

Date: May 7, 2001

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE PNO-I-01-012

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 I staff on this date.

**Facility**

University of Pennsylvania  
Philadelphia, PA

**Licensee Emergency Classification**

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

Docket No.: 030-02939

License No.: 37-00118-07

SUBJECT: MEDICAL MISADMINISTRATION REPORTED FOLLOWING  
IDENTIFICATION OF LEAKING IODINE-125 SOURCE

At 11:51 a.m. on Saturday, May 5, 2001, the licensee's Radiation Safety Officer notified the NRC Operations Center that a medical misadministration occurred at the Hospital of the University of Pennsylvania on May 4, 2001, when one or more iodine-125 seeds implanted into the prostate gland of a patient were found to be leaking. A total of 94 seeds had been implanted. Each seed contained approximately 0.5 millicuries (18.5 MBq) of iodine-125. The leaking source was identified by the Radiation Safety Office staff when post-operative surveys of the device used to implant the iodine-125 seeds showed radiation levels above background. Additional surveys of the device revealed approximately 50 nanocuries (1.9 kBq) of removable iodine-125 contamination. The licensee suspects that a seed was damaged during implant, as surveys of containers which held the seeds prior to implant were negative for contamination.

The Radiation Safety Office staff reportedly notified the patient's attending physician and the decision was made to administer potassium iodide, a thyroid blocking agent. A bioassay of the patient's urine was positive for iodine-125. A direct bioassay of the patient's thyroid showed an uptake of approximately 73 nanocuries (2.7 kBq) of iodine-125. From this measurement, the licensee estimates that the patient will receive a radiation dose of approximately 320 millirem (3.2 mSv) to the thyroid.

Region I will perform a reactive inspection beginning on May 7, 2001. The Commonwealth of Pennsylvania has been advised. The Region I Office of Public Affairs is prepared to respond to media inquiries.

This information is current as of 10:45 a.m. on May 7, 2001.

Contact: Penny Lanzisera  
(610)337-5169

Brian Smith  
(610)337-5255

DISTRIBUTIONS:  
BY E-MAIL:

OWFN  
 Chairman Meserve  
 Comm. Diaz  
 Comm. McGaffigan Jr.  
 Comm. Merrifield  
 Comm. Dicus  
 OIP  
 OCA  
 OGC  
 EDO  
 OE  
 NRR  
 SECY  
 Regional Offices

TWFN  
 IRO  
 ACRS  
 NMSS  
 OIG  
 RES

LST  
 PDR

BY FAX:

DOT:Trans

INPO

NSAC

RI Resident Office

Licensee: \_\_\_\_\_  
 (Reactor Licensees)

DOCUMENT NAME: S:\PN\PN1000

OFFICE	RI/DNMS	RI/DNMS	RI/DNMS	RI/PAO	RI/SLO
NAME	P Lanzisera PAN	B Smith BWS1	G Pangburn FMC FOR	D Screnci DPS	R Bores ADW FOR
DATE	5/7/01	5/7/01	5/7/01	5/7/01	5/07/01

Region I Form 83  
 (Rev. August 17, 2000)