U. S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 030-10829/90-001

Docket No. 030-10829

License No. 29-16333-01 Priority 4 Category G2

Licensee: James M. Brown, M.D.
109 South Munn Avenue
East Orange, New Jersey 07018

Inspection At: The above address

Inspection Conducted: November 26, 1990

Inspector: Steven R. Courtemanche 1/23/91
Steven R. Courtemanche, Health Physicist date
Nuclear Materials Safety Section A

Approved by: M. S. Shanbaky 1/23/91
Mohamed M. Shanbaky, Ph.D., Chief date
Nuclear Materials Safety Section A

Inspection Summary: Special, announced inspection conducted on November 26, 1990 of the events surrounding the fire of November 23, 1990, of the licensee's facilities and possible contamination of the site. (Report No. 030-10829/90-001).

Areas Inspected: Security of the building from unauthorized entry, assessment of potential radioactive materials contamination of the site, and independent measurements made by the inspector.

Results: No violations were identified. No radiation levels above natural background radiation were detected at the facility (Details. Section 4.0).

DETAILS

1. Persons Contacted

Charles Klena, Deputy Fire Chief
*James M. Brown, M.D., President
Robert Larson, Arson Investigator
William Csaszar, New Jersey State Inspector

*Present at exit interview

2. Incident

On November 26, 1990, at 11:30 am, representatives from the State of New Jersey Bureau of Radiation Protection notified Region I of a fire that occurred at the licensee's facilities on November 23, 1990 at 2 to 3 a.m. The offices of the licensee sustained substantial fire and structural damage. Small quantities of radioactive materials were being used at the facility. An inspector was dispatched to the site and attempts were made to contact the licensee and the supplier of radiopharmaceuticals to obtain more information. The inspector determined that the licensee only possessed spent unit doses of Technetium-99m, two 25 microcurie capsules of Iodine-131, and dose calibrator reference sources of the following activities: 250 microcuries of Cesium-137, 5 millicuries of Cobalt-57, and 140 microcuries of barium-133.

3. Site Security

The inspector arrived at the site at 3:00 pm on November 26, 1990. A barricade had been set up by the police department about the building and a police officer was assigned to the site twenty-four hours per day.

No violations were identified.

4. Independent Measurements

Upon arrival at the facility, the inspector attempted to account for all of the above listed radioactive materials. Due to the severe fire damage at the facility, the inspector was unable to find the material. It appears that the material was consumed in the fire.

The inspector performed radiological surveys of the site using an Eberline E-120 GM survey meter outfitted with an end-window probe. Additional radiological surveys were made with an Eberline PRM-7 MicroR meter. No radiation levels greater than natural background were detected. Three 500 milliliter Marinelli samples of dry ash were taken from the site. Each sample contained approximately 200 grams of dry ash. Based on the volume and the density of the samples, a maximum activity of 2.9 x 10 -7 microcurie per gram of sample of Cesium-137 was detected by the Region I Laboratory. Since no radioactive material above normal background levels were detected, (less than one picocurie per gram of sample was detected), no further action is required.

No violations were identified.

5. Exit Interview

The inspector met with the licensee representative denoted in section 1. The inspector summarized the scope and purpose of the inspection.