

Wilson, Scott

From: Wilson, Scott
Sent: Tuesday, December 22, 2015 2:56 PM
To: 'damaris.santiago1@upr.edu'
Cc: Ullrich, Elizabeth
Subject: UNIVERSITY OF PUERTO RICO, REQUEST FOR ADDITIONAL INFORMATION
CONCERNING APPLICATION FOR AMENDMENT TO LICENSE, CONTROL NO. 589049

Docket No. 03014313
License No. 52-10510-04
Control No. 589049

Damaris Santiago
Radiation Safety Officer
University of Puerto Rico
Mayagüez Campus
Health and Safety Office
P.O. Box 9050
Mayagüez, Puerto Rico 00681-9050

SUBJECT: UNIVERSITY OF PUERTO RICO, REQUEST FOR ADDITIONAL INFORMATION
CONCERNING APPLICATION FOR AMENDMENT TO LICENSE, CONTROL NO. 589049

Dear Damaris Santiago:

This is in reference to your application dated September 29, 2015, requesting renewal of Nuclear Regulatory Commission License No. 52-10510-04. In order to continue our review, we need the following additional information:

1. Item 2 of your application states the mailing address for the license is "Call Box 9000;" however, the mailing address on your current license is P.O. Box 9050. Please clarify this discrepancy.
2. We identified a discrepancy in the spelling of the University Chancellor's name, where it is spelled "John Fernandez-Van Cleve" on the application (NRC Form 313) and in section "A" of the application; however, the spelling in section "B" of the application is "John Fernandez-Van Cleave". Please respond with the correct spelling.
3. Item 3 of your application, "Address where licensed material will be used or possessed," did not include "College Station, Mayagüez." This location is listed as a location of use on your current license. Please either state that this location is to remain on the license or provide evidence that the location is acceptable for unconditional release in accordance with 10 CFR 30.36.
4. Item 8 of your application, "Training for Individuals working in or frequenting restricted areas" states the requirements for personnel training prior to use of radioactive materials. NUREG-1556, Volume 7, Section 8.8, states that the applicant must provide a description of the radiation safety training program including the frequency of training. Please provide the frequency of refresher training for individuals working in or frequenting restricted areas.
5. Item 11 of the application, regarding radioactive waste decay-in-storage, states that "Ten half-life spans must pass in order to consider the waste as non-radioactive."

- a. Item 11 of NUREG-1556, Volume 7, states that such waste may be disposed of as ordinary trash if radiation surveys of the waste at the end of the holding period indicate that radiation levels are indistinguishable from background. Please verify that the University will perform radiation surveys of waste material and that radiation levels will be indistinguishable from background prior to discarding any material as non-radioactive trash.
 - b. The NRC will allow radioactive waste with half-lives of less than or equal to 120 days to be held for decay-in-storage for a period of time less than 10 half-lives, as long as a survey is performed at the end of the holding period as described above, and the radiation levels are indistinguishable from background. Confirm if you wish to change your procedure so that you do not have to hold the waste for 10 half-lives as specified in your application.
6. Section 9, Item 2 of your application states that “Dosimetry will be required whenever the RSO deems it necessary.” Please provide a response to NUREG-1556, Volume 7, Section 8.10.4, “Occupational Dose,” which states that the applicant must provide either:
- a. A statement that: “We have done a prospective evaluation and determined that unmonitored individuals are not likely to receive, in 1 year, a radiation dose in excess of 10 percent of the allowable limits in 10 CFR Part 20,” or “We will monitor individuals in accordance with the criteria in the section, ‘Radiation Safety Program—Occupational Dose’ in NUREG-1556, Volume 7, Revision 1, ‘Consolidated Guidance about Materials Licenses: Program-Specific Guidance about Academic, Research and Development and Other Licenses of Limited Scope;” or
 - b. A description of an alternate method for demonstrating compliance with the referenced regulations.
7. If licensed materials are to be used in animals, please submit:
- a. a description of the animal housing facilities,
 - b. a description of the training that will be provided to individuals caring for animals containing licensed materials, and
 - c. a copy of the instructions provided to animal caretakers for handling of animals, animal waste carcasses, and cleaning and decontamination of animal cages.

Appendix H of NUREG-1556, Volume 7 addresses considerations for laboratory animal uses and may be helpful to you in developing a response.

8. 10 CFR 20.2003(a)(1) requires that a licensee may discharge licensed material into sanitary sewerage if the material is readily soluble (or is readily dispersible biological material). Information Notice 94-07 (enclosed) provides methods for determining compliance with this requirement which are acceptable to the U.S. Nuclear Regulatory Commission.

Please review Information Notice 94-07 and provide specific information as to how you will assure that your releases to the sanitary sewerage system will meet the solubility criteria in 10 CFR 20.2003(a)(1). If you wish, you may indicate that you will use one of the methods described in Information Notice 94-07 (web-link below). Otherwise, describe your alternative methodology including the models, calculations, analytical techniques, and quality control measurements as well as the records that will be maintained. In addition, provide calculations to show compliance with 10 CFR 20.2003(a)(2)(3)(4) and confirm that records will be maintained of all disposals made into the sanitary sewage system.

9. Section B.3.2 of the University's "Radiation Safety Regulations Manual" provided with your application states that the RSO will perform an inventory at least once per year. Condition 16 of your license requires an inventory of sources every six months. Confirm that you will perform an inventory every six months and describe how you will ensure that you will not exceed your possession limits if you are conducting an inventory of unsealed material only once a year.

Current NRC regulations and guidance are included on the NRC's website at www.nrc.gov; select **Nuclear Materials; Med, Ind, & Academic Uses**; then **Licensee Toolkits, see our toolkit index page**. You may also obtain these documents by contacting the Government Printing Office (GPO) toll-free at 1-866-512-1800. The GPO is open from 8:00 a.m. to 5:30 p.m. EST, Monday through Friday (except Federal holidays).

We will continue our review upon receipt of this information. Please reply to my attention at the Region I Office and refer to Mail Control No. 589049. **You may respond via e-mail with a written, signed and scanned document in pdf format if you find it more convenient.** You may also respond via facsimile to 610-337-5269, or via U.S. Mail to Division of Nuclear Materials Safety, US Nuclear Regulatory Commission Region I, 2100 Renaissance Boulevard, Suite 100, King of Prussia, PA 19406-2713. If you have any technical questions regarding this deficiency letter, please call me at (610) 337-5136.

If we do not receive a reply from you within 30 calendar days from the date of this letter, we will assume that you do not wish to pursue your application.

Sincerely,
Scott Wilson
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Commercial, Industrial, R&D, and Academic Branch
Division of Nuclear Materials Safety
US Nuclear Regulatory Commission Region I
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Enclosures: Web-Link to Information Notice 94-07:

<http://www.nrc.gov/reading-rm/doc-collections/gen-comm/info-notices/1994/in94007.html>