



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET SW SUITE 23T85
ATLANTA, GEORGIA 30303-8931



June 10, 2005

BWX Technologies, Inc.
ATTN: Mr. W. D. Nash, Vice President
and General Manager
Nuclear Products Division
P. O. Box 785
Lynchburg, VA 24505-0785

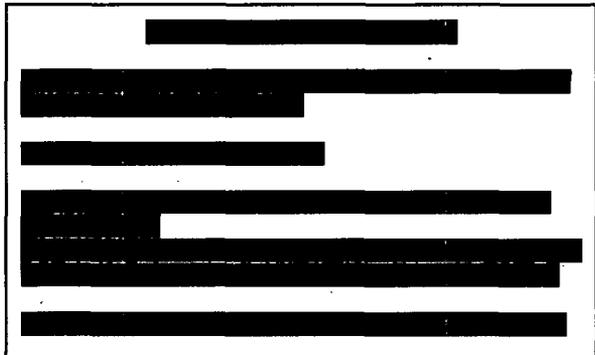
SUBJECT: NRC INSPECTION REPORT NO. 70-27/2005-004 AND NOTICE OF VIOLATION

Dear Mr. Nash:

This refers to the inspection conducted from April 3 through May 14, 2005, at the Nuclear Products Division facility. The purpose of the inspection was to determine whether activities authorized by the license were conducted safely and in accordance with NRC requirements. At the conclusion of the inspection, the findings were discussed with those members of your staff identified in the enclosed report.

Areas examined during the inspection included: Plant Operations, Management Organization and Controls, Environmental Protection, Material Control and Accounting, Physical Protection, and Emergency Preparedness. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observation of activities in progress.

Based on the results of this inspection, the NRC has determined a violation of NRC requirements occurred. The violation is cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding it are described in detail in the subject inspection report. An additional violation was identified and treated as a non-cited violation (NCV), consistent with Section VI.A.8 of the Enforcement Policy. If you contest these violations or their significance, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk,



[REDACTED]

BWXT

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Washington, DC 20555-0001, with copies to the Regional Administrator, Region II, and the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001, and the NRC Senior Resident Inspector at your facility.

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence is already adequately addressed on the docket in the enclosed inspection report. Therefore, you are not required to respond to this letter unless the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice.

[REDACTED]

Sincerely,

/RA: Douglas Collins for/

David A. Ayres, Chief
Fuel Facility Inspection Branch 1
Division of Fuel Facility Inspection

Docket No. 70-27
License No. SNM-42

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

cc w/encls:
Leah R. Morrell
Manager, Licensing and Safety Analysis
BWX Technologies
P. O. Box 785
Lynchburg, VA 24505-0785

[REDACTED]



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SISP REVIEW COMPLETE: Initials: DMC SISP REVIEW PENDING*: Initials: _____ *Non-Public until the review is complete

ADAMS: Yes ACCESSION NUMBER: _____

OFFICE	RII:DFFI	RII:DFFI	RII:DFFI	RII:DFFI		
SIGNATURE	CC via phone	CC via phone	da (for)	/RA/		
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DATE	06/08/2005	06/08/2005	5/ /2008	06/08/2005	5/ /2008	5/ /2008
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NOTICE OF VIOLATION

BWX Technologies, Inc.
Lynchburg, Virginia

Docket No. 70-27
License No. SNM-42

During an NRC inspection conducted on April 3 through May 14, 2005, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions," NUREG-1600, the violation is listed below:

Safety Condition S-1 of NRC license SNM-42 authorizes the use of nuclear materials in accordance with Chapter 1-8 of the License Application submitted on July 14, 1995, and supplements thereto. Section 4.1.2 of the License Application states that activities at the site involving special nuclear materials are conducted according to limits and controls specified on nuclear criticality safety postings.

Contrary to the above, on April 11, two pieces of wood were found on a special nuclear material storage [REDACTED] in conflict with the requirement of the Nuclear Criticality Safety posting which authorized moderating material only as necessary.

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

The NRC has concluded that information regarding the reasons for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence and the date when full compliance will be achieved is already adequately addressed on the docket in the enclosed inspection report. However, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation," and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region II, within 30 days of the date of the letter transmitting this Notice of Violation (Notice).

If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

[REDACTED]

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

Dated this 10th day of June 2005

Enclosure 1

[REDACTED]

[REDACTED]

U. S. NUCLEAR REGULATORY COMMISSION
REGION II

Docket No.: 70-27

License No.: SNM-42

Report No.: 70-27/2005-004

Licensee: BWX Technologies, Inc.

Facility: Nuclear Products Division

Location: Lynchburg, Virginia

Dates: April 3 through May 14, 2005

Inspector: G. Wertz, Senior Resident Inspector
A. Gooden, Senior Fuel Facility Inspector

Approved by: David A. Ayres, Chief
Fuel Facilities Inspection Branch 1
Division of Fuel Facility Inspection

Enclosure 2

[REDACTED]

[REDACTED]

NRC INSPECTION REPORT 70-27/2005-04

EXECUTIVE SUMMARY

BWX Technologies, Inc., Nuclear Products Division

This inspection included periodic observations conducted by the Senior Resident Inspector during normal and off-normal shifts in the area of Plant Operations, Management Organization and Controls, Environmental Protection, Material Control and Accounting, and Physical Protection. A specialized inspection and review of documentation were conducted by a regional inspector in the area of Emergency Preparedness (May 2 through 6).

Plant Operations

- The facility was operated safely. The Emergency Operations Center and associated equipment were maintained in a state of readiness. Maintenance work was performed in accordance with radiation work permit requirements. Housekeeping was adequate to ensure routes of egress were clear in case of an emergency (Paragraph 2.a).
 - A nuclear criticality safety posting violation was identified when moderating material was not controlled in accordance with the posting requirements and two wooden pieces were found on a storage [REDACTED] (Paragraph 2.b).
 - [REDACTED] operations were performed safely. Compensatory measures for processing raffinate solution with the inline monitor out of service were appropriate (Paragraph 2.c).
 - Operators performed fuel fabrication activities in accordance with procedure requirements (Paragraph 2.d).
 - Receipt, handling, and storage of [REDACTED] special nuclear material were planned and managed effectively. Nuclear criticality safety and radiation protection controls were developed and implemented in advance of material receipt. Unexpected conditions were effectively resolved (Paragraph 2.e).
 - A detailed and comprehensive safety analysis was completed prior to installation and operation of the [REDACTED] at the Lynchburg Technology Center. Safety controls necessary for personnel protection from hazardous process gases were properly identified and incorporated into the operating procedure and design of [REDACTED] alarm monitor. The safety systems were properly tested. Operators were trained on the hazards and were cognizant of their required emergency actions. Operators demonstrated their understanding when they responded to two minor operational anomalies safely and in accordance with procedure requirements. Corrective actions were implemented prior to continued operation (Paragraph 2.f).
- [REDACTED]

[REDACTED]

Management Organization and Controls

- A non-cited violation occurred when special nuclear material [REDACTED] were found in an area prohibited by the nuclear criticality safety posting. The planned corrective action was to re-designate the storage area to allow special nuclear material storage (Paragraph 3).

Environmental Protection

- Minor soil contamination was identified outside the protected area boundary when the licensee was surveying [REDACTED]. The NRC was properly notified and the licensee planned to remove the contaminated material and document the final survey results in the Decommissioning file (Paragraph 4).

Material Control and Accounting

- [REDACTED]
- [REDACTED]
- [REDACTED]

Physical Protection

- [REDACTED]

Emergency Preparedness

- Program changes had no impact on emergency preparedness. The independent audit was a compliance-based assessment. The licensee's previous actions to ensure that controlled documents were maintained current and up to date were ineffective (Paragraph 7.a).
- The revised procedures in the Emergency Preparedness Manual continued to implement the Emergency Plan (Paragraph 7.b).
- Based on interviews and training documentation, emergency response training was adequate and all personnel selected for review were trained in accordance with procedures (Paragraph 7.c).

[REDACTED]

- Based on interviews and records reviewed the interface with offsite support groups was properly maintained (Paragraph 7.d).
- The licensee conducted exercises in accordance with the requirements of the Plan. The performance of [REDACTED] drills using realistic scenarios provided sufficient challenges to maintain the proficiency of the response organization (Paragraph 7.e).
- Based on the equipment operability checks and documentation for maintenance and calibration, the inspector determined that the reliability of selected equipment was good and the equipment was maintained in a state of operational readiness (Paragraph 7.f).

Attachment:

Partial Listing of Persons Contacted
List of Items Opened, Closed and Discussed
Inspection Procedures Used
List of Acronyms

[REDACTED]

REPORT DETAILS

1. Summary of Plant Status

a. Routine Operations

Routine fuel manufacturing operations and maintenance activities were conducted in the [REDACTED] process areas, [REDACTED]. Uranium recovery, downblending and other routine operations and maintenance activities were conducted in the [REDACTED] facility.

2. Plant Operations (Temporary Instruction (TI) 2600/006)

a. Conduct of Operations - Routine Observations

(1) Inspection Scope and Observations

The inspector observed various operational activities to determine if the facility was operated safely and in accordance with license and regulatory requirements. The inspector verified that the Emergency Operations Center (EOC) was maintained in a state of readiness. The inspector reviewed various operational procedures and records, radiation work permits (RWPs), and nuclear criticality safety (NCS) postings and observed that specific operations were performed safely and in accordance with approved plant procedures and postings. Outside areas were toured and no conditions that could create an undesirable situation or hazard in the event of adverse weather (high winds, cold weather, or flooding), or blocked evacuation pathways were observed. The inspector observed that equipment and devices used to contain radioactive contamination and airborne radioactivity in fuel processing, UR, and other material access areas (MAAs) were in proper working condition, and that personal protective clothing and dosimetry were issued and properly worn. The inspector noted that emergency egress routes were adequately clear of debris. Housekeeping was sufficient that no significant hazards were identified. A routine fire safety tour verified that fire hazards were minimized especially in locations containing hazardous chemicals or [REDACTED] special nuclear material (SNM).

(2) Conclusions

The facility was operated safely. The EOC and associated equipment were maintained in a state of readiness. Maintenance work was performed in accordance with radiation work permit requirements. Housekeeping was adequate to ensure routes of egress were clear in case of an emergency.

b. Implementation of Process Safety Controls

(1) Inspection Scope and Observations

The inspector reviewed nuclear criticality control devices and measures in effect during the inspection period in order to assess the effectiveness of the licensee's program for prevention of an inadvertent criticality. The inspector toured fuel processing, storage,

[REDACTED]

[REDACTED]

and recovery areas and observed that personnel generally complied with approved, written NCS limits and controls, especially in areas where the licensee was using administrative controls rather than passive or active engineering controls. The inspector verified NCS limits were posted and available to the operators. During tours of [REDACTED] [REDACTED] areas of the facility, the inspector observed proper spacing practices and controls, use of storage locations, and identification of SNM.

On April 11, the inspector observed two wooden pieces on a storage [REDACTED] [REDACTED] NCS engineers contacted agreed that the two wooden pieces were not appropriate for storage on the SNM storage [REDACTED] Radiation Protection (RP) personnel were notified and the unauthorized material was promptly removed. The event was captured in the corrective action (CA) program as CA 2005-0317 and the issue was reviewed with the responsible staff in order to emphasize NCS posting compliance. SNM-42, License Application, Section 4.1.2 requires activities involving SNM to be conducted according to the limits and controls specified on the NCS postings. NCS Posting 15-23-001 specified moderating materials were allowed "only as necessary." Failure to control moderating material in accordance with the NCS posting represented a violation (VIO) of NRC requirements and was cited as VIO 70-27/2005-04-01, Failure to Control Moderating Material in accordance with NCS Posting Requirements.

(2) Conclusions

A NCS posting violation was identified when moderating material was not controlled in accordance with the NCS posting and two wooden pieces were found on a storage [REDACTED] [REDACTED]

c. [REDACTED] System Operations

(1) Inspection Scope and Observations

The inspector observed operation of the [REDACTED] noting that [REDACTED] [REDACTED] was in an alarm condition and out of service. The inspector discussed the issue with the operator who indicated that the system was undergoing maintenance. The operator explained that when [REDACTED] was out of service, the waste solution was double sampled to ensure the uranium (U) concentration was below release limits [REDACTED] and disposed to a raschig ring vessel. The operator demonstrated adequate knowledge of the appropriate Operating Procedures (OPs): OP-1014952, "[REDACTED]," and OP-1016063, "[REDACTED] Inline Waste Monitoring System." The responsible engineer for [REDACTED] indicated that the system required a software modification which was pending. No adverse safety consequences were observed as a result of [REDACTED] processing without the use of the inline monitor.

[REDACTED]

(2) Conclusions

[REDACTED] processing operations were performed safely. Compensatory measures for processing raffinate solution with the inline monitor out of service were appropriate.

d. Operations

(1) Inspection Scope and Observations

The inspector observed operators fabricate fuel using equipment [REDACTED]. The operators performed the activities in accordance with OP-1015925 NCS and [REDACTED] requirements were maintained. No discrepancies were identified.

(2) Conclusions

Operators performed fabrication activities in accordance with procedure requirements.

e. Receipt and Storage of [REDACTED]

(1) Inspection Scope and Observations

The inspector reviewed the licensee's plan for receipt of SNM of [REDACTED], and observed the receipt, inspection, handling, repackaging and storage of SNM of [REDACTED]. Since some of the SNM consisted of [REDACTED], the inspector focused the inspection effort on review of the NCS and RP measures.

The licensee staff obtained detailed information from the shipper on the SNM of [REDACTED] in order to effectively evaluate the potential hazards and handling requirements. The resulting NCS and RP requirements were described in Safety Evaluation Report (SER) 05-013 and RWP 05-049. NCS controls listed in the SER were consistent with the storage and handling requirements for similar SNM and were implemented in accordance with the NCS postings. [REDACTED] was done in accordance with SER design specifications. The RWP required breached on [REDACTED] SNM storage within the controlled area. A special RWP consideration included modification of the glovebox control process [REDACTED].

The inspector observed receipt, inspection, handling and repackaging operations. Receipt activities were performed in accordance with procedure E41-85, "Requirements for Transport of SNM of [REDACTED]." Operators removed the [REDACTED] components from their shipping containers and re-packaged them inside a glovebox. An unexpected condition concerning the thickness [REDACTED] was appropriately communicated to the NCS engineers and resolved. Radiation survey results indicated expected contamination levels and were appropriate for storage in the controlled area. The [REDACTED] were adequately re-sealed for

[REDACTED]

[REDACTED]

storage and properly placed into the storage [REDACTED] by operators. Overall, the inspector determined that the [REDACTED] receipt and handling activities were effectively planned since minimal unexpected conditions occurred. Management oversight proved effective as evidenced by the resolution of the [REDACTED] thickness condition.

(2) Conclusions

Receipt, handling, and storage of [REDACTED] SNM were planned and managed safely. NCS and RP controls were developed and implemented in advance of SNM receipt. Unexpected conditions were safely resolved.

f. [REDACTED]

(1) Inspection Scope and Observations

The inspector reviewed the safety assessment and requirements of the [REDACTED] installed in the [REDACTED] at the Lynchburg Technology Center (LTC). The [REDACTED] was a demonstration unit used to evaluate the [REDACTED]. The primary hazards associated with the [REDACTED] were the use of [REDACTED].

SER 04-059, "[REDACTED] Demonstration," evaluated the safety hazards and detailed the pre-operational safety requirements. The [REDACTED] was chosen because of existing [REDACTED] detection and ventilation systems. [REDACTED] monitors were installed in the [REDACTED] and tested satisfactorily. [REDACTED] sensor activation levels were reviewed by the inspector and were consistent with industrial safety guidelines. All process piping was pressure tested. Automatic isolation valves were installed [REDACTED].

The inspector observed pre-operation [REDACTED] monitor testing which was performed as required by OP B-SML-7, "General OP for the [REDACTED]." Emergency shutdown instructions were clearly defined in OP B-SML-9, "Procedure for Operating the [REDACTED]," and the operators were properly trained. The inspector compared the installation drawing to the system and no discrepancies were identified. On March 24, the inspector observed BWXT safety and management complete the pre-operational readiness review required by the SER. No discrepancies were identified.

[REDACTED] operations began on April 5. Soon thereafter, a minor leak occurred and the area [REDACTED] monitor alarmed as expected. Operators promptly evacuated the [REDACTED] and the emergency team responded and promptly tested for hazardous gases. On April 13, a gas cloud was observed in an effluent hood and the operators evacuated the [REDACTED] as a precaution. Neither event presented a safety risk to the operators and causes (CA 2005-265 and 2005-304) were corrected prior to continued operation. The remaining [REDACTED] were processed without incident.

[REDACTED]

(2) Conclusions

A detailed and comprehensive safety analysis was completed prior to installation and operation of the [REDACTED] at the LTC. Safety controls necessary for personnel protection from hazardous process [REDACTED] were properly identified and incorporated into the OP and design of the [REDACTED] alarm monitor. The safety systems were properly tested. Operators were trained on the hazards and were cognizant of their required emergency actions. Operators demonstrated their understanding when they responded to two minor operational anomalies safely and in accordance with procedure requirements. CAs were implemented prior to continued operation.

3. Management Organization and Controls (TI 2600/006)

a. Inspection Scope and Observations

The inspector reviewed CA 2005-238 which documented an event where SNM [REDACTED] were found [REDACTED] designated by NCS posting, PLANT-002. The [REDACTED] were apparently mistaken for [REDACTED] prior to placement in the [REDACTED]. The safety significance of the misplaced SNM was low since the storage area had originally been designated and used for SNM storage. The planned corrective action was to re-designate the area for the storage of SNM [REDACTED]. As such, this non-repetitive, licensee-identified and corrected failure was treated as a non-cited violation (NCV), consistent with Section VI.A.8 of the NRC Enforcement Policy (NCV 70-27/2005-04-02, SNM [REDACTED] Found in a Non-SNM Storage Area.

b. Conclusions

An NCV occurred when SNM [REDACTED] were found in an area prohibited by the NCS posting. The planned corrective action was to re-designate the storage area to allow SNM storage.

4. Environmental Protection (TI 2600/006)

a. Inspection Scope and Observations

[REDACTED], the licensee performed a radiological survey of the soil which identified several slightly contaminated locations. The affected area was just outside the [REDACTED] boundary. The survey results indicated relatively low contamination levels of U with the highest reading being 312 picocuries per gram. The inspector toured the site with the cognizant health physicist and concluded that the contamination appeared confined to a concentrated area and did not present any radiological health risks.

The licensee notified NRC personnel via a teleconference on April 21 and, in accordance with 10 CFR 70.38, via a letter dated April 29, 2005. The licensee plans to remove the contaminated soil and document the final survey results in their Decommissioning File in accordance with 10 CFR 70.25(g).

b. Conclusions

Minor soil contamination was identified outside the [REDACTED] boundary [REDACTED]. The NRC was properly notified and BWXT planned to remove the contaminated material and document the final survey results in the Decommissioning file.

5. Material Control and Accounting (TI 2600/006)

- [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

■ [REDACTED]

[REDACTED]

6. [REDACTED]

■ [REDACTED]

[REDACTED]

[REDACTED]

7. Emergency Preparedness (Inspection Procedure (IP) - 88050 (F3))

a. Review of Program Changes (F3.01)

(1) Inspection Scope and Observations

Changes to the Emergency Plan (EP), 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 4.5 of the Plan was also evaluated. Since the last inspection (June 2004) no significant organization or facility changes had occurred.

Plan changes were submitted by letter in accordance with 10 CFR 70.32(i). The most recent changes (dated September 13, 2004) were incorporated as Revision 16 to the Plan and submitted by letter dated September 22, 2004. Plan Revision 16 was approved by NRC via a letter dated November 4, 2004.

An independent audit was performed during January 2005. The audit was compliance oriented and a detailed assessment of the emergency preparedness program. During the tour of onsite and offsite facilities maintained by the licensee, the inspector reviewed the status of emergency preparedness controlled documents to assess the effectiveness of the corrective actions discussed during the last inspection (Report No. 70-27/2004-05) in preventing any further examples of superceded controlled documents. A negative observation resulted in that the inspector found two examples of outdated information (Emergency Team roster and Industrial Engineering Department listing) contained in the Emergency Operations Center Staff Roster Book; and the licensee's independent audit conducted in January 2005 identified an outdated site map stored inside the EOC. In response to the current NRC observations and the independent audit, the inspector discussed with the licensee the additional corrective actions planned using electronic verification that all documents were current via the bar-code inventory system.

(2) Conclusions

Program changes had no impact on emergency preparedness. The independent audit was a compliance-based assessment. The licensee's previous actions to ensure that controlled documents were maintained current and up to date was ineffective.

b. Implementing Procedures (F3.02)

(1) Inspection Scope and Observations

Changes to the Emergency Preparedness Manual (EPM) were reviewed for adequacy and to ensure that the revised procedures continue to implement the EP. Randomly selected procedure changes were considered procedure updates or enhancements and continued to implement the EP requirements. All changes were developed, reviewed, and approved in accordance with the change request procedures and requirements in Section 4 of the EP.

(2) Conclusions

The revised procedures in the EPM were adequate to implement the EP.

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

(1) Inspection Scope and Observations

Emergency response training was reviewed to determine if the licensee had provided adequate training to all personnel designated as the primary and/or alternate Emergency Director (ED), to other key personnel assigned to the emergency management organization (EMO), and members of the emergency team (ET).

The inspector reviewed the training outline and class attendance roster sheets for personnel assigned to the EOC staff and members of the ET. Personnel training was current and in accordance with procedural requirements governing emergency response training. The inspector conducted interviews with four members of the ET, three [REDACTED] workers [REDACTED], and a member of the EOC staff. The ET members were knowledgeable regarding their roles and demonstrated that the radiation safety training provided adequate instructions for performing radiation surveys in the absence of radiation protection personnel. Regarding the [REDACTED] workers, the inspector questioned the workers regarding what actions to take and where to report in the event of a criticality accident. Interviewees were familiar with the criticality alarms, the evacuation route, and the accountability reporting location. The EOC staff member was questioned regarding role and decisions associated with emergency exposures. No problems were identified during any of the interviews and walkthroughs. Emergency response training provided adequate information regarding roles, responsibilities, and recent changes to the Plan and EPM.

(2) Conclusions

Based on interviews and training documentation, emergency response training was adequate and all personnel selected for review was trained in accordance with procedures.

d. Offsite Support (F3.04)

(1) Inspection Scope and Observations

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

All agreements with offsite support groups were maintained current in accordance with Section 7.7 of the Plan. Regarding offsite support training, annual training was provided in accordance with the Plan and procedures. On November 14, 2004, a site familiarization tour was provided to offsite fire support and rescue personnel. The radiation safety training provided to offsite response personnel was adequate and provided the appropriate level of understanding regarding the potential hazards that may be encountered during an onsite response. Offsite authorities participated in the last biennial exercise conducted [REDACTED]

(2) Conclusions

Based on interviews and records reviewed the interface with offsite support groups was properly maintained.

e. Drills and Exercises (F3.05)

(1) Inspection Scope and Observations

Section 4.3 of the Emergency Plan required that biennially an emergency exercise be conducted. This area was reviewed for adequacy in testing both onsite and offsite emergency response capability. The effectiveness of the licensee's critique to self identify areas of improvement was also reviewed.

The last biennial exercise was observed by NRC [REDACTED], and included participation by State and local support agencies. In addition to the biennial exercise, the licensee conducted [REDACTED] drills involving activation of the emergency organization. The licensee's drill frequency (quarterly) and the accident scenarios that were postulated provided sufficient challenges to maintain the proficiency of response personnel.

Critique items resulting from the drills and/or exercises were reviewed by the Emergency Preparedness Committee (EPC) and if needed tracked for corrective actions until completion.

(2) Conclusions

The licensee conducted exercises in accordance with the requirements of the EP. The performance of quarterly drills using realistic scenarios provided sufficient challenges to maintain the proficiency of the response organization.

f. Emergency Equipment and Facilities (F3.06)(1) Inspection Scope and Observations

Emergency response equipment, instrumentation, and supplies used to evaluate and assess radiological conditions were examined to determine if maintained in a state of operational readiness.

The inspector observed an inventory and operability check of equipment at select locations and noted that survey instruments were operational, and the response to a radiation check source was within the expected range based on the calculated source activity. The remaining equipment (respiratory protection, air samplers, etc.) and supplies were checked for shelf-life, reliability and quantity, and found to be maintained in a state of readiness. Documentation in support of the calibration and maintenance of the wind measuring systems for LTC and NPD was reviewed covering the period December 2003 to April 2005. No problems were noted. Based on the wind measuring system maintenance documentation and an interview with the instrument calibration personnel, the system appeared to be reliable and rarely required any adjustments.

(2) Conclusions

Based on the equipment operability checks and documentation for maintenance and calibration, the inspector determined that the reliability of selected equipment was good and the equipment was maintained in a state of operational readiness.

8. Exit Meeting

The inspection scope and results were summarized on May 5 and 19, 2005, with those persons indicated in the attachment. Proprietary documents and processes were reviewed during this inspection and this report has been appropriately marked as such. No dissenting comments were received from the licensee.

[REDACTED]

ATTACHMENT

1. **LIST OF PERSONS CONTACTED**

Licensee

D. Bradley, Security Operations
J. Calvert, Manager, Industrial Health and Safety
R. Coats, Manager, Environmental Protection
R. Cochrane, Manager, Operations
J. Compher, Manager, Industrial Engineering
J. Creasey, Manager, Uranium Processing
L. Duncan, Manager, Nuclear Criticality Safety
R. Hogg, Manager, Downblending Operations
F. Metz, Manager, RTRT Operations
L. Morrell, Manager, Licensing & Safety Analysis
J. Myrick-Jenkins, Emergency Preparedness Officer
W. Nash, Vice President and General Manager
T. Nicks, Manager, Security
J. Noel, Manager, NRC Security
S. Peters, Manager, Recovery Operations
C. Reed, Manager, Uranium Processing
S. Schilthelm, Manager, Safety and Licensing
D. Spangler, Manager, Radiation Protection
M. Suwala, Manager, Nuclear Materials Control
D. Ward, Manager, Environment, Safety, Health and Safeguards

Other licensee employees contacted included engineers, technicians, production staff, security, and office personnel.

2. **LIST OF ITEMS OPENED AND CLOSED**

<u>Item Number</u>	<u>Status</u>	<u>Description</u>
70-27/2005-04-01	Opened/Closed	VIO - Failure to Control Moderating Material in accordance with NCS Posting Requirements (Paragraph 2.b)
70-27/2005-04-02	Opened/Closed	NCV - SNM [REDACTED] Found in a Non-SNM Storage Area (Paragraph 3)

3. **INSPECTION PROCEDURES USED**

TI 2600/006 Resident Inspection Program for Category I Fuel Cycle Facilities
IP 88050 Emergency Preparedness

[REDACTED]



4. **LIST OF ACRONYMS USED**

CA	Corrective Action
DOE	Department of Energy
ED	Emergency Director
EMO	Emergency Management Organization
EN	Event Notification
EOC	Emergency Operations Center
EP	Emergency Plan
EPC	Emergency Preparedness Committee
EPM	Emergency Preparedness Manual
EPO	Emergency Preparedness Officer
ET	Emergency Team
FNMCP	Fundamental Nuclear Material Control Plan
IP	Inspection Procedure
LTC	Lynchburg Technology Center
MAA	Material Access Area
MC&A	Material Control and Accounting
NCS	Nuclear Criticality Safety
NCV	Non-cited Violation
OP	Operating Procedure
RP	Radiation Protection
RWP	Radiation Work Permit
SER	Safety Evaluation Report
SNM	Special Nuclear Material
TI	Temporary Instruction
VIO	Violation
U	Uranium
UR	Uranium Recovery
U-235	Uranium 235

