



Nuclear Facilities
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July 5, 2006

ATTN: E. William Brach
Director, Spent Fuel Project Office
MS O13-D13
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

**University of Florida Training Reactor, Facility License R-56, Docket 50-83
Shipping Quality Assurance Program for Type B Packages Update**

The University of Florida Training Reactor (UFTR) previously requested to be registered as a user of U.S. Nuclear Regulatory Commission Package Identification Number USA/5957/B()F, Model No. BMI-1 Cask, in accordance with 10 CFR 71.12 (3). The following is pertinent facility information:

- Licensee Name: University of Florida Training Reactor
- Docket Number: 50-83
- License Number: R-56
- USNRC Package ID No.: USA/5957/B()F

A proposed Shipping Quality Assurance Program for Type B Packages was submitted for your review and approval with a letter dated June 19, 2006. Enclosed with this letter are six pages with minor changes to clarify and correct the previous QAP submittal. These pages should replace those in the earlier submittal.

If there are any questions or concerns with this request, please contact me.

Sincerely,

William G. Vernetson
Director of Nuclear Facilities

WGV/dms
Enc.

cc: RSRS
A. Adams
M. Mendonca (letter only)

Sworn and subscribed this 5 day of July 2006

Notary Public

Terri L. Sparks
Commission # DD346498
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procedures have been performed and verified. The Shipping/Fuel Handling QA Supervisor and Shipping QA Inspector positions may be collateral duties of designated staff members.

All Shipping/Fuel Handling QA Supervisors, Inspectors and Performers have the authority to stop unsatisfactory work in order to comply with federal regulations and UFTR Shipping QA procedures. If a difference in opinion or a safety concern occurs between a Shipping QA Inspector and other Shipping QA personnel concerning compliance with the Shipping QA Program, the work evolution involved shall be stopped and put in a safe condition. The Shipping QA Inspector shall show the individual(s) the basis for the requirement. If the difference of opinion still exists, the appropriate Shipping/Fuel Handling QA Supervisor shall resolve the difference after consultation with the Director of Nuclear Facilities and/or Radiation Control Officer.

The UFTR is a small 100 kW reactor facility, the fuel is relatively low activity and little hazardous/radioactive waste is expected to be generated during shipping-related activities.

The UFTR Shipping QA Program has a single responsible group designated for Fuel Handling/Shipping. This group has a Shipping/Fuel Handling QA Supervisor to ensure that work in the assigned area meets the requirements of the Shipping QA Program.

The Shipping/Fuel Handling QA Supervisor is responsible for packaging and shipments of reactor spent fuel and/or fissile material in Type B packages.

The primary responsibility of the Director of Nuclear Facilities is the safe shipment of reactor spent fuel. The Director of Nuclear Facilities is designated as the Shipping/Fuel Handling QA Supervisor. The UF Radiation Control Officer is designated as an alternate Shipping/Fuel Handling QA Supervisor for spent fuel and/or fissile material shipments.

7. Identification and Control of Materials, Parts and Components

The Shipping/Fuel Handling QA Supervisor shall ensure that materials, parts and components used for repair of Type B packaging are adequately identified and controlled to prevent use of incorrect or defective items. When replacement of limited-life items is specified, the Shipping/Fuel Handling QA Supervisor shall ensure that no materials, parts or components are used whose shelf life or operation times have expired.

8. Control of Special Processes

The Shipping/Fuel Handling QA Supervisor shall ensure that all major repairs of Type B packaging requiring special processes such as welding or non-destructive testing be performed in accordance with the following criteria: all procedures, equipment and personnel are qualified in accordance with applicable codes, standards, and specifications; the operations are performed by qualified personnel and accomplished in accordance with written process sheets with recorded evidence of verification; and qualification records of procedures, equipment and personnel are established, filed and kept current.

9. Inspection Control

The Shipping/Fuel Handling QA Supervisor or Shipping QA Inspector will perform a visual inspection of all Type B packaging upon receipt at the UFTR to ensure compliance with procurement documents. These visual inspections shall, as applicable, include inspection of surface conditions; weld and structural integrity; the condition of flange faces or sealing areas, gaskets, seals, gauges, rupture disks, valves, and pressure relief devices; the condition of tie-down members; labeling and marking; and leak-tightness; and leak-tightness of the packaging. Any Type B packaging that does not comply with the procurement specifications or fails the visual QA inspection will be in non-compliance and immediately reported to the Shipping/Fuel Handling QA Supervisor, the Director of Nuclear Facilities, and the Radiation Control Officer.

Procedures shall ensure adequate maintenance of Type B packaging. They shall identify the items to be maintained, the criteria for acceptability or replacement, and the frequencies of inspection assigned to each item.

The appropriate Shipping/Fuel Handling QA Supervisor shall establish checklists to ensure that inspections are performed to verify compliance with the following items prior to each use:

1. Type B packages are properly assembled.
2. Valves are set to specifications.
3. All shipping papers are properly completed.
4. Type B packages are conspicuously and durably marked as required by DOT regulations.
5. Authorized individuals shall sign the shipping paperwork prior to release for shipment.

Procedural steps which require an independent QA inspection will be completed by a Shipping QA Inspector or a Shipping/Fuel Handling QA Supervisor who is not performing the activity being inspected.

10. Control of Measurement and Test Equipment

The Shipping/Fuel Handling QA Supervisor shall ensure that measurement and test equipment (gauges, fixtures, reference standards, and devices used to measure product characteristics of Type B packages) will be calibrated, adjusted and maintained at established intervals.

Measurement and test equipment shall, as applicable, be labeled or tagged to indicate the planned date of its next calibration and the calibration records shall, as applicable, be identified and traceable. Calibration shall be traceable to nationally recognized standards; or, where nationally recognized standards do not exist, provisions shall be established to document the basis for calibration.

Measurement and test equipment that fail calibration will be removed from service and tagged as out of calibration equipment until repaired or replaced.

11. Handling, Storage and Shipping

The handling, storage and shipping of Type B packaging will be controlled to assure safety, minimize degradation, damage and/or loss.

12. Inspection, Test and Operating Status

A tag, label, marking, log entry or other documentation will indicate the status of Type B packaging. The records will indicate when periodic surveillance tests have been performed. No deviations from required inspection, test or other critical operations are authorized without the approval of the Director of Nuclear Facilities and the Radiation Control Officer.

13. Non-Conforming Materials, Parts and Components

The Shipping/Fuel Handling QA Supervisor shall ensure that non-conforming items for completed packaging, replacement parts or components shall include the following principal elements:

- (1) proper identification,
- (2) segregation of discrepant or non-conforming items,
- (3) disposition of the items on non-conformance, and
- (4) evaluation of the items of non-conformance.

All items or components found to be in non-conformance by procedure, inspection, testing or operations is to be immediately reported to the Shipping/Fuel Handling QA Supervisor.

Non-conforming items will be quarantined or placed in a controlled hold area until disposition is completed. After designated repair, the Shipping/Fuel Handling QA Supervisor shall ensure that the acceptance of non-conforming items is verified by re-inspection or re-test against the original specifications. Final disposition of non-conformances shall be identified and documented.

Non-conformance reports shall, as applicable, be analyzed by QA personnel to determine quality trends for appropriate management review and assessment.

14. Corrective Action

For activities important to safety concerning use, maintenance and repair of Type B packaging, the Shipping/Fuel Handling QA Supervisor shall ensure that conditions adverse to quality (e.g., those resulting from failures, malfunctions, deficiencies, deviations and defective material and equipment) are promptly identified and reported to appropriate levels of management. In the case of a significant condition adverse to quality, a root cause of the condition will be determined and corrective actions taken to preclude recurrence.

15. Quality Assurance Records

The Shipping/Fuel Handling QA Supervisor shall ensure the maintenance of QA records that are to be retained for the lifetime of packaging. These records include appropriate design and production-related records that are generated throughout manufacturing and furnished with packaging; records demonstrating evidence of operational capability; records verifying repair, rework and replacement; and audit plans, audit reports, corrective actions and records that are used as a baseline for maintenance. Records showing evidence of delivery of packages to a carrier and proof that all NRC and DOT requirements have been satisfied shall, as applicable, also be retained with their retention times identified.

The Director of Nuclear Facilities, with guidance from the Radiation Control Officer, is responsible for the prompt replacement of a QA record that is lost or damaged and for assessing and controlling records in the UFTR's possession.

QA records shall be maintained in storage locations that minimize the risk of damage.

16. Audits

The Director of Nuclear Facilities shall ensure that audits are performed in accordance with pre-established written procedures or checklists and are conducted by qualified personnel not having direct responsibility in the areas being audited. The audit shall verify compliance with all aspects of the Shipping QA Program and determine the effectiveness of the program.

The procedures or checklists shall list activities to be audited and the frequency at which each activity is to be audited. The frequency of audits shall, as applicable, be based on the importance of the activity to safety; however, each activity shall, as applicable, be audited at least once each year.

It is the responsibility of the Director of Nuclear Facilities to ensure that corrective actions resulting from audits are completed and documented on a timely basis. Deficient areas shall be re-audited on a timely basis to verify implementation of corrective action.