PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE
PNO-IV-98-007

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 IV staff in Arlington, Texas on this date.

Facility	Licensee Emergency Classification
N D C Systems, Inc.	Notification of Unusual Event
N D C Systems, Inc.	Alert
5314 N. Irwindale Ave	Site Area Emergency
Irwindale,California	General Emergency
License No: CA-1451-19	X Not Applicable

Subject: AMERICIUM-241 CONTAMINATION EVENT

On January 27, 1998, the state of California Department of Health Services (CDHS) notified NRC of a contamination event that occurred at the NDC Systems, Inc., facility in Irwindale, California (a state of California licensee).

CDHS reported that on January 22, 1998, while attempting to remove a sealed source containing 100 millicuries of americium-241 from its source capsule using a small, hand held, butane torch, the source exploded, causing contamination of the worker and facility. The Radiation Safety Officer (RSO) of NDC Systems, Inc. (NDC), was using the torch to heat the epoxy that held the source in place. NDC planned to return the source to the source manufacturer (Amersham) for wear evaluation and possible recycling. Amersham would not accept the source if it was returned in its tungsten holder; therefore, the RSO decided to remove the source from its holder. On January 21, 1998, the RSO used the same technique to remove two other sources. The sources were removed from their holders by heating the holders until the epoxy burned away; at the same time the capsule was pushed out of the holder a sufficient distance to allow the capsule to be removed.

The procedure was performed in the licensee's fume hood located in their source loading room. While heating the third source capsule, the source exploded, the front face of the capsule gave way and the americium-241 scattered inside the hood. The hood door was partially closed thereby protecting the RSO from direct contamination of his face. However, contamination was detected on his clothing, the floor and on some tables inside the room. Contamination was also detected at the exhaust duct for the hood at the roof of the facility. The licensee notified CDHS on January 23, 1998, and the CDHS immediately dispatched an inspector to the site.

A urine and fecal bioassay was ordered on the RSO. Results are not yet available. The licensee was also ordered to employ the services of a consultant health physicist to assist the licensee with dose estimates and contamination control.

ID&R-5-1 Operating Exp.

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The state of California has been informed.

Region IV received notification of this occurrence by telephone from

Office of State Programs at approximately 1:30 p.m. on January 27, 1998. Region IV has informed NMSS.

This information has been discussed with the state of California and is current as of 2:30 p.m. (CT) on January 27, 1997.

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