

**Veterans
Administration**

NOV - 8 1985

In Reply Refer To: 526/115

Nuclear Materials Safety Section
Nuclear Regulatory Commission Region I
631 Park Avenue
King of Prussia, PA 19406


SUBJ: Amendment to License No 31-00636-07

1. This is a request for amendment of the Material License of this facility as follows:

Condition 12:

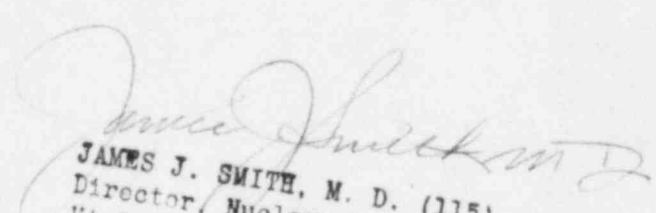
Add Dr. Kenneth Sterling for in-vitro use of ^{35}S . A research protocol summary is attached for Dr. Sterling whose pertinent training records are already on file with the Commission.

2. The enclosed application has been reviewed and approved by the Radioisotope Committee of this facility.


K. L. MULHOLLAND, Jr.
Medical Center Director

Enclosure

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REG1 LIC30
31-00636-07 PDR


JAMES J. SMITH, M. D. (115)
Director, Nuclear Medicine Service
VA Central Office
Washington, D.C. 20420

To: Radioisotope Committee

^{35}S usage planned by Dr. Sterling and colleagues

I. All work will be done in the Protein Research Laboratory, and will consist of in vitro studies on isolated cells, cell homogenates, etc. The forms of the label would include GTP, ATP, and methionine for incorporation into protein, as well as studies on cellular metabolism. Dr. Sterling, the principal investigator, has previously been licensed by the AEC to possess up to 3 mCi of ^{35}S , including human usage in vivo. In the present application, we expect to use less than 20 microcuries in each experiment, and not more than 20 experimental studies per month. Therefore, 1 mCi is adequate for the total amount we would want to have on hand at any one time. No special problems or hazards are evident.

II. Procedures to be followed in storage of materials.

All materials will be kept in shipping containers, and stored in the refrigerator, which is located within our locked laboratory, along with all other radiochemicals.

III. Isotope handling procedures to be followed.

The procedures employed will be the same as used with our other beta-emitters, namely ^{14}C and Tritium, which are employed on an occasional basis in this lab. The same records of receipt and disposal of all radionuclides will be kept as previously. No containers will ever be left exposed on laboratory benches, but will be taken out of the refrigerator only for use by the personnel involved. The usual monthly wipe tests will be done.

IV. Dr. Sterling has been authorized to use this isotope under his AEC license #31-1013-1, including in vivo human usage, and a total amount of 3 mCi. Milton A. Brenner, M.S. has kept records of isotopes for the Protein Research Lab for about two decades. Joseph M. Backer, Ph. D. has had extensive experience in the use of ^{35}S over the course of his work at the Columbia University Cancer Center, and he will be working closely with Dr. Sterling and Mr. Brenner.

V. Dr. Sterling is responsible for supervision and compliance with the Center's NRC license. Any new personnel who may work in the laboratory will be directly responsible to Dr. Sterling, and will be carefully instructed in all our procedures.


KENNETH STERLING, M. D.

10/7/85