

U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

Region I

Report No. 70-820/81-01
Docket No. 70-820
License No. SNM-777 Priority 1 Category UR

Licensee: United Nuclear Corporation
UNC Recovery Systems
Wood River Junction, RI 02894

Facility Name: Fuel Recovery Operation

Inspection at: Wood River Junction, Rhode Island

Inspection conducted: January 15-16, 1981

Inspectors: W. W. Kinney
W. Kinney, Project Inspector

2/9/81
date signed

Accompanying Person H. W. Crocker, Chief, Fuel Facility
Project Section, FF&MS Branch

date signed

Approved by: H. W. Crocker
H. W. Crocker, Chief, Project Section,
FF&MS Branch

date signed
2/9/81
date signed

Inspection Summary:

Inspection on January 15-16, 1981 (Report Number 70-820/81-01)

Areas Inspected: Special announced inspection by a region-based inspector of the packaging of non-lagoon waste in eighty-eight 55 gallon steel drums for shipment and burial at the Barnwell, South Carolina burial site. The inspection involved 5 inspector-hours onsite by one NRC region-based inspector.

Results: No items of noncompliance or deviations were identified.

DETAILS

1. Persons Contacted

*R. J. Gregg, Plant Manager
P. Dessaules, Operations Manager
J. Murphy, Operations Supervisor

The inspectors also contacted operators during the course of the inspection.

* denotes the person present at exit interview.

2. Scope of Inspection

This inspection only concerned the determination of the acceptability of 88 drums of low level radioactive non-lagoon type waste for transportation and burial at the Barnwell, South Carolina burial site during January 1981.

On October 1, 1980, UNC Recovery Systems made commitments to Region I concerning the upgrading of the waste packaging operations, especially the lagoon waste packaging operations, so that in the future packages and their contents would meet DOT-NRC regulations and burial ground license requirements. Even though the main concern was the packaging of lagoon waste, these commitments also concerned the packaging of non-lagoon waste. Therefore, as in December 1980, Region I inspected the packages to be shipped to determine that the material and the packaging of the material was acceptable for shipment and burial.

3. Inspection of Quality Assurance Documents

The licensee supplied to the inspector a listing of the identification numbers and the contents of the 88 drums they desired to ship and bury in January 1981. The licensee also supplied to the inspector copies of the "Container Specification and Inspection Report" forms which were filled out for each drum. These forms showed the initial inspections done on the containers when they were originally loaded. As committed in a January 8 letter to the NRC, the licensee reopened and reinspected all 88 of the drums to be shipped. The forms for this reinspection were also inspected.

When the waste to be packaged contained more than 15 grams of uranium 235, the licensee used a DOT Specification 17H 55 gallon steel drum meeting the requirements of 49 CFR 173.396(b)(7). The licensee used Container Specification and Inspection Report No. Q-001-2, Revision 3, dated 12/21/79, for recording the inspection, closure and labeling of these 55 gallon drums.

When the waste to be packaged contained not more than 15 grams of uranium 235, the licensee used the same 55 gallon steel drums as strong, tight containers holding low specific activity material and meeting the requirements of 49 CFR 173.392(c)(1). The licensee used Container Specification and Inspection Report No. Q-001-4, Revision 1, for recording the inspection, closure and labeling of these drums.

The inspector reviewed all these documents and verified that the licensee had quality assurance documentation documenting that: the containers were satisfactory for use; the containers were closed properly; and the containers were properly labelled.

4. Inspection of Containers

The inspector chose 10 drums to be opened for inspection. Six of the drums contained more than 15 grams of U-235; therefore, they were supposed to meet the requirements of 10 CFR 49 173.396(b)(7). Four of the drums contained 15 or less grams of U-235; therefore, they were supposed to meet the requirements for packages containing radioactive LSA material.

The inspector verified that there was no liquid in the drums. This was done either by inspecting the packages in the drums or by having the drums layed on their sides and observing the packages for liquid.

All of the contents of the drums were as identified in the list supplied to the NRC. All of the drum lids had gaskets. One gasket was damaged during the opening of the drums, and the licensee replaced it. One of the RADIO-ACTIVE-YELLOW II labels had fallen off the side of a drum. The licensee taped all of the labels in place to assure that other labels would not fall off.

5. Acceptability of Packages

On the basis of the inspection findings that: 1) the licensee had performed adequate quality assurance activities in the packaging of waste in 88 55-gallon drums; and 2) the sample of 10 drums were acceptable for shipping and burial, Region I found the 88 drums to be acceptable to the NRC for shipment and burial during January 1981.

6. Exit Interview

The inspectors met with the licensee representative (denoted in paragraph 1) at the conclusion of the inspection on January 16, 1981, and presented the scope and findings of the inspection.