



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION I
2100 RENAISSANCE BLVD.
KING OF PRUSSIA, PA 19406-2713

April 17, 2022

Luis A. Ferrao Delgado, Ph.D., Chancellor
University of Puerto Rico
Rio Piedras Campus
Chancellor's Office
P.O. Box 23305
San Juan, Puerto Rico 00931-3305

**SUBJECT: UNIVERSITY OF PUERTO RICO, REQUEST FOR ADDITIONAL
INFORMATION, MAIL CONTROL NO. 629398**

Dear Dr. Ferrao Delgado:

This is in reference to your application dated 11/22/2021, requesting to renew NRC License No. 52-01986-04. In order to continue our review, we need the following additional information:

1. Please confirm you are requesting a reduction in your possession limit for the following:
 - a. H-3: 30 mCi to 5 mCi
 - b. C-14: 10 mCi to 5 mCi
 - c. P-32: 30 mCi to 5 mCi
 - d. P-33: 30 mCi to 5 mCi
2. Please confirm you are requesting removal of authorization for:
 - a. S-35
 - b. Ca-45

In addition, please state whether you ever possessed these isotopes, and confirm that adequate surveys were performed to release any areas impacted.

3. Specify whether I-125 will be free (volatile) or bound (non-volatile).
4. Confirm that the manufacturer and distributor of the Kr-85 sources is the same as the current license and is approved as a SDDR by NRC or an Agreement State and will be used in accordance with the SDDR.
5. Confirm the following:

Pursuant to 10 CFR 30.35(g), we will maintain records important to decommissioning and transfer these records to NRC or Agreement State licensee before license activities are transferred or assigned, in accordance with 10 CFR 30.34(b) as appropriate.

Furthermore, pursuant to 10 CFR 30.51(f), as appropriate, prior to license termination, we will forward the records required by 10 CFR 30.35(g), as appropriate, to the appropriate NRC Regional Office.

6. Provide a description of uses in animals, AND provide a description of tracer or field studies, if applicable.
7. With regard to your description of facilities, I attempted to gather the information included in documents with the dates you provided but determined that my consolidation of the applicable documents might not be fully accurate. Therefore, I am requesting that you gather these documents and provide the following:

9.	FACILITIES AND EQUIPMENT		
	— Describe the facilities and equipment that will be available at each location where radioactive material will be used (see Appendix G of this NUREG for topics to consider). Include the area(s) assigned for the receipt, storage, security, preparation, measurement, use, and disposal of radioactive materials.	*	[]
	— Submit a diagram showing the locations of shielding, the proximity of radiation sources to unrestricted areas, and other items related to radiation safety.	*	[]
	— When applicable to facilities where radioactive materials may become airborne, the diagrams should contain schematic descriptions of the ventilation systems, with pertinent airflow rates, pressures, filtration equipment, and monitoring systems.	*	[]
	— Diagrams should be drawn to a specified scale, or dimensions should be indicated.	*	[]
	— For facilities where it is anticipated that more than one laboratory or room may be used, a generic laboratory or room diagram may be submitted.	*	[]
	— Describe how facility design and procedures for operation will minimize contamination of the facility and the environment, facilitate eventual decommissioning, and minimize the generation of radioactive waste.	*	[]

Note: If you would like a copy of the document you referenced (i.e., correspondence dated November 9, 1989, February 15, 1995, and July 6, 1998, I can email copies to you.

8. Please provide the following information with respect to your survey instrumentation.

Item No.	Suggested Response	Yes	Description Attached
10.	<p>RADIATION SAFETY PROGRAM (Continued)</p> <p>Radiation Monitoring Instruments Describe the instrumentation that will be used to perform required surveys</p> <p style="text-align: center;">AND</p> <p>State that: "We will use instruments that meet the radiation monitoring instrument specifications published in Appendix I in NUREG-1556, Volume 7, Revision 1, 'Program-Specific Guidance About Academic, Research and Development, and Other Licenses of Limited Scope.' We reserve the right to upgrade our survey instruments as necessary."</p> <p>Instrument Calibration State that instruments will be calibrated before first use, at least annually thereafter, and after any repair, by a vendor that the NRC or an Agreement State has licensed to perform instrument calibration.</p> <p style="text-align: center;">OR</p> <p>State that: "We will implement the model radiation survey meter calibration program published in Appendix I in NUREG-1556, Volume 7, Revision 1 'Program-Specific Guidance About Academic, Research and Development, and Other Licenses of Limited Scope.'"</p> <p style="text-align: center;">OR</p> <p>Submit equivalent procedures for instrument calibrations.</p> <p>Material Receipt and Accountability</p>	<p style="text-align: center;">*</p> <p style="text-align: center;">[]</p> <p style="text-align: center;">[]</p> <p style="text-align: center;">[]</p> <p style="text-align: center;">[]</p> <p style="text-align: center;">*</p>	<p style="text-align: center;">[]</p> <p style="text-align: center;">[]</p> <p style="text-align: center;">[]</p> <p style="text-align: center;">[]</p> <p style="text-align: center;">[]</p>

9. Please provide the following information with regard to material receipt and accountability:

<p>Material Receipt and Accountability</p> <ul style="list-style-type: none"> • State that: "We will develop, implement, and maintain procedures for ensuring accountability of licensed materials at all times." • If applicable, provide the following statement: "We will comply with the National Source Tracking System (NSTS) reporting requirement as described in 10 CFR 20.2207." <p style="text-align: center;">AND</p> <ul style="list-style-type: none"> • Provided either of the following: <ul style="list-style-type: none"> — State 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. Records of inventory will be maintained for a period of 5 years from the date of each inventory, and will include the radionuclides, quantities, manufacturer's name and model numbers, and the date of the inventory." <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> — Provide a description of the procedures for ensuring that no sealed sources have been lost, stolen, or misplaced. 	<p>[]</p> <p>[]</p> <p>*</p>	<p>[]</p> <p>[]</p> <p>[]</p>
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10. Please provide the following information with respect to occupational dose monitoring:

Item No.	Suggested Response	Yes	Description Attached
10.	<p>RADIATION SAFETY PROGRAM (Continued) Occupational Dose Provide one of the following statements: “We will maintain, for inspection by the NRC, documentation demonstrating that unmonitored individuals are not likely to receive a radiation dose in excess of the limits in 10 CFR 20.1502.”</p> <p style="text-align: center;">OR</p> <p>“We will monitor individuals in accordance with the guidance in the section titled, ‘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.’”</p> <p style="text-align: center;">OR, IN LIEU OF THESE STATEMENTS, Provide a description of an alternative method for demonstrating compliance with the referenced regulations.</p> <p>Public Dose No response is required from the applicant in a license application, but compliance will be examined during inspection. During NRC inspections, licensees must be able to demonstrate, by measurement or calculation, that the TEDE to an individual likely to receive the highest dose from the licensed operation does not exceed the annual limit for members of the public. See Appendix K of this NUREG for examples of methods to demonstrate compliance.</p>	<p>[]</p> <p>[]</p> <p>*</p> <p>N/A</p>	<p>[]</p> <p>[]</p> <p>[]</p> <p>N/A</p>

12. Please provide the following with regard to contamination surveys:

Item No.	Suggested Response	Yes	Description Attached
10.	<p>RADIATION SAFETY PROGRAM (Continued) Surveys State: “We will survey our facility and maintain contamination levels in accordance with the survey frequencies and contamination levels published in Appendix M in NUREG–1556, Volume 7, Revision 1, ‘Program-Specific Guidance About Academic, Research and Development, and Other Licenses of Limited Scope.’”</p> <p style="text-align: center;">OR</p> <p>Submit a description of an alternate radiation survey program, including survey frequencies and contamination levels, to evaluate a radiological hazard.</p>	<p>[]</p> <p>*</p>	<p>[]</p> <p>[]</p>

13. You provided procedural guidance for minor or major spills. However, additional procedural guidance is needed for security and emergencies. Please provide the following:

Safe Use of Radionuclides, Security, and Emergency Procedures

State that: "We will develop, implement, and maintain procedures for safe use, security and emergencies."

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OR

State that: "We will adopt the procedures for the safe use of radionuclides, security and emergencies as published in Appendix L in NUREG-1556, Volume 7, Revision 1, 'Program-Specific Guidance About Academic, Research and Development, and Other Licenses of Limited Scope.'"

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OR

Provide procedures for safe use of radionuclides, security of materials and emergencies.

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14. Your survey program appears to not be compatible with the guidance in NUREG 1556, Vol. 7, Rev. 1, "Program Specific Guidance About Academic, Research and Development, and Other Licenses of Limited Scope." Please provide the following information.

Item No.	Suggested Response	Yes	Description Attached
10.	<p>RADIATION SAFETY PROGRAM (Continued)</p> <p>Surveys State: "We will survey our facility and maintain contamination levels in accordance with the survey frequencies and contamination levels published in Appendix M in NUREG-1556, Volume 7, Revision 1, 'Program-Specific Guidance About Academic, Research and Development, and Other Licenses of Limited Scope.'"</p> <p style="text-align: center;">OR</p> <p>Submit a description of an alternate radiation survey program, including survey frequencies and contamination levels, to evaluate a radiological hazard.</p> <p>Leak Tests State: "Leak tests will be performed at the intervals approved by the NRC or an Agreement State and specified in the SSD registration certificate."</p> <p style="text-align: center;">AND</p> <p>If leak tests will be analyzed by an outside entity, state: "Leak tests will be analyzed by an organization authorized by the NRC or an Agreement State to provide leak testing services to other licensees. Leak tests may be collected by the licensee, using the sealed source or plated foil manufacturer's (distributor's) and the leak test kit supplier's instructions. Such leak test kits will be supplied by an organization authorized by the NRC or an Agreement State to provide leak testing services."</p> <p style="text-align: center;">OR</p> <p>If leak tests will be analyzed by the applicant, state: "We will implement the model leak test program published in Appendix N in NUREG-1556, Volume 7, Revision 1 'Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Academic, Research and Development, and Other Licensees of Limited Scope.'"</p> <p style="text-align: center;">OR</p> <p>Submit a description of alternate equipment or procedures to evaluate a radiological hazard and for determining whether there is radioactive leakage from sealed sources or plated foils.</p>	<p>[]</p> <p>*</p> <p>[]</p> <p>[]</p> <p>[]</p> <p>*</p>	<p>[]</p> <p>[]</p> <p>[]</p> <p>[]</p>

We will continue our review upon receipt of this information. Please reply to my attention at:

Randolph C. Ragland, Jr.
Mail Control No. 629398
USNRC, Region I
Division of Radiological Safety and Security
2100 Renaissance Boulevard
King of Prussia, PA 19406

Or

R1DRSSMail.Resource@nrc.gov
*Reference – Randolph C. Ragland, Jr.
Mail Control No. 629398*

L. Ferrao

In order to continue prompt review of your application, we request that you submit your response to this letter within 15 calendar days from the date of this letter.

An electronic version of the NRC's regulations is available on the NRC Web Site at: www.nrc.gov. Additional information regarding use of radioactive materials may be obtained on the NRC Web Site at: <http://www.nrc.gov/materials/miau/mat-toolkits.html>. This site also provides the link to the toolbox for updated information on the revised regulations for naturally-occurring and accelerator-produced radioactive materials (NARM).

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web Site at: <http://www.nrc.gov/reading-rm/adams.html>. Please be aware that you may request that certain portions of your submittal to NRC be withheld from public disclosure as proprietary information. To do this, you must execute an affidavit as specified in 10 CFR 2.390. You must list all portions that you wish to be held proprietary, along with your reasoning as to why that is appropriate. While it is allowable, please refrain from submitting proprietary information in support of a license unless necessary. Keep in mind that all NRC licenses are considered to be in the public domain, and therefore may be viewed by any member of the public who requests to see them.

If you have any questions regarding this request for additional information, please contact me at 610-337-5083 or via electronic mail at Randolph.Ragland@nrc.gov.

Thank you for your cooperation.

Sincerely,

Randolph C. Ragland, Jr., Senior Health
Physicist
Commercial, Industrial, R&D
and Academic Branch
Division of Radiological Safety and Security
Region I

License No. 52-01986-04
Docket No. 030-01183
Mail Control No. 629398

cc: Lymari Orellana, Radiation Safety Officer

L. Ferrao

UNIVERSITY OF PUERTO RICO, REQUEST FOR ADDITIONAL INFORMATION, MAIL CONTROL NO. 629398 DATED APRIL 17, 2022.

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SUNSI Review Complete: R.Ragland

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