

Ponce School of Medicine & Health Sciences P.O. Box 7004, Ponce, PR 00732-7004

> Tel: (787) 840-2575 Ext. 2258 Fax: (787)841-1040 kthompson@psm.edu

July 1, 2013

Mr. Dennis Lawyer Health Physicist U.S. Nuclear Regulatory Commission Division of Nuclear Material Safety

Dear Mr. Lawyer:

In response to your May 23, 2013 inquiry related to additional information to complement our NRC Form 314 dated May 13, 2013, requesting for termination to Nuclear Regulatory Commission License No. 52-19547-01 and Docket No. 030-17845, we provide the following information:

#### Inquiry Point:

- Prior to termination of a license, 10 CFR 30.35(g), 30.36(k)(4) and 30.51 require that you submit to the NRC certain records. Please submit the following records, or explain why such records are not applicable:
  - a. for unsealed materials with half-lives greater than 120 days, records for disposal made pursuant to 10 CFR 20.2002 (alternate disposal procedures, including burial authorized prior to January 28, 1981), 20.2003 (disposals to the sanitary sewerage system), 20.2004 (incineration of wastes), 20.2005 (disposal of specific wastes including liquid scintillation cocktail and animal tissue), and 20.2103(b)(4), evaluations of effluent releases and;
  - b. records important for decommissioning as described in 30.35(g). Examples of such records include but are not limited to: records of contamination, identifying the radionuclides, quantities and concentrations; as-built drawings and modifications of structures and equipment in restricted areas and locations of inaccessible contamination such as buried pipes; a single list, updated at least every 2 years, of areas to which access is limited for the purpose of radiation protection (restricted areas); and records related to the provision of financial assurance.

## Response:

We used disposal to sanitary sewerage system for appropriate wastes (decayed waste previously containing P32, scintillation cocktail). We do not have these records anymore as they have been lost.

# Inquiry Point:

2. Your license was authorized to possess many different isotopes of radionuclides. Please state the radionuclides and physical forms that were used at your present location authorized under the license (Urb. Industrial Reparada, B Street, Ponce By-Pass, Ponce, Puerto Rico).

a. Please state the location of the survey

- b. Please state the efficiency of the counting instrument for the three regions counted and the isotopes of concern.
- c. If only tritium isotope was used, a wipe survey would be sufficient. However, the simplified survey procedures specified in NUREG-1757, Volume 3 (<u>http://www.nrc.gov/reading-rm/doc-</u> <u>collections/nuregs/staff/sr1757/v1/sr1757v1r2.pdf</u>), "Consolidated Decommissioning Guidance, Decommissioning Process for Materials Licensees", page 8-2, require 100% scan of the area for any other isotope of concern. Please perform appropriate survey scans or state that only tritium was used in this facility.

## Response:

We had tritium and carbon-14 isotopes (sealed and unsealed materials) on site at the time of our final decommissioning earlier this year. Phosphorus 32 was used at our institution in the form of radio-labeled nucleotides in a time period that was greater than 24 months in the past and no such materials or containers were on site at the time that I began final disposal.

- a. The survey was conducted in the research building at the Ponce School of Medicine located at 395 Industrial Reparada, Zona 2, Ponce, PR 00716. Specifically, the survey occurred in the designated radioactivity laboratory which is a controlled access space of approx.. 150 square feet (access through two locked doors, key is controlled by the institutional safety officer). This is the only space at our institution where the use of radioactivity was authorized.
- b. The isotopes of concern are C-14 and H-3. I performed the wipes and sent the swabs to our consultant. He arranged for the scintillation counting to be done at another institution in Puerto Rico. The efficiencies are: C-14 93.9%; H-3 49.13%
- c. We had both tritium and C-14 on site. The closeout survey tested for both of these isotopes. Phosphorus 32 had not been used in over two years. A handheld Geiger counter survey was performed at the time of the closeout survey. This coverage area was 100% of all bench space, sink, floor surface, hood and refrigerator. As well, door and doorknob, light switch, and spot check on walls near door and refrigerator were all negative.

## Inquiry Point:

Please confirm that licensed material was not used in any other locations than the room that was submitted.

## Response:

Only this space was authorized at our institution for the use of radioactive materials. There are no records to indicate that anyone violated the institution regulations. Based on these factors, I confirm to the best of my ability that licensed material was used only in this laboratory.

#### Inquiry Point:

The NRC Form 314 was not completely filled out. Please submit where all future correspondence regarding this license should be sent. <u>Response:</u>

Please send all future correspondence to: Kenira Thompson, PhD Dean for Research Ponce School of Medicine PO Box 7004 Ponce, PR 00716

#### Inquiry Point:

On the NRC Form 314, it was submitted that radioactive materials were disposed by transfer to a waste contractor, NRC License No. 24-20091-01. This licensee is authorized to possess sealed sources, wipe tests, and environmental samples. Please state how your unsealed licensed materials and solid waste from the unsealed licensed material were disposed. Please submit records supporting methods of disposal or transfer.

#### Response:

The materials were collected and placed into a 5 gallon container by our consultant, Mr. David Rhoe (listed on form 314). He sent that material to RM Wester and Associates (215 Indacom Dr., St. Peters, MO 63376) and they were received on April 30, 2013. I have forwarded you a scan of that letter of receipt.

Please let us know if additional information is needed.

Cordially,

Kenia Thompson

Kenira Thompson, PhD Interim Dean for Research

mcs