

Yale University *New Haven, Connecticut 06520*

License No. 06-00183-03

Docket No. 030-00582

MLER-8 9-077

OFFICE OF THE PROVOST

June 23, 1989

Mr. John Kinnerman
U. S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, Pa. 19406

Dear Mr. Kinnerman:

Subject: Nuclear Regulatory Commission License No. 06-00183-03
Update of Notice - 30 day letter dated May 17, 1989
10CFR Part 20.405

This letter contains updated information regarding the incident previously reported in our letter to you dated May 17, 1989. The original date of the skin contamination was estimated to be March 27, 1989. Subsequently, it was discovered that the initial skin contamination occurred on an earlier date, March 7, 1989. Due to the earlier date of March 7, 1989 we have revised the original dose estimates.

The revised estimated dose to the basal layer of the skin of the extremities is 177.6 rem. This dose represents an upper limit because it assumes that all the skin contamination occurred on March 7, 1989 even though a second similar uptake occurred on April 5, 1989. These two uptake dates are separated by more than four weeks and are both prior to the date the skin contamination was discovered on April 19, 1989. There were thirteen areas of contamination on the left hand including two ring areas, one area on the palm, and the tip and flat of each digit. There were twelve areas of contamination on the right hand including one ring area, one area on the palm of the hand, and the tip and flat of each digit. The tip of the left middle finger received the highest dose. The dose calculations were based on a paper entitled "Dose to the Basal Layer of the Skin from ^{125}I Skin Contamination". This article was taken from Radiation Protection Dosimetry, Vol. 20, No. 4, pp 253-256 (1987), Nuclear Technology Publishing.

Further measurements taken on the thyroid gland indicate an initial thyroid burden of 0.324 uCi (approximately 178 MPC hr). The effective half-life in the thyroid is now estimated to be 44.6 days. Weekly measurements are being taken on the thyroid and this estimate is based on data taken as of June 7, 1989.

If there are questions, please contact us.

Sincerely,

Edward A. Adelberg
Edward A. Adelberg
Deputy Provost

cls

IX30

Return to Dept of Region I

9102270325
PDR FISA
TUH4590-524

910130
PDR

EAA:cm