

(b)(6)

E

Unred
results

1 pm/anal | 1 pm/sample
587° · 5.9 x 10⁵

date analysis

10/26/65

work in room

(b)(6)

560

227

etc

280

(b)(6)

1370

cut source + worked
welder

280

worker

(b)(6)

253

"

413

587

"

813

"

(b)(6)

280

"

347

"

547

welding source

F-23

Red Oct Lab

source isolated
NS/E with

TELEPHONE INCIDENT REPORT

Notify caller if secretary takes notes of conversation

Date of Call: 10/12/66
 Time: 3:30 PM
 Receiver: Grant

Reported by: Ed R Harris
 Title: Manager, Safety at the Protection MSD
 Phone No: 215-969-3130 Extension: 3129

Company: DE
 Address: Valley Forge Pa
 License No: 37-2006-5

Person Involved: Dose:
 Title: 10 people involved
 Person: night frequenting lot Dose:
 Title: and doing welding and cutting operations
 Person: met last Veranopsis Dose: Applied H.P. Inc
 Title:

Describe Licensed Material Involved:
 H-3 foil
 High Voltage Eng P-4227
 1.8 units

How Dose Determined: FB #'s & Dates:
 FB Supplier & Address:

Describe Incident: with tin snips Date Occurred: between 8/29-9/2/66 Time: —
 Tritium foil was cut, 1/4 removed and welded to wire to fabricate an electron source. Cut in Rm 9111, first welding attempt Rm 9137 (unsuccessful), second welding attempt Rm V864 (successful). Bench top in Rooms 3-4000 down beta
 Detected 10/11/66 ~ 1000 PM

Present Status of Facility: Rooms closed off with decontaminated but equipment cleaned and moved back (Continue on back)

Cause of Incident: welding foil

Corrective Action Taken: education program and possible removal of radioactive material and authorization

Any Publicity Releases: no

Other Agencies Notified: State - Pa

Instructions & Requests to Reporter of Incident: Inform CO-1 of analysis result

Review 20.403 & 20.405 + 30 day report external report

Type of Incident: _____ Persons Assigned to Investigate: _____

Dir:
Sr. Rmwr
Sr. Insp.
Inves.
File: <i>GR</i>

UNITED STATES GOVERNMENT

Memorandum

Reviewed by: Paul B. Wilson
CBP
Hox

TO : Files

DATE: NOV 18 1966

FROM : William B. Grant, Radiation Specialist *WBS*
Region I, Division of Compliance

SUBJECT: COMPLIANCE INQUIRY MEMORANDUM
GENERAL ELECTRIC COMPANY
VALLEY FORGE, PENNSYLVANIA
LICENSE NO. 37-2006-5
EXPOSURE TO AIRBORNE TRITIUM, NO OVEREXPOSURES

On October 12, 1966, E. R. Harris, Manager, Safety and Fire Protection, Missile and Space Division, informed CO:I by telephone that some of his people had been exposed to concentrations of airborne tritium during attempts to weld a piece of a tritium foil to a wire in order to fabricate an electron source. Harris stated that subsequent to the AEC inspection conducted on September 7 and 8, 1966, he was routinely identifying and leak testing all sources on hand. During the evening of October 11, 1966, he discovered that the tritium foil, High Voltage Engineering Model No. P4227, a 1.8 curie source, had been cut with the tin snips and an approximate 1/4 piece welded to a wire. Harris reported that the cutting had taken place in Room 9111 and the first unsuccessful welding attempt in Room 9137. The second welding attempt was successfully accomplished in Room U864. Harris stated that he could not determine exactly when this had happened, but that it had occurred sometime during the week of August 29, 1966.

Harris stated that a slight amount of contamination (3,000 - 4,000 dpm β) had been found on the bench tops and some equipment in the rooms in which the welding had been done. He said that the rooms were closed off until decontaminated on the morning of October 12, 1966. He said that while only two persons were involved in the cutting and welding he was going to have urinalyses done on those two individuals and all other persons who had worked in or around the three rooms during the time in question.

On November 1, 1966, Harris informed CO:I of the results of the urinalyses taken October 26, 1966. The highest activity detected was in the urine of the individual who cut and welded the source; however, this activity was reported to be less than 1 $\mu\text{c}/\text{l}$ calculated back to the time of the exposure. This would give an infinite dose to the whole body of approximately 5 mrem.

Harris stated that this documents another incident of scientific personnel not getting or requesting approval of an operation involving radioactive material. He said that the man who cut and welded the source has had his



authorization to work with radioactive material withdrawn. He added that a complete overhaul of company radiation protection procedures and a basic health physics educational program are in progress.

We feel that no further action is necessary and the case is considered closed.

cc: CO:HQ
R. G. Page, SIR