



**New  
England  
Aquarium**

Central Wharf  
Boston, Massachusetts 02110  
(617) 742-8830

17 February 1984

Division of Fuel Cycle and Material Safety  
Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Dear sirs:

We request that Byproduct Material License No. 20-12743-01 be renewed and amended as follows:

Line #2:

Change the applicant's name from "Sea Farm Research Foundation, Inc." to "New England Aquarium, Inc.". This request reflects a change in title only, and does not signify a change in status or use of radioactive material at the Edgerton Research Laboratory, New England Aquarium. The New England Aquarium has been the only actual site of radioisotope use for the last 6 years and was then designated as the only authorized site of radioisotope use under Amendment No. 9 (15 Feb 1983) to License No. 20-12743-01. Sea Farm Research Foundation was a private foundation headed by Guy C. McLeod, then Director of Research, Edgerton Research Lab, New England Aquarium. Foundation activities were run in conjunction with the operation of the Edgerton Research Lab. Mr. McLeod died suddenly in March of 1983. Sea Farm Research Foundation, consequently, has been liquidated. Since the New England Aquarium has been the only actual site of radioisotope work for a number of years, we are requesting this change in "Applicant's Name".

Line #6:

Delete the names of Guy C. McLeod and Kenneth Kustin from the list of individuals who will use or directly supervise the use of licensed material. Add Joseph R. Geraci to this list. The inclusive list will therefore include only Drs. William E. Robinson and Joseph R. Geraci. Qualifications of both individuals are included in Sections 16 and 17.

Line #8:

In addition to the radioisotopes listed in Amendment 9 to our license, make the following additions or changes:

- a) delete cesium-134; add cesium-137. Cesium-137 is contained in a sealed source, installed as an internal standard in

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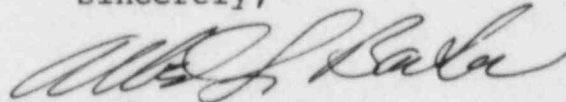
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our Beckman LS-100C liquid scintillation counter.

- b) add nickel-63. This isotope is present as a foil strip, installed as an internal standard in our Perkin Elmer Model 3920 gas chromatograph. This isotope was inadvertently dropped from our list of authorized licensed material in Amendment 8, issued 26 Feb 1979.
- c) add lead-210 and hydrogen-3. These isotopes will be used in our studies of metal uptake and transport in bivalve molluscs, under the direction of Dr. William E. Robinson.
- d) add iron-59, chromium-51 and iodine-125. These isotopes will be used in experiments on iron anemia and blood volumes in the bottlenose Dolphin, Tursiops truncatus, under the supervision of Drs. Joseph R. Geraci and William E. Robinson.

The elements listed under Item 8 of this application are therefore the inclusive list of elements which we require authorization to utilize.

Sincerely,



Albert J. Barker  
Senior Research Administrator  
Edgerton Research Laboratory

AJB:cmc

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