

August 27, 1979

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE--PNO-79-368A

This preliminary notification constitutes EARLY notice of an event of POSSIBLE safety or public interest significance. The information presented is as initially received without verification or evaluation and is basically all that is known by IE staff on this date.

FACILITY: Virginia Commonwealth University
Medical College
License No. 45-00048-17
Richmond, Virginia

SUBJECT: POSSIBLE HAND OVEREXPOSURE (PNO UPDATE)

The licensee reported that two technicians performing in-vitro research with 5 millicuries of phosphorous-33 later learned that the material was phosphorous-32. The error was apparently due to inadequate measurements by the licensee. It appeared that the error was compounded by mislabeling by a New England radiopharmaceutical manufacturer. The licensee ordered P-33 and all documents indicated that phosphorous-33 had been shipped. The vendor has acknowledged the error to the licensee. The bremsstrahlung dose rate from P-32 in glass is about six times more energetic than that from P-33. Technicians handling the containers may have received from 10 to 80 rems to their fingertips depending upon the outcome of re-enactments. The regulatory limit for hand exposure in 10 CFR 20.101 is 13.75 rems per quarter. No whole body overexposures are suspected. Region II is reviewing the licensee's dose estimates for the hand exposures. An NRC inspector will be on site on August 28.

Media interest is not expected and the licensee does not plan a news release. The Commonwealth of Virginia and Region I have been informed.

Region II (Atlanta) received notification of this occurrence by telephone from the licensee at 4:10 p.m. on August 24. This information is current as of 9:00 a.m. on August 27.

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PRELIMINARY NOTIFICATION

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