



3

UNITED STATES  
**ATOMIC ENERGY COMMISSION**  
 DIRECTORATE OF REGULATORY OPERATIONS  
 REGION 1  
 631 PARK AVENUE  
 KING OF PRUSSIA, PENNSYLVANIA 19406

JUN 4 1975

✓ United Nuclear Corporation  
 Attention: Mr. G. D. Geise  
                   General Manager  
 Naval Products Division  
 67 Sandy Desert Road  
 Uncasville, Connecticut 06382

License No. SNM-368  
 Inspection No. 70-371/75-06

Gentlemen:

This refers to the inspection conducted by Mr. Allen of this office on May 16, 1975 at New Haven, Connecticut of activities authorized by NRC License No. SNM-368 and to the discussions of our findings held by Mr. Allen with Mr. Luster of your staff at the conclusion of the inspection.

Areas examined during this inspection are described in the Office of Inspection and Enforcement Inspection Report which is enclosed with this letter. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, measurements made by the inspector, and observations by the inspector.

Within the scope of this inspection, no items of noncompliance were observed.

In accordance with Section 2.790 of the NRC's "Rules of Practice", Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosed inspection report will be placed in the NRC's Public Document Room. If this report contains any information that you (or your contractor) believe to be proprietary, it is necessary that you make a written application within 20 days to this office to withhold such information from public disclosure. Any such application must include a full statement of the reasons on the basis of which it is claimed that the information is proprietary, and should be prepared so that proprietary information identified in the application is contained in a separate part of the document. If we do not hear from you in this regard within the specified period, the report will be placed in the Public Document Room.

OFFICE ▶	W. P. C.	<i>(TV)</i>	<i>W.C.</i>	<i>M. Nelson</i>	<i>O'Reilly</i>	
SURNAME ▶	Allen/mjd	Knapp	Crocker	Nelson	O'Reilly	
DATE ▶	5/29/75	<i>30 May 75</i>	<i>5/30/75</i>	<i>6/4/75</i>		

United Nuclear Corporation

-2-

No reply to this letter is required; however, should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

Paul R. Nelson, Chief  
Radiological and Environmental  
Protection Branch

Enclosure:

IE:I Inspection Report No. 70-371/75-06

cc: H. D. Thornburg, Chief  
Field Support and Enforcement Branch, HQ

bcc (w/encls):  
IE Chief, FS&EB  
IE:HQ (4)  
L:D/D for Fuels and Mat'l  
PDR  
Local PDR  
NSIC  
IE Files  
DR Central Files  
State of Massachusetts

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

IE Inspection Report No: 70-371/75-06 Docket No: 70-371  
Licensee: United Nuclear Corporation License No: SNM-368  
Naval Products Division Priority: I  
Category: A(1)  
Safeguards Group: \_\_\_\_\_  
Location: New Haven, Connecticut  
Type of Licensee: Fuel Fabrication  
Type of Inspection: Announced Special (Closeout Survey)  
Dates of Inspection: May 16, 1975  
Dates of Previous Inspection: March 3-6, 1975 (Radiation Protection)  
Reporting Inspector: W. D. Allen 5/30/75  
W. D. Allen, Radiation Specialist DATE  
Accompanying Inspectors: None DATE  
DATE  
DATE  
DATE  
Other Accompanying Personnel: None DATE  
Reviewed By: P. J. Knapp 30 May 1975  
P. J. Knapp, Chief, Facilities Radiological DATE  
Protection Section

## SUMMARY OF FINDINGS

### Enforcement Action

#### A. Items of Noncompliance

None

#### B. Deviations

None

### Other Significant Findings

#### A. Current Findings

The inspection was limited to independent measurements in and around Building 24-D in New Haven, Connecticut, and discussions with licensee representatives relative to a licensee report dated April 10, 1975. The report documented the licensee's final survey of the building and requested its deletion from the license.

#### B. Status of Previously Identified Unresolved Items

Not Applicable

### Licensee Action on Previously Identified Enforcement Action

Not Applicable

### Management Interview

The inspector held an exit interview with D. Luster, Specialist Radiological and Environmental Control at the conclusion of the inspection on May 16, 1975.

The inspector stated that, following analyses of the smears taken during the inspection, a report documenting the findings would be forwarded to IE:HQ for transmittal to the Fuel Cycle Licensing Branch. The inspector stated that a letter and a copy of the Inspection Report would be sent to UNC.

## DETAILS

### 1. Persons Contacted

D. Luster, Specialist, Radiological and Environmental Control  
N. Grenon, Health Physics Technician

### 2. Plant Tour

#### A. General Plant

The inspector toured the facility identified in licensee's report dated April 10, 1975 as Building 24-D. The floor plan, as presented, was verified. It was noted that survey locations identified in the report were marked on floors and walls.

#### B. Autoclave Room

1. The inspector visually inspected the only room where enriched uranium was handled according to the licensee. The inspector asked if any air ducts or drains that served the room were to remain. A licensee representative stated that the only duct or drain work were on equipment which exhausted or drained within the room. He further stated all this equipment had been removed to other licensed facilities for disposal. A visual inspection revealed no apparent drain lines or air exhaust ducts.
2. The inspector asked what efforts had been made to decontaminate the autoclave room. A licensee representative stated that walls had been completely washed down twice and floors had been scrubbed five times. He further stated that following a finding of no additional reduction in removable contamination, the washing was discontinued.

#### C. Outside Areas

The inspector toured the outside areas of D-Tract and noted no unusual conditions or equipment.

### 3. Independent Measurements

#### A. Fixed Alpha

The inspector took readings at random locations within the plant with - Eberline PAC-4S alpha meter. The only detectable fixed alpha readings were in the autoclave room. The maximum fixed alpha readings were verified by the inspector and were in agreement with the levels presented in the licensee's report. No levels greater than those reported were identified.

B. General Gamma Levels

1. In Plant Areas

Due to the fact that highly enriched uranium was handled in Building 24-D, the inspector toured the building with an Eberline PRM-5-3 with a SPA-3 NaI crystal. No gamma levels above operating background were detected. The only exception was noted in the autoclave room where a slight increase above operating background was noted.

2. Outside Areas

A gamma survey with the PRM-5-3 was performed on areas outside the building within D-Tract. No gamma levels above operating background were detected.

C. Removable Contamination

A random number of smears were taken throughout the facility with special emphasis near and in the autoclave room.

The smears were analyzed at IE:I on an Eberline SAC-4. A summary of results is as follows:

General Plant Areas:

All smears indicated 5 dpm/100 cm<sup>2</sup> removable alpha or less

Autoclave Room:

Maximum Removable Alpha - 40 dpm/100 cm<sup>2</sup>

Average Removable Alpha (Floor) - 12 dpm/100 cm<sup>2</sup>

Average Removable Alpha (Total Smears) - 15 dpm/100 cm<sup>2</sup>