

**From:** [Ullrich, Elizabeth](mailto:Ullrich.Elizabeth)  
**To:** [acheh@american.edu](mailto:acheh@american.edu); [bowman@american.edu](mailto:bowman@american.edu)  
**Subject:** your NRC license application  
**Date:** Wednesday, July 25, 2012 2:16:00 PM

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LN 08-08371-06  
DN 030-38560  
Control No. 577838

Dr. Cheh and Ms. Bowman,

I've reviewed your license application, and overall, it is very good. I have two issues to discuss with you:

1. I need to do a pre-licensing visit to your facility before I can issue a license. Please contact me to set up a date for this.
2. You provided us with your Radiation Protection Program Plan. With a few exceptions, this is really good information. However, it contains a level of detail that is not required by our guidance; if I list this document in the list of license commitments on your license, any changes that you need to make will require you to amend your license. Based on your use of the Appendix C application form from NUREG-1556, Vol 7, the only sections of the RPP Plan that would need to be referenced are Sections 5.3, the description of your training program, and 5.8, your description of your instrumentation. Most of the other sections address issues for which you are only required to commit to develop, maintain, and implement procedures that meet our Appendices criteria; for these, your RRR Plan descriptions are good, and should be available for inspection; but I don't think you need them as license commitment. You can either request that Appendix D be retracted, and provide me copies of Sections 5.3 and 5.8 separately, or I could list on the license "Letter dated July 2, 2012, with attachments A, B, C, and Attachment D, Sections 5.3 and 5.8 only"
3. Some minor questions/issues:
  - Attach C lists locations in Hurst and Beeghly; Attachment D.8.2 also mentions a loading dock, but does not list on which building it is located. If you consider the loading dock a place of use or storage, please give me a building name or address.
  - Attachment D refers to sealed sources; at the moment you are not requesting any for this specific license, correct?
  - Attachment D, Section 5.4.4 contains some incorrect numbers, and these should be corrected whether or not you have Att D listed as a license commitment. Specifically, the ALI for C-14 is 2 E+6 microcuries only for CO; it is 2 E+5 for carbon dioxide and 2 E+3 for all other C-14 labeled compounds. Your documents states that the value of 10% of the ALI for C-14 is 200,000 microcuries, but that would be correct on for carbon monoxide. Similarly, the 10 % value of 1000 microcuries listed for S-35 (listed as S-25) is only correct for S-35 in vapor form
  - Attachment D, Section 5.12 states that securing a copy of the

recipient's license is recommended; please note that 10 CFR 30.41(d) has specific requirements for the documents you must have in order to transfer licensed materials. (either a copy of the license or a statement from the transferee containing certain information, and some other alternates. Please note that this regulation is undergoing rulemaking and requirements may change shortly.)

- Attachment D section 5.14.2 lists records which must be retained until license termination.

- Attachment D, 8.5 shows a DIS half-life storage duration to be 10 half-lives. Please note that the NRC no longer requires that DIS be held for 10 half-lives, but may be released earlier if the surveys cannot detect any radiation levels above background. A revised license condition will be on your license.

I can be reached by telephone 610-337-5040 or email [Elizabeth.ullrich@nrc.gov](mailto:Elizabeth.ullrich@nrc.gov) to discuss these items. I will be out of the office on Friday 7/27.

Thanks,  
Betsy

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