

June 27, 2001

**PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE** PNO-II-01-018A

This preliminary notification constitutes EARLY notice of events of possible safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by Region II staff (Atlanta, Georgia) on this date.

<b><u>Facility</u></b>	<b><u>Licensee Emergency Classification</u></b>
Studsvik Processing Facility	Notification of Unusual Event Alert
Erwin, Tennessee	Site Area Emergency
Dockets/License: TN-R-86011	General Emergency
	X Not Applicable

SUBJECT: UPDATE OF SITE CONTAMINATION EVENT

On May 21, 2001, the NRC Operations Center was notified by the State of Tennessee Division of Radiological Health (DRH) that a spill of approximately 29 millicuries of activation and mixed fission products had occurred at the licensee's facility on May 18, 2001. The licensee was authorized for the receipt, possession, processing, storage, handling and shipment of radioactive waste resins under a Tennessee Agreement State license. The licensee completed their review and evaluation of the event and provided a written report to DRH on June 14, 2001.

In summary, the contamination was contained within the vault at the 85' and 95' elevations of the facility. After the initial response to the event, decontamination efforts began. On May 24, 2001, the decontamination was completed. Five minor personnel contamination events occurred which were related to the event. Bioassays of the individuals included nasal swabs, whole body counts and urinalyses, resulting in a maximum calculated committed effective dose equivalent (CEDE) of 21.4 millirem (compared to the occupational limit of 5,000 millirem). No contamination from this event was measured outside the facility.

The event occurred due to a small pinhole leak in a non-utilized nozzle on the bottom of the primary process vessel. Root cause analysis by the licensee determined that the leak was caused by the fluidization nozzles associated with the affected vessel becoming plugged, eventually eroding through the vessel at the non-utilized nozzle. The licensee repaired the damage and reinspected the entire vessel before placing it back into service.

The licensee took other corrective actions to prevent recurrence including installation of remote monitors, catch containments, and additional modifications and computer control measures were installed to mitigate future fluidization gas nozzle/distributor plugging.

The plant resumed operations on June 6, 2001, after completion of all recovery and repair operations.

This information presented herein has been discussed with the State and is current as of 10:30 a.m., Wednesday, June 27, 2001.

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