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28 October 1982

Dr. Thomas T. Martin, Director Division of Engineering and Technical Programs United States Nuclear Regulatory Commission Region 1 631 Park Avenue King of Prussia, Pennsylvania 19406

> Ref. License No. 20-11085-01 Docket No. 30-04694

Subject: Response to Notice of Violation

Dear Dr. Martin:

In response to your letter dated 30 September 1982, a meeting has been arranged with Mr. Murray Bolton, Health Physicist from Massachusetts Institute of Technology, to assist us in correcting and amending our current radiation safety program. In addition, I would like to inform you that effective 1 November 1982, Mr. Bolton will become our consultant Radiation Health Physicist and that he will make monthly visits to our institute. During such visits he will perform wipe tests, thyroid scans, educational seminars, and check the entire radiation record keeping of this institute. The corrective measures which will be instituted immediately are as follows:

- A. Items 1 and 2: To upgrade the documentation procedure, an authorized individual will be assigned to coordinate the iodination activity. The date, time and person who performs iodination will be recorded. The results of physical measurements of airborne radiation (breathing zone and effluent air discharged from the hood) will be recorded after every iodination. Personnel handling millicuries of iodine will receive a thyroid scan within 48 hours, using a Ludlum Model 3 counter, equipped with a thin NaI probe, which can detect 1 nCi radiation. Any person showing a scan higher than 10 nCi by this method will be sent to Mr. Bolton at MIT for absolute measurement.
 - Mr. Bolton and/or his associate will visit our institute on a monthly basis and on such site visits, thyroid scans will be given to personnel who have handled mCi of 125 iodine during the period between visits.

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> Item 3: All ¹²⁵I-Contaminated Glassware and trash will be packaged and sent for disposal through an authorized carrier according to the regulation.

B. New employees will receive instructions on radiation safety from in-house staff or supervisor, and MIT consultants will also provide training services. In addition, periodic reinforcement seminars and training as well as briefs on any change in rules and regulations will be provided by the consultants on their visits as required.

Laboratory technicians will be instructed to survey working areas on a weekly basis (for $3_{\rm H}$, $14_{\rm C}$ and $125_{\rm I}$). A Ludlum Model 3 probe counter will be used for $125_{\rm I}$ and for $3_{\rm H}$, $14_{\rm C}$ estimation, wipe test will be performed). Any area showing radiation over the allowed limit will be decontaminated and tested again. The consultants will perform a wipe test on a monthly basis.

All survey instruments have been and will be calibrated by an authorized agency(ies) twice a year.

It is our hope that we will be in full compliance with rules and regulations of the NRC in the near future. I am pretty sure that Mr. Bolton will be of great help in this matter.

Sincerely,

In-Fai Lan

In-fai Lau, Ph.D. Health Radiation Safety Officer

IL/mg

cc: Mr. William Woods Dr. Henry J. Esber Mr. Murray Bolton, MIT