public without redaction.

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

Sincerely,

/RA/

Jay L. Henson, Chief
Fuel Facility Inspection Branch 2
Division of Fuel Facility Inspection

Docket No. 70-7002
Certificate No. GDP-2

Enclosures:
1. Notice of Violation
2. NRC Inspection Report

cc w/encls:
P. D. Musser, Portsmouth General Manager
T. A. Brooks, Manager, Nuclear Regulatory Affairs
R. Starkey, Paducah General Manager
S. A. Toelle, Director, Nuclear Regulatory Affairs, USEC
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NOTICE OF VIOLATION

United States Enrichment Corporation
Portsmouth Gaseous Diffusion Plant

Docket No. 70-7002
Certificate No. GDP-2

During an NRC routine inspection conducted from February 9 through 13, 2004, the inspectors identified one cited violation of NRC requirements. In accordance with NUREG-1600, "General Statement of Policy and Procedure for NRC Enforcement Actions," the violation is listed below.

Technical Safety Requirement 3.9.1 requires, in part, that approved written procedures be implemented for activities described in Safety Analysis Report Section 6.11.4.1, and listed in Appendix A to Safety Analysis Report.

Appendix A to Safety Analysis Report Section 6.11 identifies radiation protection as an activity for which procedures shall be implemented.

A. Procedure UE2-HP-RP1030, “Conduct of Radiological Operations”, Appendix G, describes the sequence for removal of protective clothing upon exiting a contamination area, including the requirement to remove each shoe cover prior to placing the shoe onto the clean step-off pad.

B. Procedure UE2-HP-RP1030, “Conduct of Radiological Operations”, Appendix H, provides the requirements for personnel monitoring with hand-held survey instruments after exiting a controlled area, including the requirement to move the probe slowly over the surface (frisking hands before picking up the probe), approximately 2 inches per second.

C. Procedure XP2-SH-IH-1037, “Respiratory Protection Program”, Step 5.6.7, requires that the respirator wearer wears only respiratory protection equipment that has been issued for use by the specific wearer.

D. Procedure UE2-HP-RP1030, “Conduct of Radiological Operations”, Step 6.3.2.F, requires that personnel wear the minimum protective clothing as specified on the Radiation Work Permit (RWP). RWP number 04-330-0024-2-S required workers to wear cloth hoods as part of protective clothing.

Contrary to the above:

A. On February 11, 2004, a worker exiting a contamination area in Building X-330 did not remove protective clothing in the proper sequence. Specifically, the individual did not remove shoe covers prior to placing each shoe onto the clean step-off pad.

B. On February 11 and 12, 2004, while workers were exiting a control led area in Building X-330, they failed to frisk their hands before picking up the hand-held survey instrument probe and moved the probe over the surface at a rate exceeding 2 inches per second.

C. On February 12, 2004, a worker was observed donning respiratory protection equipment that was not issued for use by that individual.

D. On February 11, 2004, three workers were observed not wearing the minimum protective clothing specified on RWP 04-330-0024-2-S. Specifically, the workers were wearing skull caps rather than the cloth hoods required by the RWP.

This is a Severity Level IV violation (Supplement VI).

Pursuant to the provisions of 10 CFR 76.70, United States Enrichment Corporation is hereby required to submit a written statement or explanation in reply to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555-0001, with a copy to the Regional Administrator, Region II, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). Your reply to the violation should be clearly marked as a "Reply to a Notice of Violation" and should include for the violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation; (2) the corrective steps that have been taken and the results achieved; (3) the corrective steps that will be taken to avoid further violations; and (4) the date when full compliance will be achieved. Your response may reference or include previously docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an Order or a Demand for Information may be issued as to why the Certificate should not be modified, suspended, or revoked, or why such other action, as may be proper, should not be taken. Where good cause is shown, consideration will be given to extending the response time.

If you contest this enforcement action, you should also provide a copy of your response to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001.

Because your response will be made 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), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm.html (the Public Electronic Reading room). If personal privacy or proprietary information is necessary to provide an acceptable response, please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days.

Dated this 8th day of March, 2004

U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.	70-7002
Certificate No.	GDP-2
Report No.	70-7002/2004-001
Facility Operator:	United States Enrichment Corporation
Facility Name:	Portsmouth Gaseous Diffusion Plant
Location:	3930 U.S. Route 23 South P.O. Box 628 Piketon, OH 45661
Dates:	February 9 through 13, 2004
Inspectors:	David Hartland, Senior Fuel Facility Inspector Alphonsa Gooden, Health Physicist Richard Gibson, Inspector-in-Training Jose Jimenez, Inspector-in-Training Matthew Yoder, Intern
Approved by:	Jay L. Henson, Chief Fuel Facility Inspection Branch 2 Division of Fuel Facility Inspection

Enclosure 2

EXECUTIVE SUMMARY

United States Enrichment Corporation
Portsmouth Gaseous Diffusion Plant
NRC Inspection Report 70-7002/2004-001

This inspection included aspects of certificatee operations, maintenance, management organization and controls, training, radiation protection, and emergency preparedness. The report covers regional inspection activities and includes follow-up of issues identified during previous inspections.

Operations

- The inspectors determined that operations observed were conducted in accordance with regulatory requirements (Paragraph 1.a).

Facility Support

- The inspectors determined that maintenance and surveillance activities observed were performed in accordance with regulatory requirements (Paragraph 2.a).

- The inspectors determined that plant management qualifications and Plant Operations Review Committee and Quality Assurance audit activities reviewed were in accordance with regulatory requirements (Paragraph 2.b).

- The inspectors determined that adequate controls were in place to ensure that training requirements for plant employees were current. Training facilities and equipment were observed to be in acceptable condition (Paragraph 2.c).

Radiation Protection

- Self-assessments of the radiation protection program were implemented in accordance with the certificate and regulatory requirements (Paragraph 3.a).

- Based on dosimetry results for calender year 2003, the maximum assigned external exposure was approximately ten percent of the limits for occupational exposure in 10 CFR 20.1201. The external exposure monitoring program was implemented in a manner for ensuring dose was as low as reasonably achievable (Paragraph 3.b).

- Administrative and physical controls were in place to both monitor and control internal exposures (Paragraph 3.c).

- Radiological safety postings and radiation work permits were properly utilized to communicate potential hazards and protective equipment requirements to workers. A violation was identified for failure to follow procedures governing radiological operations and respiratory protection (Paragraph 3.d).

- Based on records review and interviews, the inspectors concluded that the certificatee's as low as reasonably achievable program was being properly implemented (Paragraph 3.e).

Emergency Preparedness

- The independent audit provided an adequate assessment of the certificatee's ability to implement the emergency response program (Paragraph 4.a).

- The Emergency Operations Center (EOC) minimum staffing during off-hour activations was timely, and randomly selected members of the EOC cadre were trained in accordance with the Emergency Plan and procedures (Paragraph 4.b).

- Based on an interview and records reviewed, the inspectors determined that the certificatee was periodically contacting the offsite support groups to maintain a state of readiness for responding to emergencies (Paragraph 4.c).

- The drill and exercise program was effectively implemented as evidenced by the types of scenarios postulated and the frequency at which drills were being conducted (Paragraph 4.d).

- Based on facility tours, interviews, and surveillance documentation, the inspector concluded that the facilities and equipment were adequately maintained (Paragraph 4.e).

REPORT DETAILS

1. Plant Operations

a. Conduct of Operations

(1) Inspection Scope (88020 and TI 2600/003)

The inspectors observed routine operations activities and discussed routine operations with staff and management to ensure that activities were conducted in accordance with regulatory requirements.

(2) Observations and Findings

The inspectors observed routine operations in the cascade buildings and area control rooms, autoclave facilities, and the central control facility. The appropriate nuclear criticality safety requirements were implemented for the routine activities observed. Operations staff were alert and generally knowledgeable of the current status of equipment associated with their assigned facility.

(3) Conclusions

The inspectors determined that operations observed were conducted in accordance with regulatory requirements.

b. Miscellaneous Operations Issues

(Closed) Violation (VIO) 07007002/2003-001-02: Failure to effectively preclude recurrence of unauthorized overtime exceedances. The plant staff determined that the root cause for the violation was a fragmented overtime canvassing program and incomplete organizational long-term orders that lacked consistency. As corrective action, the plant staff developed a site-wide use document to provide consistency in the canvassing program and trained affected supervisors to the new document. The Plant Shift Superintendent office also instituted a practice to run daily system reports to identify and followup on potential discrepancies. The inspectors noted that the actions have been effective in preventing unauthorized overtime exceedances, and this item is closed.

(Closed) VIO 07007002/2003-202-01: Emergency egress lighting battery pack unit in the Building X-342-A vaporizer room was not plugged in to an electrical outlet. The plant staff determined that the likely cause for the violation was the failure to properly restore the power following completion of testing performed the previous week. As corrective action, the plant staff revised the affected procedure to document verification of emergency egress lighting leads when removing and restoring power to the battery pack units. The inspectors have no further issues, and this item is closed.

(Closed) Event Reports 39981 (ER 03-06), 39853 (ER 03-03), and 39827 (ER 03-01): Manual actuation of the gas emergency release system in Building X-344. The plant staff determined the root cause was that the cylinder valve inspection criteria was not

adequate to prevent or detect the potential of valve seat or stem leakage/damage in older cylinders. As corrective action, the plant staff revised applicable operations procedures to require replacement of valves on the older cylinders and incorporated methods for addressing leaking valves and failed leak-rates. The inspectors noted that the actions taken have been effective in preventing further releases, and these items are closed.

(Closed) URI 07007002/2003003-01 and Event Reports 39977 (ER 03-05) and 40037 (ER 03-07): Failure of parent cylinder safety valve air supply lines while in an applicable mode of autoclave operation. The plant staff determined that the root cause was that procedure requirements for ensuring that there was no interference between the autoclave shell and head during closure was inadequate. As corrective action, applicable procedures were revised to implement the use of nylon tie-wraps to prevent lines/leads from being crushed during autoclave closure. The inspectors determined that the events were of low significance, as the overall autoclave containment function was not compromised during the time that the safety valves were rendered inoperable. The inspectors noted that the actions have been effective in preventing recurrence, and these items are closed.

(Closed) URI 07007002/2003003-04: The issues associated with this unresolved item were addressed in Inspection Report 07007002/2003-04 and this item is closed.

2. Facility Support

a. Conduct of Maintenance and Surveillance

(1) Inspection Scope (88025)

The inspectors observed maintenance and surveillance activities to ensure compliance with regulatory requirements.

(2) Observations and Findings

The inspectors observed a Criticality Accident Alarm System cluster change-out in Building X-330 and verified one or more of the following: 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 acceptance criteria were clear and conformed with the TSR and Safety Analysis Report; and any deficiencies or out-of-tolerance values identified during the testing were documented, reviewed, and resolved by appropriate management personnel.

The inspectors attended the daily work control meeting and observed that emergent issues were appropriately prioritized. The inspectors also reviewed the backlog of preventative and corrective maintenance work orders and did not identify any significant adverse trends or issues.

(3) Conclusions

The inspectors determined that maintenance and surveillance activities observed were performed in accordance with regulatory requirements.

b. Management Organization and Controls

(1) Inspection Scope (88005)

The inspectors reviewed management changes that had occurred in the past two years to verify that requirements in the certificate regarding personnel qualifications were being met. The inspectors also observed a Plant Operation Review Committee (PORC) meeting and reviewed some quality assurance audit reports to ensure that those activities were conducted in accordance with regulatory requirements.

(2) Observations and Findings

The inspectors reviewed the Portsmouth Qualification Review Report over the previous two years that documented the process for ensuring that individuals assigned to management positions described in Safety Analysis Report (SAR) Section 6.1 were qualified to fill those positions. The inspectors noted that although some of the individuals did not have college degrees, they had the equivalent technical experience as described in the SAR.

The inspectors attended a PORC meeting and observed that the participants discussed the agenda items in detail prior to approval. The inspectors also reviewed some Quality Assurance audit reports and noted that the scope of the audits was appropriate and that issues identified were properly documented for followup.

(3) Conclusions

The inspectors determined that plant management qualifications and PORC and Quality Assurance audit activities reviewed were in accordance with regulatory requirements.

c. Operator Training

(1) Inspection Scope (88010)

The inspectors reviewed training documentation, toured training facilities, and conducted interviews to verify that hazards and safety controls were adequately addressed in the training program.

(2) Observations and Findings

The inspectors noted that the plant staff used a computer program to track all the current and future training activity for each employee. The program ensured that personnel had the minimum training requirements for the activities for which they were qualified. The computer program alerted employees and their supervisors via e-mail when a given training activity was due.

The inspectors also toured various training facilities and determined that the rooms, training materials, and hands-on equipment were in acceptable condition. The radiological safety training area was found to be properly equipped with adequate supply of protection equipment, survey instruments, and two scenarios that adequately simulated conditions encountered in the different working areas of the plant.

(3) Conclusions

The inspectors determined that adequate controls were in place to ensure that training requirements for plant employees were current. Training facilities and equipment were observed to be in acceptable condition.

3. Radiation Protection (83822)

a. Radiation Protection Program Implementation (R1.01)

(1) Inspection Scope

The inspectors conducted interviews and reviewed certificatee documentation to ascertain the status of self-assessments of radiation program implementation.

(2) Observations and Findings

Self-assessments were performed on a monthly basis by members of the health physics staff to determine if various program elements were being implemented in accordance with the certificate and regulations. In addition, experienced radiological protection personnel from the Paducah site also performed independent assessments periodically. The assessments were effective in verifying program implementation and included both compliance and performance activity.

(3) Conclusions

Self-assessments of the radiation protection program were implemented in accordance with the certificate and regulatory requirements.

b. External Exposure Control (R1.04)

(1) Inspection Scope

The inspectors interviewed dosimetry personnel and reviewed the maximum assigned exposure results to determine if exposures were in compliance with 10 CFR Part 20 limits and maintained as low as reasonably achievable (ALARA).

(2) Observations and Findings

Based on interviews, procedural reviews, and observations of plant personnel inside radiation control areas, the exposure control monitoring program was implemented consistent with requirements in 10 CFR Part 20. The inspectors reviewed dosimetry

results from January 2002 to December 2003 and determined that the maximum assigned external exposure was well below the limits for occupational exposure in 10 CFR 20.1201. The inspectors also noted that the use of specialized shielding by the certificatee in Building X-344 for processing material contaminated with technetium-99 was effective in reducing the external exposure to workers. Table 1 below displays the maximum assigned exposure data for calendar years (CY) 2002 and 2003.

Table 1. Annual Exposures

Year	Deep Dose Equivalent (DDE)	Shallow Dose Extremity (SDE)	Total Effective Dose Equivalent (TEDE)	Collective TEDE (person-rem)	Committed Effective Dose Equivalent (CEDE)
2002	0.316 rem	0.353 rem	0.316 rem	7.09	0.021 rem
2003	0.496 rem	0.569 rem	0.496 rem	17.56	[1]N/A

[1]**Note**: Maximum assigned CEDE for 2003 was not available at this time pending final assessments and calculations.

(3) Conclusions

Based on dosimetry results for CY 2003, the maximum assigned external exposure was approximately ten percent of the limits for occupational exposure in 10 CFR 20.1201. The external exposure monitoring program was implemented in a manner to maintain doses as low as reasonably achievable.

c. Internal Exposure Control (R1.05)

(1) Inspection Scope

The inspectors reviewed controls for assessing internal exposure to verify that the administrative and physical controls were in place to control occupational dose ALARA. Exposure results were reviewed to determine if exposures were in compliance with 10 CFR Part 20 limits.

(2) Observations and Findings

Table 1 above presents the maximum assigned internal exposure for CY 2002. The results for CY 2003 had not been completed at the time of the inspection due to sample results which were pending. Based on interview with the dosimetrist and a review of the results from previous years (1999 through 2002), the maximum assigned CEDE (which ranged from 0.010 to 0.047 rem) was less than five percent of the limits in 10 CFR 20.1201. The inspectors determined that the administrative controls and procedures were in place to both monitor and assign dose resulting from routine operations or an unplanned release of radioactive material.

(3) Conclusions

Administrative and physical controls were in place to both monitor and control internal exposures.

d. Postings, Labeling and Control (R1.07)

(1) Inspection Scope

Several work locations were examined to determine if radioactive containers were properly labeled and to assess the adequacy of contamination control barriers and posting of radiation areas as required by 10 CFR 20.1902. Radiation work permits (RWPs) were reviewed to determine the adequacy of the requirements posted for worker protection and the degree to which those requirements were being implemented.

(2) Observations and Findings

All observed work areas involving radioactive material or potentially contaminated material were properly posted. Selected containers examined during facility tours were labeled or had other markings on the container in accordance with requirements. The inspectors reviewed several RWPs associated with maintenance activities in Buildings X-705, X-330, X-343, and X-344. Selected RWPs were adequate for type of work being performed.

During tours of the facilities, the inspectors noted that radiological signs, postings, and RWPs were properly posted and readily available. On two separate dates, personnel were observed performing valve maintenance work in the cold recovery area of Building X-330 under RWP 04-330-0024-2-S. The inspectors noted several examples where workers failed to follow procedures and/or RWP requirements as follows:

- RWP number 04-330-0024-2-S required workers to wear cloth hoods as part of protective clothing. On February 11, 2004, three workers were observed wearing skull caps rather than the cloth hoods required by the RWP.

- On February 11, 2004, the inspectors observed workers improperly remove protective clothing including placing their shoes on the step-off pad prior to removing the shoe covers.

- On February 11 and 12, 2004, workers failed to follow procedures in that frisking was done at a pace that exceeded procedural requirements, and personnel failed to frisk their hands before handling the survey instrument.

- On February 12, 2004, a health physics technician was observed wearing a respirator assigned to a shift technician from the previous shift.

Technical Safety Requirement 3.9.1 required, in part, that approved written procedures shall be implemented to include activities described in Safety Analysis Report Section 6.11.4.1 and listed in Appendix A to Safety Analysis Report. Appendix A to Safety

Analysis Report Section 6.11 identified radiation protection as an activity for which procedures shall be implemented.

Procedure UE2-HP-RP1030, “Conduct of Radiological Operations”, Appendix G, described the sequence for removal of protective clothing upon exiting a contamination area, including the requirement to remove each shoe cover prior to placing the shoe onto the clean step-off pad. Procedure UE2-HP-RP1030, “Conduct of Radiological Operations”, Appendix H, provided the requirements for personnel monitoring with hand-held survey instruments after exiting a controlled area, including the requirement to move the probe slowly over the surface (frisking hands before picking up the probe), approximately 2 inches per second. Procedure XP2-SH-IH-1037, “Respiratory Protection Program”, Step 5.6.7, required that the respirator wearer wears only respiratory protection equipment that has been issued for use by the specific wearer. Procedure UE2-HP-RP1030, “Conduct of Radiological Operations”, Section 6.3.2.F, required that personnel shall wear the minimum protective clothing as specified on the Radiation Work Permit (RWP). RWP number 04-330-0024-2-S required workers to wear cloth hoods as part of protective clothing.

Contrary to the above, on February 11, 2004, a worker was observed exiting a contamination area in Building X-330, and did not remove protective clothing in the proper sequence. Specifically, the individual did not remove each shoe cover prior to placing the shoes onto the step-off pad. On February 11 and 12, 2004, workers observed exiting a control area in Building X-330, failed to frisk their hands before picking up the survey instrument probe, and moved the probe over the surface at a rate exceeding 2 inches per second. On February 12, 2004, a worker was observed donning respiratory protection equipment that was issued for use for another worker. On February 11, 2004, three workers were observed not wearing the minimum protective clothing specified on RWP 04-330-0024-2-S. Specifically, the workers were wearing skull caps rather than the cloth hoods required by the RWP. This is a violation (07007002/2004001-01).

(3) Conclusions

Radiological safety postings and RWPs were properly utilized to communicate potential hazards and protective equipment requirements to workers. A violation was identified for failure to follow procedures governing radiological operations and respiratory protection.

e. Implementation of ALARA Program (R1.10)

(1) Inspection Scope

The certificatee’s ALARA program was reviewed to determine if the program and ALARA goals were being developed and implemented in accordance with the certificate. In addition, the program for re-enforcing the ALARA concept among employees was assessed.

(2) Observations and Findings

On a quarterly basis, the certificatee issued an ALARA Performance Report detailing ALARA goals and exposure summaries to identify undesirable trends. In those cases where exposures were elevated, consideration was given to ways for reducing exposures. An ALARA success story was the installation of specialized shielding on the technetium-99 traps in Building X-344, resulting in a reduction in external exposures. Annually, ALARA goals and objectives were approved by the Radiation Safety Committee.

Several workers were interviewed regarding ALARA and demonstrated an adequate knowledge and/or understanding of ALARA concepts. The inspectors interviewed the health physicist assigned responsibility for the ALARA evaluations and assessments associated with the processing of the technetium-99 traps. From the interviews and review of records, the inspectors determined that the certificatee evaluation of the ALARA program was appropriate.

(3) Conclusions

Based on records review and interviews, the inspectors concluded that the certificatee's ALARA program was being properly implemented.

4. Emergency Preparedness (88050)

a. Review of Program Changes (F3.01)

(1) Inspection Scope

Changes to the certificatee's emergency organization, facilities, and equipment were reviewed to assess the impact on the effectiveness of the program. The adequacy of the emergency preparedness audit required by Section 7.5 of the Emergency Plan was also evaluated.

(2) Observations and Findings

The inspectors verified that no significant changes were made since the last inspection. The independent audits for CY 2002 and 2003 were performance-based via observation of the emergency exercises held April 24, 2002, and October 8, 2003. The independent audit provided an adequate assessment of the certificatee's ability to implement the emergency response program to protect the plant and public during postulated accident conditions.

(3) Conclusions

The independent audit provided an adequate assessment of the certificatee's ability to implement the emergency response program.

b. Training and Staffing of Emergency Organization (F3.03)

(1) Inspection Scope

The inspectors determined if emergency response training was provided to key emergency management organization personnel in accordance with Section 7.2 of the Emergency Plan. The inspectors also reviewed the adequacy of the notification system for activation and staffing of the Emergency Operations Center (EOC) during off-hours.

(2) Observations and Findings

The inspectors conducted a walk-through with a key member of the emergency organization assigned responsibility as the interim Crisis Manager (CM) during back-shift or weekend operations. The interviewee demonstrated good knowledge and familiarity with the implementation of the Emergency Plan and implementing procedures including emergency classification, notification time limits, and the role of the CM during emergencies.

When presented postulated accident conditions, the interviewee was prompt and correct in the identification of the emergency action level and the emergency classification determination. The inspector reviewed training documentation for several key individuals assigned as members of the EOC cadre. No problems were noted, as training was current and up-to-date.

Regarding staffing and augmentation during off-hours, the inspectors reviewed documentation resulting from actual events requiring activation of the EOC cadre during the period of September 2002 through January 2004. No problems were noted with meeting the minimum staff requirements for activation as stated in the Emergency Plan.

(3) Conclusions

The EOC minimum staffing during off-hours activations was timely, and randomly selected members of the EOC cadre were trained in accordance with the Emergency Plan and procedures.

c. Offsite Support (F3.04)

(1) Inspection Scope

Certificatee activities in the areas of training, agreements, and exercises were reviewed to determine if the certificatee was periodically involving offsite support groups.

(2) Observations and Findings

The inspectors reviewed documentation to show that the offsite authorities were being offered opportunities to participate in drills/exercises, and periodic site familiarization tours were provided. Agreement letters with offsite support agencies were maintained current and up-to-date.

(3) Conclusions

Based on an interview and records reviewed, the inspectors determined that the certificatee was periodically contacting the offsite support groups to maintain a state of readiness for responding to emergencies.

d. Drills and Exercises (F3.05)

(1) Inspection Scope

Section 7.3 of the Emergency Plan required a biennial exercise be performed involving the onsite emergency management organization and allow for participation by the offsite support agencies. This area was reviewed for adequacy in testing both onsite and offsite emergency response capability.

(2) Observations and Findings

The recent biennial exercise conducted on October 8, 2003, included offsite agency participation. The inspectors reviewed accident scenario documentation covering the period of March 2002 through October 2003, and determined that credible scenarios were being used that provided the appropriate challenges for testing the capabilities of the emergency management program.

(3) Conclusions

The drill and exercise program was effectively implemented as evidenced by the types of scenarios postulated and the frequency at which drills were being conducted.

e. Emergency Equipment and Facilities (F3.06)

(1) Inspection Scope

The emergency facilities, emergency response equipment, instrumentation, and supplies were inspected to determine the state of operational readiness.

(2) Observations and Findings

The inspectors examined emergency equipment and supplies (e.g. protective clothing , gas sampling tubes, etc.) used for personnel protection during an emergency stored in the emergency response room and the emergency response vehicle. No problems were noted. The equipment and supplies were available as described in procedures and performed the intended function when checked for operability.

Periodic maintenance and surveillance records covering the period of December 2002 to February 2004 disclosed that emergency equipment and facilities were properly maintained. The inspectors verified via interviews and documentation review that periodic test and maintenance was being performed on the public warning system (sirens) to ensure operability. The results disclosed that when problems were identified, prompt corrective actions were taken to resolve them.

(3) Conclusions

Based on facility tours, interviews, and surveillance documentation, the inspectors concluded that the facilities and equipment were adequately maintained.

5. Exit Interview

The inspectors presented the inspection results to the members of facility management on February 13, 2004. The inspectors asked the certificatee staff whether any materials examined during the inspection should be considered proprietary. The certificatee staff did not identify any of the materials as proprietary.

ATTACHMENT

1. PERSONS CONTACTED

Partial List of Licensee's Persons Contacted

P. Musser, General Manager
*J. Anzelmo, Plant Services Manager
*S. Balko, Health Physics Section Manger
*C. Bauer, Emergency Management Specialist
*R. Bouts, Training Manager
*T. Brooks, Nuclear Regulatory Affairs Manager
*T. Canterbury, Engineering Manager
*M. Conkel, Maintenance Manager
L. Cutlip, Contaminated Feed Manager
D. Fosson, Operations Manager
*S. Fout, Plant Manager
*R. Lawton, Nuclear Safety & Quality Manager
*M. McGuire, Health Physicist
*M. Redden, Emergency Management Program Manager
*T. Sensue, Nuclear Regulatory Affairs Engineer
K. Sisler, Plant Shift Superintendent
*J. Thompson, Acting Health Physics Manager
*G. Workman, Production Support Manager

*Denotes those present at the exit meeting on February 13, 2004.

2. INSPECTION PROCEDURES USED

IP 83822	Radiation Protection
IP 88005	Management Organization and Controls
IP 88020	Regional NCS Inspection Program
IP 88025	Maintenance and Surveillance Testing
IP 88050	Emergency Preparedness
IP 90712	In-office Reviews of Written Reports on Non-routine Events
TI 2600/003	Operational Safety Review

3. ITEMS OPENED, CLOSED, AND DISCUSSED

Opened	Type	Summary
07007002/2004-001-01	VIO	Failure to follow procedures governing radiological operations and respiratory protection (Paragraph 3.d).

Closed	Type	Summary
07007002/2003-001-02	VIO	Failure to effectively preclude recurrence of unauthorized overtime exceedances (Paragraph 1.b).
07007002/2003-202-01	VIO	Emergency egress lighting battery pack unit in the Building X-342-A vaporizer room was not plugged (Paragraph 1.b).
39981, 39853, and 39827	CERs	Manual actuation of the gas emergency release system in Building X-344 (Paragraph 1.b).
07007002/2003003-01	URI	Review of safety significance of failure of parent cylinder safety valve air supply lines while in an applicable mode of autoclave operation (Paragraph 1.b).
39977 and 40037	CERs	Failure of parent cylinder safety valve air supply lines while in an applicable mode of autoclave operation (Paragraph 1.b).
07007002/2003003-04	URI	The issues associated with this unresolved item were addressed in Inspection Report 07007002/2003-04 and this item is closed (Paragraph 1.b).

Discussed

None

4. LIST OF ACRONYMS USED

ADAMS	Agencywide Documents Access and Management System
ALARA	As Low As Reasonably Achievable
CEDE	Committed Effective Dose Equivalent
CER	Certificate Event Report
CFR	Code of Federal Regulations
CM	Crisis Manager
CY	Calendar Year
DAC	Derived Air Concentration
DDE	Deep Dose Equivalent
DOE	Department of Energy
EOC	Emergency Operations Center
GDP	Gaseous Diffusion Plant
IP	Inspection Procedures
LCO	Limiting Condition for Operation

NCSA	Nuclear Criticality Safety Approval
NMSS	NRC's Office of Nuclear Materials Safety and Safeguards
NRC	Nuclear Regulatory Commission
PARS	Publicly Available Records System
PDR	Public Document Room
PORTS	Portsmouth Gaseous Diffusion Plant
RWP	Radiation Work Permit
SAR	Safety Analysis Report
SDE	Shallow Dose Extremity
TEDE	Total Effective Dose Equivalent
TSR	Technical Safety Requirement
URI	Unresolved Item
USEC	United States Enrichment Corporation
VIO	Violation