

July 11, 2008

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

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 (UPDATE)

DESCRIPTION:

This preliminary notification updates information previously reported by the NRC on June 11 and 20, 2008 (PNO-IV-2008-004 and PNO-IV-2008-004A), regarding the plutonium contamination event that occurred on June 9 at the National Institute of Standards and Technology (NIST) facility in Boulder, Colorado.

As a result of the initial assessment of the information stemming from the NRC's prompt onsite inspection follow-up of the event by NRC inspectors during the weeks of June 9 and 16, 2008, the NRC dispatched a five person special inspection team to the facility on June 29. As of today, the team's work is still in progress at the NIST facility and in the NRC's Region IV and headquarters offices. The NRC special inspection team was chartered to independently assess the circumstances surrounding the event, including its significance in terms of impact on people and the environment, its causes, and the adequacy of the licensee's corrective actions to prevent recurrence.

On July 2, 2008, the NRC issued a Confirmatory Action Letter (CAL No. 4-08-003), which documented a number of commitments made by NIST involving: (1) the cessation of use of licensed materials until a number of reviews are conducted by NIST and reviewed by NRC; (2) the conduct of thorough dose assessments for individuals exposed or potentially exposed to plutonium; (3) the submission of the results of its investigation of the incident; (4) the submission to the NRC, the State of Colorado, and the City of Boulder, of a written report of NIST's assessment of the release of plutonium into the sewer system of the City of Boulder; and (5) the submission of written plans to the NRC for review and approval to further stabilize and ultimately decontaminate the affected laboratory. Regarding Items 3 and 4 above, the preliminary results of the licensee's investigation were reported to the NRC on July 9 and its written assessment of the release of plutonium to the sewer system will be provided later today.

On July 10, NIST publicly announced that according to new dose analyses and lifetime risks estimates received from radiation health physicians and experts, the small number of NIST personnel internally exposed to plutonium are not expected to suffer any clinically significant impact on either their short or long-term health. NIST also reported that there were a variety of factors, including inadequate training, failure to follow established procedures, and a lack of a risk assessment and incident response planning, that contributed to the June 9 event.

The special inspection team is currently reviewing the licensee's preliminary findings and conclusions in addition to independently assessing the significance, causes, contributors, and circumstances associated with the event.

The State of Colorado, the City of Boulder, and US EPA, are continuing to be updated by the NRC. There continues to be media and congressional interest. NIST continues to issue periodic press releases. (http://www.nist.gov/public_affairs/news.htm)

The information presented herein is current as of 12 noon CDT, July 11, 2008.

ADAMS ACCESSION NUMBER: ML081930823

CONTACTS: Art Howell, 817-860-8106
Chuck Cain, 817-860-8186
Vivian Campbell, 817-860-8287