

HILBERT & ASSOCIATES, INC. -RADIOLOGICAL CONTRACTORS- 76 WASHINGTON STREET SARATOGA SPRINGS, NY 12866 518-584-0166	PROCEDURE TITLE: SELF READING DOSIMETER CONTROL	PROCEDURE NUMBER: RCP-210 ISSUE DATE: 15 April 1985
PREPARED BY: <i>J. M. Riggi</i>	DATE: <i>4/4/85</i>	REVISION: 01
APPROVED BY: <i>H. D. Hilbert</i>	DATE: <i>4/4/85</i>	PAGE <u>1</u> OF <u>2</u>

This procedure has been issued for applicability on Chem-Nuclear Systems contract with International Nutronics, Inc. This contract is for radiological restoration of the Dover, N.J. facility.

Purpose

To set forth specific guidance for issuing, wearing and calibrating self reading pocket dosimeters.

References

1. KAPL, Specification S-15, Section 2.3, Personnel Monitoring for Radiation Exposure
2. RCP-236, Dosimetry Program
3. ANSI N 13.5-1972
4. U.S. NRC Regulatory Guide 8.4

Enclosure

1. Dosimeter Drift Test Record

Requirements:

1. Issuing: Self Reading Pocket Dosimeters (SRPD's) shall be issued to personnel by Radiological Controls Personnel when:
 - A. That person may receive in excess of 50 millirem in one day.
 - B. That person will enter a high radiation area.
 - C. In the judgement of cognizant Radiological Controls Personnel it is prudent for them to be worn.

Radiological Controls Personnel shall fill out the "SRPD Issue Log" (RCP-236, Enclosure 9) when issuing SRPD's.

2. Wearing: SRPD's shall be worn immediately adjacent to the permanently issued TLD. The SRPD shall be attached along with the TLD to lanyards, having a breakaway feature; worn by the person to prevent inadvertant dropping or loss.
3. Maintenance/Calibration: The Radiological Controls Supervisor shall insure:
 - A. The SRPD's are sent to an authorized repair, calibration facility every six months for calibration to the standards of Reference 3, Section 9, and Reference 4, Section C. Calibrated SRPD's shall have a calibration sticker affixed showing date calibrated and date

next calibration due.

- B. The Radiological Control Supervisor or his designee shall insure that all SRPD's received from Calibrating facility are "Drift Tested" prior to use as follows:
1. SRPD's shall be fully charged.
 2. SRPD's shall be placed in a low background radiation area (≤ 0.02 milliroentgen per hour) for 24 hours.
 3. SRPD's shall be read.
 4. The discharge shall be ≤ 2 percent of full scale in 24 hours to be acceptable.
 5. SRPD's which fail drift test may be retested for acceptability one additional time.
 6. The drift test shall be recorded on Enclosure 1.
- D. Records: A calibration documentation received from the calibrating facility shall be maintained by the Radiological Controls Supervisor.
- E. All records required by this procedure shall be maintained until the end of this contract and then turned over to the Corporate Radiation Safety Officer for final disposition. (This may include providing a copy to the KAPL work administrator.)



UNITED STATES
ATOMIC ENERGY COMMISSION
DIRECTORATE OF REGULATORY OPERATIONS
REGION I
970 BROAD STREET
NEWARK, NEW JERSEY 07102

6/28/72

Paul R. Nelson, Radiological & Environmental Protection Branch
Directorate of Regulatory Operations, Region I

INSPECTOR'S EVALUATION
RADIATION INTERNATIONAL INC.
PARSIPPANY, NEW JERSEY
LICENSE NO. 29-12649-05

Inspection performed 5/17/72 revealing two items of noncompliance which do not indicate a safety hazard. Licensee performs in cell irradiations under strict license limitation as to activity permitted. Irradiation under these conditions does not present any problems and facilities appear adequate.

The license is properly categorized as E with priority III. No increase in inspection interval is recommended because of the workload and activity used. The next inspection will be performed during 5/74.

R. Smith

for

E. Epstein
Radiation Specialist

DUPE

~~8507200105~~

6/4/71

To Paul ⁶¹⁷ Nelson for Radiation Specialist COI.

Subject: Radiation Machinery Corporation Honored No
29-12649-03.

During an inspection of License 29-12649-01 at the above facility during 3/71, the inspector inquired of George Taylor, Vice President as to the status of License -03.

Taylor stated that no material was on hand under license -03 and that all use of this license had ceased over a year ago when the wood irradiation program was stopped. Taylor stated that all personnel under that program had left the above company.

Eugene Gustin.

Long - not inspectable change. du. date

to 3/72 plus a phone call

FN Lic #5

on

11/10/71

to File

352
W. Paul R. Nelson, Sr. Radiation Specialist CO.I.

Subject: Radiation International, Inc., Parsippany N.J.
License No. 29-12649-05.

The undersigned believes there are some hazards attached to the proposal submitted by the licensee.

(1) The licensee does not have any continuous ^{external} readout of radiation levels existing inside the hot cell when sources are exposed therein. During an inspection performed 3/5/71, it was noted that the service area, immediately behind the hot cells, and the area from which entries into the hot cell were made, was equipped with an overhead G.M. detector connected to Victoreen monitors and alarm systems which were inoperative. Taylor at that time, indicated that this equipment could not be repaired because of financial difficulties between the licensee and Victoreen. He reported and it was also noted that the person entering the hot cell ~~after~~ after irradiation only has a Jordan Rad Gun survey meter available to ensure a safe entry.

(2) Extensive damage was noted to glass viewing windows of hot cells and for this reason, the licensee has added swinging lead doors on the inside to protect the cell windows against further ~~to~~ radiation damage. This limits the view of any operations

occurring during graduation.

On 11/9/71 the undersigned telephoned J Maluro, DML and advised him of the conditions existing at the business facility and also informed him that a copy of the inspection report of CO:I 3/5/71 inspection was available to him. The request by DML was relayed to J Metzger CO:HQ on 11/9/71.

On 11/10/71 Metzger, CO:HQ telephoned CO:I stated a copy of CO:I inspection report was now available to DML and that he had informed DML of its existence and availability.

Eugene Epstein

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JW
To Paul R Nelson Sr. Radiation Specialist.

Subject. Radiation International Inc
Application to ship 36000 Ci ^{137}Cs

Licensee has applied for permission to
to ship 36000 Ci ^{137}Cs in a Herman Type
iradiator.

Evaluation includes chip test data and
calculation as well as heat damage possibility.

Design of this irradiator was approved
in cooperation with US Dept of Agriculture,
Isotopes Promotion AEC and Licensee. Sources
are std ORNL doubly encapsulated ship sources.

No hazard appears to exist

E. G. Gustin