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JAN 07 1991

University of Cincinnati
Office of the Senior Vice President
and Provost for Health Affairs
ATTN: Donald Harrison, M.D.
Senior Vice President and
Provost for Health Affairs
141 Health Professions Building
Mail Location 663
Cincinnati, OH 45267-0663

License No.: 34-06903-05
Docket No.: 030-02764
EA 91-01

Gentlemen:

This refers to the telephone conversation between Ms. Victoria Morris and Mr. W. J. Slawinski of this office on December 28, 1990, regarding arrangements for an enforcement conference between members of our respective organizations. This meeting is scheduled for 11:00 a.m. (CST), Friday, January 25, 1991, at the NRC Region III office at 799 Roosevelt Road, Building 4, Glen Ellyn, Illinois.

The purpose of this meeting is to discuss the findings of the inspection conducted at the University of Cincinnati during the period November 26, 1990 - December 14, 1990. The inspection identified 27 apparent violations of NRC requirements and several other areas of concern. An inspection report will be provided to you prior to our scheduled meeting and a summary of the apparent violations and concerns is enclosed for your review. Please be prepared to discuss the root causes and contributing factors for these violations and concerns and your corrective actions taken and/or planned to preclude recurrence of these violations and improve implementation of your NRC-licensed programs.

If you have any questions related to this meeting, please contact Mr. W. H. Schultz of this office at (708) 790-5526.

Sincerely,

ORIGINAL SIGNED BY C. E. NORELIUS

Charles E. Norelius, Director
Division of Radiation Safety and
Safeguards

Enclosure: As stated

cc w/enclosure:
DCD/DCB (RIDS)

bcc w/enclosure:
J. Lieberman, JE
J. Goldberg, OGC
R. Bernero, NMSS

C. Pederson, RIII
B. Benson, RIII
J. Calum, NMSS

RIII
WWS/gw
Slawinski/jl
1/3 /91

RIII
Lambert
1/3/91

RIII
Cameron
1/3/91

RIII
WWS
Schultz
1-3-91

RIII
Grobe
1-4-91

RIII
Norelius
1/4/91

EE07

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Summary of Apparent Violations

University of Cincinnati

License No. 34-06903-05

1. Failure to establish an adequate material control and accounting system capable of yielding accurate licensed material inventory data.
2. Exceeding licensee established hourly incinerator burn limits for certain isotopes.
3. Radiation Safety Committee approval of prospective authorized users who may not have met the minimum requirements for training and experience specified in the licensee's Authorized User Manual.
4. Failure to evaluate the disposal of licensed materials to the sanitary sewerage system.
5. Use of licensed materials by unsupervised laboratory workers.
6. Failure of individual authorized users to perform required lab surveys.
7. Failure of the Radiation Safety Office to audit all labs where licensed materials are used.
8. Purchase and receipt of licensed materials by researchers which exceeded the individually authorized purchase limit.
9. Failure to perform timely thyroid bioassays on individuals who use millicurie quantities of volatile radioiodines.
10. Failure to perform required surveys in all radiopharmaceutical preparation and administration areas on all dates of use at the Children's Hospital Medical Center.
11. Failure to complete exposure evaluations on at least 30 research lab workers who failed to submit their whole body and extremity personnel monitoring devices for vendor processing for the monitoring period between August 1 and 30, 1990.
12. Failure to instruct two Central Pharmacy employees who either receive incoming packages of licensed materials during off-hours and/or frequent the radioactive material receipt/storage area in the topics listed in 10 CFR 19.12.
13. Failure to properly instruct the individual who conducted incinerator operations in radioactive material burn limitations.

14. Failure to properly complete shipping papers for the transport of radioactive material.
15. Since August 1990, the Radiation Safety Office audits of labs and areas authorized for the use of licensed material failed to include verifications of radiation worker training, personnel monitoring or authorized user inventories.
16. Failure to leak test alpha emitting sources of licensed material for leakage and/or contamination at intervals not to exceed 3 months.
17. Failure to perform dose calibrator constancy checks on all days of use at the Children's Hospital Medical Center.
18. Failure to furnish timely reports of prior personnel exposure to radiation to those former employees who request such a report.
19. Evidence of eating and drinking, and the storage of food, in areas where radioactive materials are used and/or stored.
20. Failure to maintain complete brachytherapy source accountability records.
21. Failure to use a syringe shield while preparing patient doses of radiopharmaceuticals.
22. Failure to post the Xenon gas clearance time in the routine administration area of University Hospital.
23. Failure to label bags containing radioactive wastes for incineration to identify their contents.
24. Failure to label radioactive waste containers as required.

License No. 34-06903-09(Pool Irradiator)

Failure to properly instruct individuals who monitor the facility's low water and high radiation level alarms in the specific emergency response procedures and required actions.

License No. 34-06903-13(Veterinary Teletherapy Unit)

Failure to attend or otherwise restrict access to areas where individuals could receive more than 2 millirems in any one hour or 100 millirems in any seven consecutive days.

License No. SUD-265

Failure to evaluate the water moderator used in the subcritical assembly prior to its disposal to the sanitary sewer.

University of Cincinnati
Other Concerns

License No. 34-06903-05 (Broadscope)

1. Previous corrective actions not fully effective or timely.
 - a. 1989 protocol review commitments not met
 - b. Inventory and material accountability program development and implementation not timely
 - c. Personnel dosimetry program development and implementation not timely
 - d. Electronic purchasing program implementation not timely
 - e. Several repeat violations
2. Lack of Assistant RSO involvement in the program.
3. Staffing, communications and morale problems in the radiation safety office.
4. Overall management and maintenance of records is poor.

License No. 34 06903-09 (Pool Irradiator)

1. Pool low water and high radiation level alarm signals are not continuously monitored.
2. Emergency response call list is inaccurate.

License No. 34-06903-13 (Teletherapy Unit for Animal/Tissue Irradiation)

Elevated radiation levels in source shutter region.

SUD-265 (Natural Uranium Slugs as a Subcritical Assembly)

Lack of physical inventory/accountability program to account for the approximately 1400 uranium "slugs."

SNM-490 (PuBe Neutron Sources)

Calibration of neutron survey instruments does not adequately evaluate instrument response to both thermal and high energy neutrons.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

NOTICE OF SIGNIFICANT LICENSEE MEETING

Name of Licensee: University of Cincinnati

Facility: Cincinnati, Ohio

License No.: 34-06903-05

Docket No.: 030-02764

Enforcement Action No.: 91-01

Date and Time of Meeting: January 25, 1991, 11:00 a.m. (CST)

Location of Meeting: NRC Region III Office
799 Roosevelt Road
Glen Ellyn, IL 60137

Purpose of Meeting: To discuss NRC findings during a special inspection, the NRC Enforcement Policy, and the licensee's corrective actions.

NRC Attendees:

A. B. Davis, Regional Administrator
C. D. Pederson, Director, Enforcement and Investigation Coordination Staff
J. A. Grobe, Chief, Nuclear Materials Safety Branch
B. Berson, Regional Counsel
W. H. Schultz, Chief, Nuclear Materials Safety Section 1
W. J. Slawinski, Senior Radiation Specialist
K. J. Lambert, Radiation Specialist
J. L. Cameron, Radiation Specialist

Licensee Attendees:

D. Harrison, M.D., Senior Vice President and Provost for Health Affairs
C. Kupferberg, Associate Senior Vice President, Medical Center and Associate Dean, College of Medicine.
J. Lessard, Ph.D., Chair, Radiation Safety Committee
V. Morris, Radiation Safety Officer
J. Wesnes, General Counsel

NOTE: Attendance by NRC personnel at this Region III licensee meeting should be made known by 11:00 a.m., (CST), January 23, 1991, via telephone call to W. J. Slawinski, FTS 388-5618.

See Attached Distribution

Distribution:

- J. H. Sniezek, Deputy Executive Director for Nuclear Reactor Regulation, Regional Operations, and Research, EDO
- H. Thompson, Deputy Executive Director for Nuclear Materials Safety, Safeguards and Operations Support, EDO
- J. Lieberman, Director, Office of Enforcement
- J. Goldberg, Deputy Assistant General Counsel for Enforcement, Office of the General Counsel
- R. M. Bernero, Director, Office of Nuclear Materials Safety and Safeguards
- R. E. Cunningham, Director, Division of Industrial & Medical Nuclear Safety, NMSS
- J. Glenn, Chief, Medical, Academic and Commercial Use Safety Branch, NMSS