



THE CATHOLIC UNIVERSITY OF AMERICA

Office of the Executive Vice President  
Washington, D.C. 20064  
202-319-5252  
FAX 202-319-4492

December 21, 1993

U.S. Nuclear Regulatory Agency  
Washington D.C., 20555  
ATTN: Document Control Desk

Docket No. 030-008 <sup>638</sup> 38	License No. 08-02075-03
Docket No. 030-29138	License No. 08-02075-04
Docket No. 040-06329	License No. SUD-157
Docket No. 070-00190	License No. SNM-164

SUBJECT: REPLY TO NOTICE OF VIOLATION FROM ROUTINE INSPECTION  
NOS. 030-008<sup>638</sup>38/93-001, 030-29138/93-001, 040-06329/93-001, 070-00190/93-001

REFERENCE: (1) Letter and NOV, Mohamed Shanbaky, NRC Region I to  
Sr. Rosemary Donley, CUA dated November 24, 1993

Dear Mr. Shanbaky:

This letter and attachment comprise The Catholic University of America's response to the Nuclear Regulatory Commission's Notice of Violation sent from your Region I office on November 24, 1993 (REFERENCE 1).

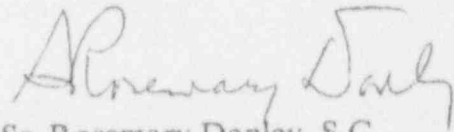
As requested within the text of the Notice of Violation, the University's response includes for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved.

December 21, 1993

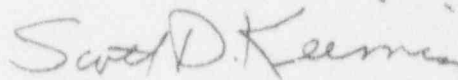
Also, please note that the University is requesting a severity level review and reclassification to level V for violation A, as is discussed in the attachment.

If you have any questions about this response or any other aspect of the University's safety programs, I would refer you to our Executive Director of Environmental Health and Safety, Dr. Scott Keimig who may be reached at 202-319-6112, or you may wish to contact directly our Radiation Safety Officer, Mr. Donald Luster, at 202-319-5206.

Sincerely,



Sr. Rosemary Donley, S.C.  
Executive Vice President



Scott D. Keimig, Ph.D., CIH  
Executive Director  
Environmental Health & Safety

cc:

Regional Administrator, Nuclear Regulatory Agency - Region I

Mr. Mohamed Shanbaky, Chief, RDS/DRSS, Nuclear Regulatory Agency - Region I

Mr. Donald Luster, Radiation Safety Officer, CUA

## REPLY TO NOTICE OF VIOLATION

### A. *Reiteration of Alleged Violation*

*Condition 11.B. of License Nos. 08-02075-03, SUD-157 and SNM-164 lists Warren Keene, Ph.D. as Radiation Safety Officer.*

*Contrary to the above, the licensee did not apply for and receive an amendment to change the Radiation Safety Officer. Specifically, Dr. Keene retired effective August 31, 1993 and the duties of Radiation Safety Officer have been assumed by Mr. Donald Luster.*

*This is a Severity Level IV violation (Supplement VI).*

(1) Reason for the alleged violation:

A draft letter had been prepared by the Environmental Health & Safety Department for submittal to NRC announcing this change in staff. However, because this draft did not contain the detailed descriptive information covering Mr. Luster's work experience with radionuclides, and other curriculum vitae thought required by the NRC to support such an appointment, the submission was delayed pending the receipt of this additional information.

(2) Corrective steps that have been taken and the results achieved:

An amendment request regarding Mr. Luster's appointment was submitted to NRC via certified mail on 9 November 1993. In a postcard dated 17 November 1993, the NRC acknowledged receipt of the amendment request and assigned the action Mail Control Numbers 118985, 118986, 118987, and 118988. The University has not yet been advised of any licensing action by the NRC as of this letter date.

(3) Corrective steps that will be taken to avoid further violations:

Future license amendment requests required for specific staff changes will be submitted in a more timely manner.

(4) Expected date of full compliance:

Full compliance with this deficiency will be achieved when the already submitted request for license amendments [reference item A.(2) above] is issued by the NRC.

## (5) Request for violation reclassification

For this violation, we respectfully request a reclassification to Severity Level V - violations that have minor safety or environmental significance. We believe this request reasonable based on:

- The stated reason for the violation
- The fact that Region I NRC representatives were in telephone contact with Mr. Luster during October 1993, in his capacity as new RSO, discussing CUA byproduct license renewal matters and CUA reactor decommissioning status.
- The fact that Mr. Luster had previously functioned as broad scope byproduct license RSO in his previous employment, thus assuring technical safety continuity during the very short period between 31 August 1993 and the date of the University's submittal of request for license amendment.

*B. Reiteration of Alleged Violation*

*Condition 19 of License Nos. 08-02075-03 requires that licensed material be possessed and used in accordance with the statements, representations, and procedures contained in your Radiation Safety Manual dated January 1980. Section 2.9 of that manual (also section 2.9 of the revised manual dated January 1992 referenced in Condition 13 of License No. SUD-157) requires that "...the RSO maintain a running inventory of all sources of ionizing radiation on the campus..."*

*Contrary to the above, at the time of the inspection the radiation safety office did not have a running inventory of sources of ionizing radiation.*

*This is a Severity Level IV violation (Supplement VI).*

## (1) Reason for the alleged violation:

The University's ionizing radiation source inventory system works as follows. The radiation safety office assigns a sequential inventory control number to each container of radioactive material received and enters it into a logbook. The authorized user of the material completes the inventory control form which accompanies the container. If a stock solution is prepared from the container, the authorized user sets up a supplemental inventory control sheet for each such solution.

The radiation safety office, for lack of time, is behind in the final reconciliation of these inventory usage sheets with the rad waste disposal log to create a running inventory.

- (2) Corrective steps that have been taken and the results achieved:

The new RSO has initiated an audit of this area in order to identify the root causes of noncompliance and then initiate the corrective actions necessary to restore and maintain compliance.

- (3) Corrective steps that will be taken to avoid further violations:

- (a) A written task instruction will be developed in order to proceduralize the steps necessary to maintain a running inventory.
- (b) The University will determine whether computer support would be appropriate to sustain the running inventory process.

- (4) Expected date of full compliance:

The radiation safety office will complete its audit and have corrective actions in place by 31 January 1994.

*C. Reiteration of Alleged Violation*

*Condition 19 of License No. 08-02075-03 and Section 1.1.2 of your Radiation Safety Manual require that the Radiation Safety Committee "periodically review the University Radiation Protection Program and recommend appropriate changes to the Executive Vice President."*

*Contrary to the above, the Radiation Safety Committee has not been performing periodic reviews of the Radiation Protection Program.*

*This is a Severity Level IV violation (Supplement VI).*

- (1) Reason for the alleged violation:

During the 1-3 November 1993 NRC inspection, a review of the Radiation Safety Committee minutes for CY 1992 and CY 1993 (to November) did not identify that a review had taken place. This is a management oversight which apparently has occurred because there was no mechanism, such as a checklist, to trigger the Radiation Safety Committee to perform this review for this specific license. One would note, however, the time frame of a "periodic review" has apparently not been established by the NRC in the license nor by the University in its Radiation Safety Manual.

- (2) Corrective steps that have been taken and the results achieved:

The Chair of the Radiation Safety Committee has been informed of this matter, and the entire notice of violation has been entered as an agenda item of the 14 December 1993 meeting of the committee. We would anticipate that an audit would be completed during the first quarter of 1994.

- (3) Corrective steps that will be taken to avoid further violations:

The Radiation Safety Committee will define the frequency of a "periodic review", and the radiation safety office will include this as a regular item on its checklist of commitments.

- (4) Expected date of full compliance:

The audit will be completed before the end of the first calendar quarter of 1994.

*D. Reiteration of Alleged Violation*

*Condition 19 of License No. 08-02075-03 and Section 2.2.6 of your Radiation Safety Manual require that all authorizations by the Radiation Safety Committee "shall terminate automatically at the termination date assigned, which normally will be two years from the first day of the month following approval."*

*Contrary to the above, authorizations 83-3 for Dr. Nardone, 86-3 for Dr. Rathod, 88-3 for Dr. Mullins and 90RAO.001 for Dr. Rao reviewed during the inspection did not contain specific termination dates. In addition, authorization 83-2 for Dr. Greene had*

*expired on June 30, 1985 and Dr. Greene continued to perform work utilizing radioactive material without a valid authorization.*

*This is a Severity Level IV violation (Supplement VI).*

(1) Reason for the alleged violation:

As stated in the Radiation Safety Manual, it is the responsibility of the authorized user to submit a timely request for extension of on-going programs. It is not clear, at this writing, why this system has worked in some but not all cases.

(2) Corrective steps that have been taken and the results achieved:

- a) All authorized user files have been pulled and are in the process of being reviewed. Those applications which require renewal will be returned to the authorized user along with a checklist allowing the user to confirm that (i) the particular work is no longer being performed, or (ii) the same work is being done, and (iii) otherwise update the application for subsequent review and approval by the RSO and the Radiation Safety Committee.
- b) A form letter has been prepared for use in announcing future user authorization actions of the Radiation Safety Committee, stating the approval date, announcing when the authorization will expire and actions necessary to avoid expiration.

(3) Corrective steps that will be taken to avoid further violations:

Individual user application files kept in the radiation safety office will be arranged by expiration date such that the RSO can readily determine the calendar quarter in which the user authorization expires. Approximately three months prior to the expiration date, the user will be notified in writing concerning the imminent expiration date, thus providing ample time for the renewal process to transpire.

In addition, an information notice summarizing the responsibilities of authorized users will be prepared by the radiation safety office and distributed to all authorized users along with the recently revised Radiation Safety Manual, following its anticipated approval in January 1994.

- (4) Expected date of full compliance:

The University will be in full compliance to this issue by 31 January 1994.

*E. Reiteration of Alleged Violation*

*Condition 18 of License No. 08-02075-03 authorizes the licensee to hold radioactive material with a physical half-life of less than 65 days for decay in storage before disposal in ordinary trash. 10CFR30.51 requires that licensees keep records showing the receipt, transfer, and disposal of by product material and that the licensee who disposed of material shall retain each record of disposal of byproduct material until the Commission terminates each license that authorizes disposal of the material.*

*Contrary to the above, the licensee did not have records of disposals pursuant to Condition 18 of License No. 08-02075-03 specifying that 1) the disposed of material containing only material with a physical half-life of less than 65 days, 2) that the material was held for a minimum of 10 half-lives, and 3) that before disposal, waste was surveyed to determine that its radioactivity could not be distinguished from background.*

*This is a Severity Level IV violation (Supplement VI).*

- (1) Reason for the alleged violation:

The assistant to the recently retired RSO confirms that the conditions specified for decay in storage disposal were observed. However, an inspectable summary form was not used.

- (2) Corrective steps that have been taken and the results achieved:

Byproduct material with a physical half-life less than 65 days being held for decay in storage will not be disposed of until a procedure and pertinent forms are devised to record the required information in a clear and inspectable format. Material currently in storage will be reinventoried using these forms. In addition, a hold has been placed on further disposal of hold for decay radioactive material until the procedure, check form, and training described below in part E.(3) is accomplished.



- (3) Corrective steps that will be taken to avoid further violations:

A written procedure to be implemented for disposal of hold for decay radioactive material will be prepared and used for future work in this area. Appropriate personnel will be trained by the RSO on the procedural requirements which among other items will entail the completion of a written form documenting completion of the requirements applicable to each disposal process. Since such disposals occur infrequently on our campus, records of disposal will be retained in a binder, allowing ready accessibility, rather than solely in computer files.

- (4) Expected date of full compliance:

The written procedure, written record forms, and the updated inventory of currently held for decay material will be completed by 28 February 1994. Thus, we will be in full compliance before disposing of any material now in hold for decay status.

*F. Reiteration of Alleged Violation*

*10CFR19.11(a) requires in part that licensee post a copy of the regulations in this part (Part 19) and Part 20, the license and amendments thereto, and operating procedures applicable to licensed activities. In lieu of the above requirement, 10CFR19.11(b) authorizes the licensee to post a notice which describes the document and states where it may be examined.*

*Contrary to the above, at each laboratory area inspected by the inspectors, the licensee did not post the required notice to permit individuals engaged in licensed activities to observe them on the way to or from the particular licensed activity location.*

*This is a Severity Level IV violation (Supplement V!).*

- (1) Reason for the alleged violation:

Page E-1 of the Radiation Safety Manual, which is attached to this correspondence, contains Appendix E entitled "Publications Available to Radiation Workers" which states in part E-1 "The below listed documents, required by 10CFR19.11 to be made available to radiation workers are available for inspection in the CUA Radiation Safety Office, located in Room B-18A Pangborn Hall" and then

proceeds to list the documents required as well as describing additional supporting documents not required to be made available but identified as being useful (see enclosed copy of Appendix E).

Since copies of the Radiation Safety Manual are distributed to all departments utilizing radioactive materials and authorized users, the University believed that the intent of this regulation, notification of the availability of these documents, had been met.

- (2) Corrective steps that have been taken and the results achieved:

A notice has been posted near appropriate user areas. This notice describes the documents available and states where they may be examined. Sufficient copies have been posted to permit individuals engaged in licensed activities to observe the notice on the way to or from the location of the particular licensed activity.

- (3) Corrective steps that will be taken to avoid further violations:

We have submitted a purchase order for lockable bulletin boards which will be installed for dedicated use by the Department of Environmental Health & Safety for these and other required regulatory postings.

- (4) Expected date of full compliance:

We are currently in full compliance.

*G. Reiteration of Alleged Violation*

*Condition 19 of License No. 08-02075-03 and Section 3.8.3 requires that the Radiation Safety Officer assure that surveys are performed in all CUA restricted areas at least once per month.*

*Contrary to the above, surveys of the restricted areas Pangborn B-18A and the Chemistry Building room 213 were not performed in September of 1992 or May of 1993; surveys of the Biology Building room 313 were not performed in February or April of 1993.*

*This is a Severity Level IV violation (Supplement VI).*

- (1) Reason for the alleged violation:

Due to a managerial oversight, these surveys were not performed.

- (2) Corrective steps that have been taken and the results achieved:

Individual checklists, listing the rooms requiring surveys in appropriate campus buildings, have been created. The list includes a "Date Surveyed" column and a "Comments/Results" column.

- (3) Corrective steps that will be taken to avoid further violations:

The completed checklists for each month will be posted in the RSO office so that a visual check of status can be readily made.

- (4) Expected date of full compliance:

We are currently in full compliance.