

U. S. NUCLEAR REGULATORY COMMISSION  
REGION I

Report No. 70-371/83-01

Docket No. 70-371 License No. SNM-368

Licensee: United Nuclear Corporation  
67 Sandy Desert Road  
Uncasville, Ct.

Facility Name: UNC Naval Products

Inspection At: Uncasville, Ct.

Inspection conducted: January 31 - February 4, 1983

Date of Last Material Control and Accounting Inspection: December 13-17, 1982

Type of Inspection: Announced Material Control and Accounting

Inspectors: Harvey Zibulsky 2-22-83  
H. Zibulsky, Chemist date

E. Woltner 2-22-83  
E. Woltner, Auditor date

A. Della Ratta 2-22-83  
A. Della Ratta, Auditor date

Approved by: A. T. Gody 2/25/83  
A. T. Gody, Chief, Safeguards and Fuel date  
Facilities Section

Inspection Summary: Inspection on January 31-February 4, 1983  
(Report No. 70-371/83-01)

Areas Inspected: Inventory Verification and Shipper-Receiver Verification. The inspection involved 96 inspector-hours onsite by three NRC inspectors and was begun during the regular hours.

Results: The licensee was in compliance with NRC requirements in the areas examined during the inspection.

## DETAILS

### 1. Key Persons Contacted

- \*T. Collopy, Manager, Nuclear Safeguards
- \*A. Wolvendyk, Supervisor, Nuclear Material Control
- M. Kelley, Statistician

The inspectors also interviewed other licensee personnel involved in the control, security, and accounting of special nuclear material.

\*Present at exit interview.

### 2. 30703 - Exit Interview

The inspectors met with the licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on February 4, 1983, and summarized the scope and findings of the inspection.

### 3. 92713 - Independent Inspection Effort

No violations were identified.

The inspectors reviewed new entry procedures to the plant and to the material access area.

### 4. 85208 Shipper - Receiver Verification

No violations were identified.

The inspectors reviewed the status of six receipts having significant Shipper-Receiver (S/R) differences (Inspector Followup Item 82-15-02). The lot numbers of receipts 2070, 2071, 2073 and 2134 remain open pending completion of re-assay results. The remaining receipt lots were acceptable upon re-assayed results.

### 5. 85213 - Inventory Verification

No violations were identified.

The inspection results were obtained by performing an independent verification of the U-235 content of one of three populations of containers of feed material located within the storage area of MBA-1. Type III material was measured. The number of samples measured was not sufficient to provide 95% confidence that the absence of formula kilograms could be detected. To obtain 95% confidence level, 1300 containers were required to be measured; only 275 containers were measured.

For the 275 samples measured an accept/reject criteria for the determination of a defect were chosen. Each of the sample items selected was initially weighed and gamma counted for 10 seconds using a B-SAM III. The results of the test indicated that of the samples measured, no gross defects were observed. A gross defect is defined as a difference greater than 20% between the stated and the measured contents of an item.