

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 999-90003/90013(DRSS)

Docket No. 999-90003

License No. General License (10 CFR 31.5)

Licensee: Unisys Corporation  
2751 Shepard Road  
St. Paul, MN 55154

Inspection Conducted: December 11, 1990

Purpose of Inspection: This was an announced, special inspection conducted to review the circumstances surrounding the loss of two NRD polonium-210 static eliminators and the licensee's corrective actions associated with the event.

Inspector: *Roy J. Caniano*  
Michael Kurth  
Radiation Specialist

1/9/91  
Date

Approved By: *Roy J. Caniano*  
Roy J. Caniano, Chief  
Nuclear Materials Safety  
Section 2

1/9/91  
Date

Inspection Summary

Inspection on December 11, 1990 (Report No. 999-90003/90013(DRSS))

Areas Inspected: This was an announced, special inspection conducted to review the circumstances surrounding the loss of two static eliminators, each containing a nominal 10 millicuries of polonium-210, manufactured by NRD, Incorporated, of Grand Island, New York.

Results: Within the areas inspected one violation of NRC requirements was identified relating to the loss of the static eliminators; unauthorized disposal or transfer of byproduct material, 10 CFR 31.5(c)(8) (Section 3).

## DETAILS

### 1. Persons Contacted

\*Lori Nelson, Radiation Safety Officer  
\*Milt Toso, Manager of Health Programs

\*Attended Exit Meeting

### 2. Licensed Program

The licensee utilizes polonium-210 static eliminators in a process to remove static elimination on a production line. The static eliminators are installed in an in-line system used at the facility. The polonium-210 is possessed under a general license issued pursuant to 10 CFR 31.5. The licensee currently possesses one in-line static elimination device manufactured by the NRD, Inc. of Grand Island, New York.

### 3. Inspection Findings

In a letter to the Region III office, dated November 12, 1990, the licensee reported the loss of two static elimination devices (See Attachment 1). Each device contains approximately 10 millicuries of polonium-210 at the time the devices were received by the licensee in April 1989. The licensee indicated that a thorough search of the facility had failed to locate the devices. The loss was reported to the NRC during a routine inspection conducted on October 1990, by a Region III inspector of a NRC license unrelated to the general license, at the same facility. It was suggested that the loss be documented and a letter forwarded to the NRC regarding the matter.

On December 11, 1990, a special inspection was conducted to review the circumstances surrounding the loss of the static elimination devices. The inspection revealed that the device was discovered missing in approximately April 1990. The licensee ordered the devices through NRD, Inc. of Grand Island, New York with the intention of using them on an in-line system. When the devices arrived at Unisys in April 1989, it was determined that they were the wrong type for their purposes, so the manager, Maynard Paul, tried to return them to NRD. NRD refused to accept them until the lease on the static eliminators was up, which was April 1990. They were placed in a drawer to be returned April 1990.

During the time period of April 1989 to September 1990, most of the equipment in the vicinity of the static eliminators, including possibly the static eliminators, had been sold to APA Optics in Blaine, Minnesota.

In an effort to locate the devices, searches had been conducted at both Unisys and APA Optics. APA Optics is still in the process of unpacking the equipment and a letter had been sent to them stating the importance of these devices and returning them to Unisys.

The licensee speculates that the devices were inadvertently sold to APA Optics. 10 CFR 31.5(c)(8) requires that any person who acquires, receives, possesses, or transfers byproduct material in a device pursuant to the general license in paragraph (a) of this section, transfer or dispose of the device only by transfer to a person holding a specific license to receive the device.

Contrary to the above, during the approximate period of April 1989 to April 1990, two static eliminators each containing a nominal 10 millicuries of polonium-210 were transferred or disposed of in an unauthorized manner. The unauthorized transfer or disposal of the polonium-210 static eliminators constitutes an apparent violation of 10 CFR 31.5(c)(8).

Region III has concluded that the unauthorized transfer/disposal of this material does not pose a significant threat to the public health and safety.

As a result of this loss, the licensee has sent a memo to each manager stating the importance of keeping radioactive devices under stringent control. In addition, the licensee will involve the Radiation Safety Officer, currently Lori Nelson, in the ordering and returning of radioactive material, including those materials which are covered under a general license.

One apparent violation of NRC requirements was identified.

#### 4. Exit Meeting

An exit meeting was conducted on December 11, 1990, at the conclusion of the inspection with Lori Nelson, Radiation Safety Officer, and Milt Toso, Manager of Health Programs. The inspection findings, the NRC Enforcement Policy, and the licensee's corrective actions were discussed. No information in this report was identified as proprietary by the licensee.

Attachments: Letter dated  
November 12, 1990