June 20, 2008

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

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
_X_ Not Applicable

SUBJECT: CONTAMINATION EVENT (UPDATE)

DESCRIPTION:

On June 11-12, 2008, a NRC Region IV inspector conducted an onsite review at the National Institute of Standards and Technology (NIST) center in Boulder, Colorado, where a plutonium reference source was ruptured resulting in the contamination of several workers on June 9. (See NRC Event Notification No. 44281.) The inspector conducted an assessment of NIST's initial response to the event and follow-up plans. The licensee's local health physics staff who initially responded to the event was augmented by health physics staff from the NIST office in Gaithersburg, Maryland.

NIST provided a detailed telephonic briefing to the NRC Region IV office on June 17, which included their plan to have a DOE Radiological Assistance Program (RAP) team enter the lab and conduct a characterization survey. Region IV again dispatched an inspector to the site on June 19. The RAP team entered the lab that evening and planned a further entry on June 20.

The inspector provided a verbal report of the RAP team's work to the regional office on June 20. The RAP team reported after their first entry of finding widespread plutonium contamination in the lab and in the sink in the lab. Data from their surveys have been sent electronically to their remote laboratory for analysis. A refined report of their results to NIST is expected Monday, June 23.

The City of Boulder has expressed concern regarding the possibility of plutonium contamination in their sewer system and has requested a report from NIST no later than Monday, June 23. The RAP team reported that they will provide some bounding estimates to NIST of material in the sewer with their report.

The licensee is also arranging for several individuals to undergo lung counting today at a facility in Boulder. The licensee has also been in contact with DOE REACT/S (Oak Ridge) regarding possible follow-up review for some of the workers.

The State of Colorado is continuing to be updated by Region IV. There continues to be media and congressional interest. NIST has issued press releases (http://www.nist.gov/public_affairs/news.htm).

The information presented herein is current as of 3 p.m. CT, June 20, 2008.

ADAMS ACCESSION NUMBER: ML081720574

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