



UNIVERSITY OF MARYLAND AT COLLEGE PARK

GLENN L. MARTIN INSTITUTE OF TECHNOLOGY • A. JAMES CLARK SCHOOL OF ENGINEERING

November 17, 1995

Document Control Desk
U.S. Nuclear Regulatory Commission
Rockville, MD

SUBJECT: REVIEW OF HEALTH PHYSICS STAFF

RE: NRC INSPECTION No. 50-166/94-01

LICENSE No. R70

DOCKET No. 50-166

In response to a question that arose during our last facility inspection, enclosed is our Radiation Safety Committee's review of the University's health physics staff and an evaluation of our staff's ability to meet our regulatory responsibilities.

The staff in the Radiation Safety Office at that time included one senior Health Physicist and two junior Health Physicists along with two student assistants who worked at a level of approximately 1.5 person equivalents. In summary, the report found the HP staff to be working at full capacity with sufficient resources to meet all of our current regulatory obligations but unable to accept any expanded responsibilities.

During the development of this review, one of our three full-time HP professionals left the University. In fulfillment of its regulatory responsibilities, the University has committed the financial resources to search for and hire a suitable replacement to fill this staff vacancy. This replacement position will be upgraded to a senior level health physicist so that the full time staff will include two senior Health Physicists and one junior Health Physicist.

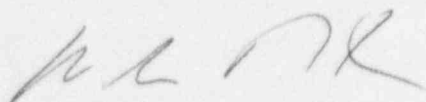
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If you have any questions regarding the status of this search, please contact Mr. Leon Igras,
Director, Department of Environmental Safety (301-405-3099)

Sincerely,



William Destler, Dean
A. James Clark College of Engineering

c.c. Dr. Aris Christou, Chairman, Department of Mat. and Nuc. Engineering, UMCP
Dr. Frank Munno, Chairman, Radiation Safety Committee, UMCP
Mr. Leon Igras, Director, Department of Environmental Safety, UMCP
Dr. Walter Chappas, Director, Nuclear Reactor, UMCP

Mr. Steven Holmes, USNRC
Mr. Tom Dragoon, USNRC
Mr. Seymour Weiss, UNRC

Review of the Radiation Safety Office Report of the Radiation Safety Subcommittee

Charge to the Committee:

The UMCP RSC should periodically perform and document, as part of at least one of the RSC meetings per year, a review of the effectiveness of the radiation protection staff in such areas as radiological work practices, work monitoring, procedural compliance and survey adequacy. A documentation of the review should be made a matter of record by incorporating evidence of this review into the RSC minutes.

Report of the Subcommittee:

In response to the charge, a subcommittee of the Campus Radiation Safety Committee was formed and instructed to conduct a review of the Radiation Safety Office (RSO). The members of the Subcommittee were Vincent Adams, Material and Nuclear Engineering, Alice Mignerey, Chemistry and Biochemistry, and Sherry Pike, Center for Environmental and Estuarine Studies, Horn Point. At the time the review was conducted the Radiation Safety Office consisted of three full time Health Physicists, one graduate student, and one undergraduate.

In order to gather the necessary data, the Subcommittee solicited the opinions and comments of the principal investigators authorized to use radioisotopes and/or radiation producing instrumentation. The users were asked to respond to the following questions:

- 1) Has Radiation Safety been providing the day-to-day service which you need to carry on your research?
- 2) Have the Radiation Safety personnel responded in a timely manner to any special requests for assistance and/or training?
- 3) Have you had any particular problems in dealing with the Radiation Safety Office?
- 4) Do you feel that the Office is capable of handling that BIG emergency?
- 5) Are there any issues which the Office should be addressing - current or future?
- 6) Have you ever been told by an inspector that your Radiation Safety Office is understaffed?

After a majority of the responses has been received, the Subcommittee met with members of the RSO to discuss the findings and hear their concerns.

In all 57 responses to the questionnaire were received. There was overwhelming satisfaction with the service the RSO is providing the researchers. Many praised the friendly, helpful nature of the staff and very few problems were noted. For example, one response said "I have to commend the personnel in this office. The nature of their job could be quite adversarial. However, even when they have found a problem...they have been extremely helpful and more important courteous".

There was concern over waste disposal and training. Several mentioned the timely nature of the volume of waste disposal and the space which the required containers take in small laboratories, but that is not within the purview of the RSO. A more substantive issue that the RSO might be able to assist with is the reduction of the volume of radioactive waste. This is a long term problem which involves the Campus and State and Federal regulators and will surely be an issue in the future. In regard to training, some thought that current radiation safety course was not offered in a timely manner, took too much time, or that the material covered was not relevant to their needs.

While most researchers were positive or neutral in their opinion of whether there is adequate staff to meet the needs of an emergency, a concern was voiced that there was not enough cross training or depth in the staff to be able to respond if someone was missing through vacation or illness. It was also pointed out that the staff is too busy performing its mandated duties to spend time working with faculty reviewing procedures and facilities to ensure the safest possible operations. The RSO is instead simply reacting to situations as they arise.

In the meeting with Radiation Safety Office personnel the shortage of trained personnel was discussed. The Office is being stressed to the point that they are unable to address any new initiatives or responsibilities which may be forthcoming without seriously affecting their day-to-day service to the Campus. Also, the current staff does not necessarily have the required expertise in these potentially new areas. The point of training appropriate for the users of isotopes for radiolabeling of compounds in chemistry, biochemistry and molecular biology was raised. Currently there is not sufficient staff to address this issue or create an additional training program.

In summary, the Subcommittee finds that the RSO is performing its assigned tasks in a friendly, efficient and timely manner. However, there is concern that this performance may erode should extra burdens be placed upon them and that they have insufficient time to work on any development or training initiatives.