

June 11, 2008

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE -- PNO-IV-2008-004

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 the Region IV, Arlington, Texas, staff on this date.

Facility

U. S. Department of Commerce
National Institute of Standards and Technology
Boulder, Colorado
Docket No. 030-03732
License No. 05-03166-05

Licensee Emergency Classification

Notification of Unusual Event
 Alert
 Site Area Emergency
 General Emergency
 Not Applicable

SUBJECT: CONTAMINATION EVENT

DESCRIPTION:

On June 10, 2008, the licensee reported that a plutonium reference source was ruptured resulting in the contamination of two workers and the laboratory in which they were working. (See NRC Event Notification No. 44281.) The glass vial contained numerous isotopes of plutonium with a total mass of approximately a quarter gram and was discovered to be fractured during the late afternoon of June 9, 2008. The source is used as a reference standard.

The licensee's health physics staff responded and determined that contamination had spread outside the laboratory into an adjoining hallway. Contamination was detected as far as 80 feet from the entrance of the lab but was immediately cleaned up. Surveys beyond the hallway have been conducted with no contamination detected. All personnel expected to have been contaminated have been identified. The lab and an adjoining lab connected by a doorway have been isolated, and licensee staff plans to commence decontamination today. The two labs have a closed air ventilation system which does not communicate with adjoining rooms.

Two researchers who discovered the broken vial were contaminated on their hands. They were subsequently decontaminated and subjected to bioassay sampling including nasal swabs, urine bioassay, and fecal bioassay. Air samples were also taken in the lab. No results of any of these samples/surveys have yet been reported.

Although the 24-foot by 50-foot lab is normally occupied by only six people, twenty-two staff use the lab on occasion. The staff members are being interviewed and will undergo urine bioassay sampling and nasal swab surveys.

The State of Colorado was notified on June 10. The incident was discussed in detail with FSME today. Region IV expects to dispatch an NRC inspector to the facility today. There has been media and congressional interest.

The information presented herein has been discussed with the licensee and is current as of 10:00 am, June 11, 2008.

ADAMS ACCESSION NUMBER: ML081630377

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