

93-323

Earlham
COLLEGE

Scroggins

cys: Taylor
Sniezek
Thompson

August 17, 1993

Blaha
Turdici

James M. Taylor
Executive Director for Operations
Nuclear Regulatory Commission
Washington DC, 20555-0001

Dear James Taylor:

On returning from Sabbatical and summer vacation I have received notice that under the new license fee policy, we will be assessed an annual licensing fee of \$5720. This is well in excess of our total departmental budget, and so is clearly unpayable by us. Even if we qualify as a small scale user, our total fees will be \$1800 per year, and clearly not worth the few experiments which we do each year with our licensed sources. These experiments, though modest, represent the only activities in which our students experience radioactive decay and some aspects of nuclear structure. In the August 6 communication which I have received, I note that we have until November 17 to request exemption from the annual fees, and that even if our request is denied, we shall be given the opportunity to withdraw our license without penalty. This is obviously our best strategy.

The reasons for exemption which might apply to us have to do with the relation of the assessed fees to the actual cost to the NRC to maintain our license. I believe that I can make a good case that our license costs to the NRC are minimal, but I do need some guidance with regard to the actual filing of a request for an exemption. (I find the statements in item 171.11 are somewhat vague in this regard.) Let me outline our program to you informally, and ask that you let me know if our case has merit, and if so, how best I should proceed.

Earlham College is a liberal arts college of about 1000 students, about 25% of whom are likely to encounter advanced courses in physics and chemistry. Earlham employs about 250 people, and has an operating budget of about \$10 million. The radioactive sources which we have licensed are only used in advanced laboratory courses as part of instruction. Nearly all maintenance and testing of the sources is carried out by the physics department, which has invested a total of about \$8000 over the years in test and detection equipment. The total physics department budget for educational equipment and supplies is less than \$4500 per year. A brief listing of our sources is on the next page.

9404280212 940418
PDR ADCK 03000699
C PDR

Here is a brief listing of the sources which we have licensed, and their uses:

One 2 Curie Plutonium source as part of a Pu-Be neutron source. The neutron source is used for the production short-lived radio isotopes of such elements as Iodine, Indium, Silver and Copper. Students use these isotopes to study the laws of radioactive decay, neutron activation cross sections, and internal nuclear energy-level structure.

One $< 1 \mu\text{C}$ plated plutonium sources, for wipe-test calibration.

One 3 mC Cesium 137 source used in a Compton Effect experiment.

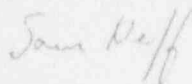
One 3 mC Cobalt 60 source, presently in storage

One 50 μC plated nickel-63 source which is part of a electron ionization detector in a gas chromatograph, used for quantitative analysis in several chemistry courses.

As you can see, these sources require very little maintenance beyond semi-annual wipe tests. The only significant expense that I can envision in the future would be associated with their disposal. The only cost to the NRC involves the license renewal which occurs every five years, and occasional inspections. We also receive a considerable volume of mail from NRC, only a small part of which is relevant to our operation. I would estimate the yearly NRC cost to be less than 1/10 of even the small-operation annual fee of \$1800.

Please let me know if my assessment of the situation is accurate, and if so, what sort of documents I should submit in making a request for exemption. If our case is not reasonable, then we shall ask to withdraw from the licensing program.

Sincerely yours,



Samuel H. Neff
Professor of Physics and Radiation Safety Officer
Earlham College
Richmond, IN 47374-4095
(317)-983-1518

[F2] - Data entry completed, Esc - Cancel data entry, Ctrl-U - Undo last change

=====

OAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
° OFFICE OF THE CONTROLLER °
° CORRESPONDENCE TRACKING SYSTEM °
AAAAAAAAAAAAAAAAAAAAAAAAAAAAA

Item Number	Author	Originating Office	Receipt
OC-93-323	S. NEFF		J. TAYLOR
Document Date	Original Due Date	Current Due Date	EDO Control Number
8/17/93	12/31/93		N/A

Subject: EARLHAM COLLEGE -- EXEMPTION REQUEST

Assigned to:	Date Completed	Date Signed
DAF		

=====

Handwritten signature/initials: A S LF

50th Nov 93 AM 11:23 PM 4:05