

Collaborative Research, Inc.

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September 28, 1982

License No. 20-11124-01
20-11124-02G
Docket No. 30-04696

United States Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, PA. 19406

Attention: Mr. Thomas T. Martin,
Director
Division of Engineering & Technical Programs

Gentlemen:

This letter refers to inspection No. 82-01, conducted by your office on July 21, 1982, and the subsequent letter of August 30, 1982 on a NOTICE OF VIOLATION.

The following corrective steps have since been taken.

1. A revised copy of a memo (dated March 6, 1981) on thyroid measurements and room air samples has been reissued to all personnel who perform iodinations. (The original memo required that the measurement of the thyroid be made 24 hours after iodination). A copy of this memo is enclosed - Appendix I.
2. All such personnel have been instructed verbally regarding the thyroid measurement procedure. In addition, audits will be conducted to determine that the procedure is followed.
3. "Full compliance" will be in effect by September 25, 1982.


The NaI crystal detection instrument used for thyroid monitoring is calibrated quarterly by our radiation safety consultant. The efficiency of detection of ^{125}I is posted on the instrument. The form provided in the iodination log book for recording thyroid monitoring (see Appendix II) allows for recording of counts per minute above background. The footnote to this form directs workers to notify the radiation protection officer if this difference represents a thyroid burden of greater than 0.025 uCi. In such a case, which has never occurred, a control background measurement would be made to determine the true thyroid uptake. Additionally, personnel who perform iodinations are given a control background measurement for thyroid uptake of ^{125}I every three months. The result of this survey is recorded in uCi ^{125}I .

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Page 2

I trust that these corrective actions will prevent future violations and will meet with your approval.

Sincerely,

A handwritten signature in cursive script that reads "Paul R. Kelley".

Paul R. Kelley
Radiation Safety Officer

PRK:ssr

Enclosures: 2

M E M O R A N D U M

September 17, 1982

To: All Personnel who Perform Iodination Reactions

From: Paul Kelley, Radiation Safety Officer

Subject: Surveys Required in Association with Iodinations

Any person who performs an iodination reaction is required to take a room air sample during the reaction using the charcoal filter apparatus at the face of the iodination hood. Results of this survey are to be recorded in the air sample section of the iodination log book in $\mu\text{Ci } ^{125}\text{I}/\text{ml}$ of air.

Upon completion of the reaction, survey your hands and feet for possible contamination before leaving the iodination laboratory.

After 24 hours (but not over 100 hours) following completion of the reaction, measure your thyroid uptake and RECORD the measurement in the thyroid monitoring section of the iodination log book.

These surveys are required to insure control of radioactive materials in compliance with NRC rules and regulations.

PRK:ssr

APPENDIX II

COLLABORATIVE RESEARCH INC.

128 Spring Street
Lexington, MA 02173

FOR PERSONNEL WHO PERFORM IODINATION:

Thyroid measurement using scintillation detector for ^{125}I uptake:

Name	Date	Background	Measurement	Difference *

*Notify radiation protection officer if you have .025 uCi _____ c/m in thyroid in any one week. The permissible thyroid uptake in one week is 0.052 uCi and the total thyroid burden is 0.700 uCi.