



BOX 10172 LAMBERT FIELD • ST. LOUIS, MISSOURI 63145 • 314 AX 1-0540

NUCLEAR

December 10, 1973

Mr. F.E. Kruesi, Director
Regulatory Operations
U.S. Atomic Energy Commission
Washington, D.C. 20545

Reference: USAEC Licence
No. 24-04206-01

Gentlemen,

At 16:00 November 13, 1973, a production technician accidentally punctured his thumb with a syringe needle containing Iodine 131. He completed his maximum uptake on November 15, 1973 and for the following seven consecutive days his average Thyroid burden was 1.1 microcuries of Iodine 131.

The calculated exposure to the gland is 89% of the permissible 8 Rems recommended by the ICRP for thirteen consecutive weeks.

The individuals' uptake occurred when he was using a syringe to extract a concentrate Macro-aggregated Radio-iodinated (I 131) Albumin sample. The individual dropped the syringe after extracting the sample. He attempted to catch it and inadvertently punctured his thumb.

The individuals' thyroid burden appears to be decaying with approximately a seven day effective half life. The uptake took longer than the expected twenty-four hours for maximum uptake. This was because of the chemical form of the active material in the puncture wound.

Sincerely,

MALLINCKRODT CHEMICAL WORKS
MALLINCKRODT NUCLEAR

Warren K. Fadling
Group Leader
Radiological Protection Dept.

MALLINCKRODT CHEMICAL WORKS

Name:
Date of birth
Social Security Number

[REDACTED]

2-20-6

WKF/te

cc: Mr. Boyce H. Grier, Director USAEC Region III

bcc: R.L. Holgate
D.W. Soldan

[REDACTED]
Radiation History File
USAEC File