

# BATES COLLEGE



LEWISTON, MAINE

04240

FINANCIAL OFFICES

December 14, 1990

Mr. John D. Kinneman  
Chief  
Nuclear Materials Safety Section B  
Division of Radiation Safety & Safeguards  
475 Allendale Road  
King of Prussia, PA 19406

Subject: Routine Inspection No. 90-001  
License No. 18-01703-03, SNM-1266

Dear Mr. Kinneman:

In response to your November 20 letter to President Donald Harward, and it's attached list of violations in Appendix A, we have thoroughly discussed the items with the two radiation safety officers involved.

The College regrets that the six violations occurred, we are disturbed that we did not have in place safe guards to verify that the required safety procedures were being followed. Apparently no other individuals at the college except the Radiation Safety Officers for the Biology Department, Dr. Joseph G. Pelliccia, and Dr. George A. Ruff for the Physics Department, were aware of the routine testing procedures that were normally required, or the necessity to oversee uses made of low level radioactive materials outside the Carnegie Science Building.

There is another factor that may have caused a lack of attention by the individuals involved, in that from the period of 1987 through this current Fall of 1990, the College has just completed a new addition and renovation to the Carnegie Science Building. Dr. Ruff, as Chair of the Faculty Committee, was very involved in the plans for the new and renovated structure, and shortly after construction commenced, he went on a one year sabbatical in the 1989/90 year. Dr. Pelliccia was away in the 1986/87 year, and returned to resume his duties as Biology Radiation Safety Officer in August of 1989 following the departure of Dr. Blake Whittaker.

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The Commission has a very valid point as it relates to the large number of Physics Department sources that have not been used in some years. The inventory should be greatly reduced as they are not used in current programs. The College will direct the Physics Department Radiation Safety Officers to contact several licensed waste disposal services before January 15, 1991, and make preparations to safely remove all of the unused radioactive sources. Based on the results of these inquiries a plan for identification, and timetable for disposal will be developed and submitted to the NRC no later than March 15, 1991.

The College has reviewed the violations with Drs. Pelliccia and Ruff and we propose the following list of actions in response to the Commission's Notice of Violations:

Violation A, B - Condition 11.A - Use of material while not in presence of a license named person, and materials not in Carnegie Science Building.

Response A, B - The College proposes to request an amendment to License #18-01703-03 to add Dr. Thomas Lawson, Chemistry Assistant Professor, to the list of approved users, and that use be permitted in his laboratory Room 116, Dana Chemistry. The amendment request will be mailed before January 15, 1991.

Violations C - 10 CFR 20.201(b) Requirement for safety surveys under specific sets of conditions (re:) a refrigerator used to store radioactive material had been disposed of without the required safety survey.

Response C - The College had directed the Radiation Safety Officers to review with all listed users, prior to January 15, 1991, the complete requirements for surveys prior to disposal of any item that may present a radiation threat. In addition, from this point forward, the College Hazardous Waste Coordinator, Philip H. Meldrum (Plant Engineer) will become involved administratively to monitor the events and records.

Violation D - Condition 13(a)(1) - sealed sources shall be tested for leakage and/or contamination at least every six months.

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Response D - The College has directed the Radiation Safety Officers to maintain proper wipe-test records, including identification of sources currently in storage, and therefore not subject to wipe-test requirements. The College will henceforth require that timely reports of completion of wipe tests be sent to Philip H. Meldrum, Plant Engineer/Hazardous Material coordinator, who monitors and separately logs the completed reports and will take action to see that they be performed should an actual date be passed. These procedures will be in place by January 15, 1991.

Violation E - Condition 14 requires a physical inventory be taken every six months.

Response E - The College has directed the Radiation Safety Officers to comply with the Commission regulations and conduct physical inventories every six months as required. They will maintain records of said inventories and report completion and quantities to the Hazardous Material Coordinator, Philip H. Meldrum who will take action to see that the inventories are completed should an actual date be passed. The present inventory shall be completed by January 15, 1991.

Violation F - 10 CFR 19.11(a) and (b) require that specified parts of the license be posted and sub-part (c) requires that Form NRC-3 be posted.

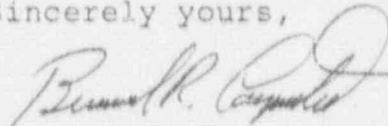
Response F - The College has directed that appropriate notice and forms delineated in 10CFR 19.11 (a)(b) and (c) be posted conspicuously in the corridors of the appropriate buildings adjacent to the rooms of use and/or storage. The Hazardous Materials Coordinator will monitor these postings, and see that they are completed prior to January 15, 1991.

As a further comment on the above violations, it is apparent that other persons on the Commission License for the Biology and Physics Departments have acted as Radiation Safety Officers when either Drs. Pelliccia or Ruff have been absent on sabbatical leave. The College, through the Office of the Dean of Faculty, will make certain that alternate, qualified individuals so named are fully informed of the many posting, monitoring, and survey requirements that are required of the Department Radiation Safety Officer.

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The College acknowledges the receipt of this letter and list of serious violations and will do all in its capacities to insure that these events do not occur again. We have proposed a list of responses for the Commission, and we will carefully monitor the time tables set forth by use of other administrative personnel. We respectfully await the Commission's acceptance or comments on the six responses.

Sincerely yours,



Bernard R. Carpenter  
Vice President for  
Financial Affairs &  
Treasurer

BRC/jg

cc: Donald W. Harward, President  
Joseph Pelliccia  
George Ruff  
Phil Meldrum  
Carl Straub