

PURDUE UNIVERSITY

VICE PRESIDENT
FOR PHYSICAL FACILITIES

November 16, 1989

U. S. Nuclear Regulatory Commission
Region III
ATTN: D.J. Sreniawski, Chief
Nuclear Materials Safety
Section 1
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Gentlemen:

RE: **License No. 13-02812-04; SNM-142**
Notice of Violation

This refers to the routine inspection conducted by Mr. J. W. Patterson of your office on July 20, through 28, 1989. Areas of concern and apparent violations are addressed in the same order as in your letter dated October 23, 1989.

Regarding License No. SNM-142 areas of concern, personnel will be instructed to conduct a visual inspection of the area for uranium chips in addition to conducting a radiological survey when fuel rod handling operations are completed. Air sampling results will be recorded in microcuries per milliliter. For clarification, only one uranium chip has been found to date on the floor in the area of the glove box. In addition, removable contamination has never been found on the floor in the area of the glove box.

Corrective actions addressing License No. SNM-142 areas of concern will be implemented immediately.

Listed below are the actions planned to correct apparent violations of License No. 13-02812-04.

1. A graduate student was observed not wearing a laboratory coat in an area where phosphorous-32 was being used. In a subsequent discussion with Mr. Patterson, the record should indicate that this apparent violation occurred in Life Sciences Research Building, Room 233. To prevent a recurrence the following actions will be taken:
 - a. Initial training will emphasize that no work can be conducted with unsealed sources that present a risk of contamination without proper personal protective equipment (PPE).

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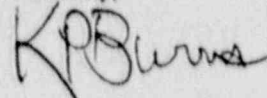
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- b. Routine laboratory audits conducted by the Department of Radiological and Environmental Management will assess compliance with PPE requirements. Lack of compliance will result in a notice of deficiency to the principal investigator. The response to the deficiency by the principal investigator will indicate what actions have been taken to prevent a recurrence. Recurring deficiencies will be addressed by the Radiation Control Committee.
 - c. All principal investigators and users will be notified in writing regarding this apparent violation and PPE requirements.
2. The inspector observed by-product material which was not in storage nor tended under the constant surveillance or immediate control of the licensee. To prevent a recurrence, personnel will be instructed that radioactive material shall be under constant surveillance or immediate control of laboratory personnel and that radioactive materials shall be secured against unauthorized use and theft. This will be accomplished as in Item 1 through training of new personnel, audits of laboratories, and notification of principal investigators and users.
 3. Certain users of radioactive materials failed to survey use areas during and following work with unsealed radioactive materials as required. A method of survey validation will be developed to assess compliance with this requirement. Once developed, new procedures will be implemented as in Item 1 through training of new personnel, audits of laboratories, and notification of principal investigators and users.

Regarding License No. 13-02812-04, implementation of the above actions should be sufficient to achieve compliance within the next cycle of routine laboratory audits (approximately one year). However, laboratories audited on a more frequent basis (i.e., quarterly) are expected to achieve compliance sooner. Training of new personnel will begin immediately, and principal investigators and users will be notified of the apparent violations by December 31, 1989.

We believe that the apparent violations observed are not representative of our program but only isolated occurrences. We will act to correct these areas to improve the Radiation Safety Program at Purdue University. If you should have any questions or concerns, please contact Dr. James F. Schweitzer at 317-494-2350.

Sincerely,



K. P. Burns
Vice President for
Physical Facilities

cc: Gordon Born, PhD.
Chairman, Radiation Control Committee
T. Grant Kepner,
Director, Safety and Security
Stuart Kline
Head, Radiological and Environmental Management
James Schweitzer, PhD.
Radiation Safety Officer