

EARLHAM

C O L L E G E

Fax to: 630-515-1078; attn Frank Tran
Mail Control No. 612056

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From: 765-983-1691 (FAX)

June 13, 2019

Materials Licensing Branch
U.S. Nuclear Regulatory Commission, Region III
2443 Warrenville Rd, Suite 210
Lisle, IL 60532-4352

Attn: Frank Tran

Dear Frank Tran,

This e-mail concerns Earlham college's recent application for an amendment to NRC license 13-05737-01.

We recently (April 24, 2019) requested that Patrick Barber replace me (John Howell) as RSO. Your response pointed out that Patrick was not properly trained to use our sources, so was not qualified to become RSO.

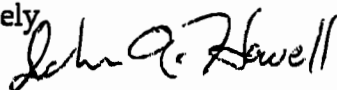
Training Patrick to use all our sources seemed impractical, especially since we were no longer interested in most of the experiments that used those sources. However, Earlham's situation has now changed. This afternoon all our registered sources were removed except the PuBe in the neutron howitzer. (We will officially notify the NRC of that change in a subsequent amendment.) Since we would like to keep our license current, we are wondering whether we could do so by keeping our PuBe source and training Patrick to use it. Would doing so allow the NRC to name him as RSO?

In particular, the experiment involving the PuBe source uses that source's neutrons to irradiate a sample of a stable isotope (usually indium, sometimes silver or another element), thereby creating an unstable isotope with which students can study radioactive decay rates. Exposing the sample for different lengths of time lets students investigate how the amount of induced radioactivity depends on exposure time. Using the PuBe source in this experiment is very simple: placing the stable isotope in the howitzer, raising the PuBe source to the position to irradiate the source, lowering the source after a prescribed time, and then removing the sample and closing the howitzer.

Would training Patrick to use the PuBe qualify him to serve as RSO? If so, what would NRC consider to be sufficient training and experience for Patrick?

If this is not an acceptable route to maintaining our license, we submit the following letter (as you suggested) to have Patrick named simply to oversee our radiation safety program.

Sincerely



John A. Howell, current RSO for Earlham College.

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Lisle, IL 60532-4352

Attn: Frank Tran

Dear Frank Tran,

This letter concerns an application for an amendment to NRC license 13-05737-01.

Licensee is Earlham College
 801 National Rd. West
 Richmond, IN 47374-4095

The person to be contacted about this application is John Howell (current RSO); contact can be made at (765) 983-1670 or jhowell@earlham.edu. John's snail-mail address is

John Howell
Earlham College Drawer 138
801 National Rd. West
Richmond, IN 47374-4095

We recently (April 24, 2019) requested that Patrick Barber replace John Howell as Earlham's RSO, since John is leaving Earlham. Your response pointed out that Patrick was not properly trained to use our sources, so was not qualified to become RSO. Since Earlham would be without an RSO, you suggested that we keep all our registered sources in storage pending disposal, and request that Dr. Barber be listed on our license not as RSO, but as the individual with oversight of our radiation safety program. This letter official requests that our license be amended according to your suggestion, viz.

Earlham College will keep its registered sources in storage pending proper disposal, and while awaiting disposal, Dr. Patrick Barber be listed on our license as the individual with oversight of Earlham's radiation safety program.

Sincerely,  John A. Howell, current RSO for Earlham College.

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E-mail: jhowell@earlham.edu