From: Wilson, Scott

To: tongson@ccsu.edu

Subject: Request for Additional Information; NRC License Renewal Application; MC583410

**Date:** Thursday, March 27, 2014 2:51:00 PM

Importance: High

Luis Tongson, Ph.D.
Radiation Safety Officer
Central Connecticut State University
Physics and Earth Sciences Department
1615 Stanley St.
New Britain, CT 06050

License No.: 06-16975-01 Docket No: 03012001 Control No: 583410

## Dr. Tongson,

This message pertains to our review of your application for renewal of NRC License No. 06-16975-01, dated February 25, 2014. Please note that the NRC has developed guidance for licensee's regarding the license application process. Before you answer the following request for information, note that it may be more efficient to complete a revised application using NRC Form 313, "Application for Materials License," and Appendix C to NUREG-1556, Volume 7, "Consolidated Guidance About Materials Licenses, Program-Specific Guidance About Academic, Research and Development, and Other Licenses of Limited Scope." The document may be accessed from the NRC web site at <a href="https://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1556/v7/">https://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1556/v7/</a>. Otherwise, you may simply provide a revised NRC Form 313, and attach answers to the applicable questions below on a separate page.

In order to continue our review of your application, we need the following information:

- 1. Your application should be signed by a management representative or an individual who has been granted the authority by management to sign on behalf of the licensee. Please confirm that you are a management representative, that management has given you the authority to sign on behalf of the licensee (and provide a signed delegation of authority, or submit a letter signed by a management representative indicating that management has reviewed the application and concurs in the statements and representations contained therein. Note also that a management representative or designee should sign all future correspondence that requests a change in your license.
- 2. 10 CFR 30.32(g) requires, in part, that an application for a specific license to use byproduct material in the form of a sealed source must identify the source or device by manufacturer and model number. Please provide this information for the sealed sources requested in your application.
- 3. In your application, your name is Luis Tongson; however, our records indicate Luisito Tongson, Ph.D. Please clarify this discrepancy.

- 4. In your application, you are identified as the authorized user and radiation safety officer. Provide a brief resume of the training and experience of each person who will directly supervise the use of material (including yourself), who will use material without supervision, or who will have responsibility for radiological safety. The resume should include the type (on-the-job or formal course work), location, and duration of the training. Training should cover (a) principles and practices of radiation protection, (b) radioactivity measurements, standardization, and monitoring techniques and instruments, (c) mathematics and calculations basic to the use and measurement of radioactivity, and (d) biological effects of radiation. The description of the use of licensed materials should include the specific isotopes handled, the maximum quantities of materials handled, where the experience was gained, the duration of experience, and the type of use. Alternatively, you may provide the minimum requirements of the individuals who will supervise the use of licensed material by others.
- 5. Submit a description of the radiation safety training program, including topics covered, groups of workers, assessment of training, qualifications of instructors, and the method and frequency of training. Radiation safety training may be commensurate with the users level of responsibility and specific handling activities.
- 1. In your application, you did not describe a training program for radiation workers and ancillary personnel (maintenance, security, etc.). The training given to each group should be commensurate with the duties and responsibilities of the group. The training program must assure that personnel are instructed before assuming duties with, or in the vicinity of, licensed materials and specify a frequency for periodic refresher training. Appendix J of NUREG-1556, Volume 7 addresses radiation safety training topics and may be helpful in developing your response.
- 2. Submit a description of the duties and responsibilities of the Radiation Safety Officer.
- 3. Describe the facilities and equipment (e.g., remote handling equipment, storage containers, shielding, fume hoods) to be made available at each location where licensed material will be used. Submit a description of the areas assigned for the receipt, storage, preparation, and measurement of licensed materials. Submit a diagram showing the locations of shielding, the proximity of radiation sources to unrestricted areas, and other items related to radiation safety. Diagrams should be drawn to a specified scale, or dimensions should be indicated.
- 4. Specify the radiation detection instruments that you have available. Include the type (Geiger Muller, Ion Chamber, etc.) and number of instruments available, the types of radiation detected, the range (milliroentgens per hour or counts per minute), and the intended use (monitoring, surveying, assaying or measuring). Appendix M of NUREG-1556, Volume 7 addresses radiation monitoring instrument specifications and may be helpful in developing your response.
- 5. Please describe your instrument calibration procedures and the frequency of instrument calibration. If your instruments will be calibrated by the instrument manufacturer or a person specifically authorized by the U.S. Nuclear Regulatory Commission or an Agreement State for instrument calibration, you only need to specify the name of the firm and the license number that authorizes the firm to

perform calibration services, and the calibration frequency. If you intend to calibrate your own instruments, please submit your calibration procedures including calibration frequency. Appendix M of NUREG-1556, Volume 7 (enclosed) contains calibration procedures acceptable to the Commission and may be helpful to you in developing your response.

- 6. Your application did not address general rules for safe use of radioisotopes. Please confirm that you will develop general rules for safe use of radioisotopes. Appendix P of NUREG-1556, Volume 7 provides general topics for safe use of radioisotopes may be helpful in developing your procedures.
- 7. 10 CFR 20.1801 requires that licensed material be secured against unauthorized removal from the place of storage. 10 CFR 20.1802 requires that the licensee control and maintain constant surveillance over materials in unrestricted areas that are not in storage. In your application, you did not indicate how you will secure licensed material. Describe how you will preclude the unauthorized removal of licensed material from the place of storage and in unrestricted areas.
- 8. Your application did not address how you will maintain accountability of the material. Please state that you will develop and maintain procedures for ensuring material accountability, and that physical inventories will be conducted at intervals not to exceed 6 months, to account for all sealed sources and devices received and possessed under the license.
- 9. Describe your procedures for ordering and receipt of licensed materials, and for notification of responsible persons upon the receipt of these materials.
- 10. Please provide your leak test procedures. Appendix R of NUREG-1556, Volume 7 contains model leak test procedures and may be helpful to you in developing your response. If you select to have another person perform the leak test, please submit the name of the person and the applicable U.S. Nuclear Regulatory Commission or Agreement State license number.
- 11. Your application did not address emergency procedures. Please confirm that you will develop and post emergency procedures. Appendix P of NUREG-1556, Volume 7 provides model emergency procedures and may be helpful in developing your procedures.
- 12. Your application did not address occupational dose. Please state that you will perform a prospective evaluation to determine if unmonitored individuals are not likely to receive, in one year, a radiation dose in excess of 10% of the allowable limits in 10 CFR 20.

Please note that you may not reply to this letter by return e-mail. You must reply in writing by letter or facsimile (610-337-5269). If we do not receive a reply from you within 30 calendar days from the date of this e-mail, we will assume that you do not wish to pursue your application.

Your cooperation is appreciated. You may contact me if you have any questions. My contact information is below.

Sincerely,

Scott Wilson
Health Physicist
Commercial, Industrial, R&D, and Academic Branch
Division of Nuclear Materials Safety
US Nuclear Regulatory Commission Region I
2100 Renaissance Boulevard, Suite 100
King of Prussia, PA 19406-2713

Phone: 610-337-5136 Fax: 610-337-5269