U.S. NUCLEAR REGULATORY COMMISSION
REGION 1

Report No. 030-07022/90-002

Docket No. 030-07022

License No. 29-13613-02 Category E3 Priority 1

Licensee: Process Technology of North Jersey
Subsidiary of RTI Incorporated
108 Lake Denmark Road
Rockaway, New Jersey 07866

Inspection At: 108 Lake Denmark Road
Rockaway, New Jersey 07866

Inspection Conducted: March 20, 1990

Inspectors: Richard H. Ladun
Richard H. Ladun, Health Physicist — 4-18-90 date signed

James P. Dwyer, Health Physicist — April 18 1990 date signed

Approved by: John R. White
John R. White, Chief — May 9 1990 date signed
Nuclear Materials Safety Section C

Inspection Summary: Special, unannounced safety inspection conducted March 20, 1990 (Inspection Report No. 030-07022/90-002).

Areas Inspected: Activities related to a reported film badge exposure in excess of 10 CFR 20.101 standards; irradiator cell safety interlock systems; and record review.

Results: Within the scope of this inspection no violations were identified.

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DETAILS

1. Persons Contacted

*John D. Schlecht, RSO
*Paul O. Shapiro, Vice President, Quality
David Smith, former employee
Andy Friedrich, Operations Manager
Mike Rosa, Irradiator Operator
Paul Grelecki, Material Handler

*Denotes those present at exit interview.

2. Film Badge Exposure

2.1 Background

On March 13, 1990, the licensee received a telephone call from R.S. Landauer reporting a film badge exposure for the period February 1-28, 1990 in excess of 500 rem. The Region I office was notified by telephone at 10:30 am on March 13, 1990. The individual issued the badge was identified as an Irradiator Operator that had been terminated on February 7, 1990 for poor job performance. The Region I office requested the licensee to contact the individual, schedule a medical evaluation, and submit a report of their investigation. Written notification of the exposure was received in a letter from the licensee dated March 1?, 1990.

The Region I office contacted the licensee on March 16, 1990. The licensee had been unable to contact the former employee but had left a message at his residence. Operating personnel were questioned but provided no information useful to the investigation. The licensee questioned Landauer as to whether any additional information could be obtained regarding the exposure. Landauer reported that the badge was black, indicating an exposure greater than 500 rem, and that no further evaluation was possible.

A Region I Senior Health Physicist telephoned the former employee at 11:15 am on March 19, 1990. The former employee said that he had been contacted by the licensee that morning, that he was questioned about the exposure, asked about his health, and told to report for a medical evaluation. The former employee stated that he felt fine and knew of nothing unusual which could have caused the exposure. The former employee believed that a medical evaluation was unnecessary. The Senior Health Physicist recommended that the former employee cooperate with the licensee's investigation; the former employee agreed.

The licensee transmitted a facsimile to the Region I office at approximately 10:00 am, March 20, 1990, notifying the Office that the former employee had scheduled a medical evaluation for 3:00 p.m. that afternoon.

Two Region I inspectors were dispatched March 20, 1990 on a special inspection to interview the former employee and to evaluate the licensee's response to the film badge exposure.

2.2 Inspector Findings

At 11:00 am on March 20, 1990, the inspectors interviewed the former employee; he stated that he was in good health and appeared to be so. The individual confirmed that he was terminated on February 7, 1990 and added that the separation was amicable. The individual stated that he knew the safety procedures, that safety procedures were followed on his shift, and that to the best of his knowledge, safety procedures were being followed at the Facility. The individual was convinced that he did not receive the exposure and believed that someone had exposed his badge. The former employee stated that, while he normally left his badge in the area designated at the licensee's facility, on February 5th, his last day of work, he took his film badge home. The badge was returned to the storage area on February 11, 1990, when the individual returned his keys and cleared out his locker. The former employee had no knowledge of film badges being purposely exposed at the licensee's facility.

At the licensee's facilities, the inspectors conducted an entrance interview with the licensee's RSO. The inspectors stated that the intent of the inspection was to evaluate the licensee's response to the reported film badge exposure, test the irradiator cell safety interlock systems, and review selected records.

The RSO said that upon receiving the Landauer report, he immediately briefed his superiors and notified the Region I office. The RSO said that he had difficulty reaching the former employee at his home but left a message with a roommate. Once the former employee was contacted, he was questioned about the exposure and scheduled for a medical evaluation. The RSO questioned other facility personnel regarding the exposure and followed with a memorandum. The RSO believes that the badge was exposed by other employees, not the former employee, and he is awaiting results of the medical evaluation before investigating further. A copy of the medical evaluation will be submitted to the Region I office immediately after it becomes available.

Members of the operating staff stated that they believed the Facility had been operating safely and no one knew of any event which could have resulted in this exposure.

No violations were identified.

3. Safety Interlock Systems

The inspectors witnessed the testing of the Irradiator Safety Interlocks following the licensee's Procedure 9.102C (dated September 27, 1988). The inspectors also tested the emergency cell cable as described in the licensee's Procedure 9.200A (dated March 6, 1987). Systems functioned as required.

No violations were identified.

4. Record Review

The inspectors checked Supervisor's Log book for the period February 1 through March 1, 1990; the Preventative Maintenance Log for the period February 1 through March 1, 1990; and January -February, 1990 exposure reports. No unusual occurrences were reported, preventative maintenance was performed, and other personnel exposures were normal.

No violations were identified.

5. Exit Interview

No violations were identified to the licensee.