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MS 18
P9

October 23, 1985

Edwin A. Wurtz, PhD
Nuclear Materials Safety Section J
Division of Radiation Safety and Safeguards
631 Park Avenue
King of Prussia, PA 19406

Reference: Mail Control No. 103997

Dear Dr. Wurtz:

Since our original application of June 18, 1985, our program has been revised so that we are applying for only a maximum of 20 μ Ci of P-32 and S-35, 10 μ Ci of I-125 and 250 μ Ci of tritium. Other submissions included in that letter remain the same.

Replies to the individual questions in your letter of August 7, 1985 are as follows:

1. Prior to receiving any radioactive materials at this location, any personnel having access to the laboratories where radioactive materials will be handled or stored will be informed of the nature and extent of the hazards involved. This will be done by both written instructions as well as a group meeting and will include secretarial, janitorial, security, safety and stockroom personnel. A yearly review will be held and documented.
2. We have an Eberline Model E-140 survey meter which we will calibrate on a monthly basis in our own facilities using an appropriate reference source purchased from New England Nuclear. The sensitivity of our meter is 0.02 mR/hr.
3. An outline of the laboratories was provided in our memo of June 18, 1985. All fume hoods in our facility are rated at a minimum of 100 cfm and will be checked at least monthly by laboratory personnel. Our materials receipt area is located in room 312 on the map provided 6/18/85. Wastes will be stored in the laboratory under professional care prior to disposal.
4. For the quantities we will be handling we do not deem personnel monitoring to be necessary. However, if the Commission insists on monitoring we will use the services of ICN Biomedicals, 26201 Miles Rd. Cleveland, OH 44128 as a source of badges and for reading the films.

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5. We will not be performing iodinations at this facility but instead will purchase antibodies to which I-125 is covalently bound. Monomers containing P-32 and S-35 will also be purchased for DNA studies.
6. Surveys using our Eberline meter will be conducted after each use of radioactive materials and when any residual is found a wipe test will be conducted and read. General surveys of the laboratories, storage and waste areas will be conducted weekly. All data will be recorded in a laboratory notebook maintained for this purpose.
7. This is not applicable since we will not be performing any iodinations or tritium labelling experiments. All chemicals will be purchased from a supplier as outlined in 5 above.
8. Our in-house safety program requires use of protective labcoats and gloves when handling any chemical materials. Eating, drinking and smoking is not allowed in the rooms where these materials will be handled, and pipetting by mouth is forbidden by our safety regulations. Radiation signs will be placed on the rooms and storage areas.
9. All spills will be cleaned up with appropriate wipe material and water or solvent as necessary. Wipe tests on the affected areas will be run and data recorded in the laboratory record book.

The radiation protection officer's name is Warren W. Harple 203-271-4285 (office) or 203-239-0812 (off-hours).

10. Due to the small quantities of material we will use at any one time, we anticipate that all wastes will be diluted to exempt quantity status, as determined by test, and disposed of through our normal laboratory waste program for solvents and chemicals. It is against group policy at Olin to dispose of any chemicals to the laboratory sewage system.
- 11/ All materials will be ordered from standard licensed supply
12 houses. Upon receipt in our stockroom either Raymond J. Thomas or Warren W. Harple will conduct a survey of the packages, including wipe tests on the container, and will personally transport the material to the appropriate laboratory. Non-technical stockroom people have been instructed (and this will be reinforced) not to open packages or to deliver them beyond the receiving area prior to notification of R. J. Thomas or W. W. Harple. No material will be ordered without approval of R. J. Thomas or W. W. Harple guaranteeing that the levels will not exceed our license and all records of materials and inventory will be maintained in a separate laboratory notebook by these people. Stored materials are always kept in locked refrigerators.

13. Total inventories are conducted every six months. Receipt and disposal of materials are recorded in the inventory records book and survey/wipe test data are recorded in a separate book maintained for this purpose.

Robert N. Scott

WWH

Robert N. Scott, PhD
Assoc. Dir. of Research

RNS/gmc

APPENDIX 2

Checklist of pertinent items to be fulfilled before report to be filed with any Governmental Agency is issued:

REPORT NAME: Amendment to By-Product Material License
Grant # S0916
REPORT FORM #: N/A
AGENCY: U.S. Nuclear Regulatory Comm.

I) PREPARER

I have the proper authorization, granted by the signer, to prepare this report and have initialed the original document.

W. W. Harple
Name (printed)

WW Harple
Signature

Name (printed)

Signature

II) SIGNER

I have the proper Grant of Authority to sign this report:

Robert N. Scott
Name (printed)

Robert N. Scott
Signature

Name (printed)

Signature

III) CONTROL PERSON

According to the available documentation, I state that the prescribed procedure has been followed and all Grants of Authority are in order.

Ruth H. Ford
Control Person (printed name)

R. H. Ford
Control Person (Signature)