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March 12,2009

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Licensing Assistance Team
U.S. Nuclear Regulatory Commission, Region I
Division of Nuclear Materials Safety
475 Allendale Road
King of Prussia, PA 19406-1415

Docket No. 030-09049

License No. 08-00216-22

SUBJECT: The George Washington University, License Amendment Request
RE: Deficiency In Amendment Request, Letter of February 23,2009

To: Licensing Assistance Team **VIA FAX: 610-337-5269**

1. Regarding any potential past use of licensed material at 20101 Academic Way, Ashburn, Virginia and the statement in the NRC Inspector's field notes of 6/14/2000: "the licensee has not used the Virginia facility for licensed material use for several years. When used, only sealed sources for classroom demonstration were used."

The Ashburn campus consist of 2 multi-story buildings housing classrooms, offices and 1 laboratory room (wet lab). Various academic departments use the Ashburn campus. We conducted a visual inspection of the campus on February 12,2009 and observed no indications of current or past use of licensed material. We also spoke with 2 researchers that work at the Ashburn campus. They confirmed that to their knowledge, there was no use of radioactive material.

We have reviewed the sealed source inventory and leak test records from January 1999 to December 2004 and confirmed that none of the sealed sources in the possession of GWU were leaking.

The majority of the sealed sources in GWU's possession during this time period were stored and dedicated for use in the hospital nuclear medicine and oncology departments. These sealed sources would not have been available for use at Ashburn. It appears that during this time period there were sealed sources identified for use by the Physics Department. The majority of these sources were low activity sources of less than 100 microcuries beta/gamma or less than 10 microcuries alpha or were in storage. Sources with an activity above the leak rest criteria and not in storage had been leak tested and were found to be not leaking.

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2. Regarding our request to add the sealed sources described below, we can add the following new information (BOLD type);

RADIOACTIVE MATERIAL

	a. Byproduct material Element and mass number,	b. Chemical and/or Physical Form.	c. Maximum Amount which will be possessed at any one time.
2.1	Radium 226	Sealed source manufactured by Monsanto Research Corporation with further encapsulation in stainless steel and identified as Type 274 by LKB Wallac Oy for use in a Wallac RackBeta 1217/1218 liquid scintillation counter SSDR: MD-0741-S-102-S	No source to exceed 0.01 millicuries 0.02 millicuries total
2.2	Radium 226	Sealed source consisting of a cylindrical steel rod 23 Em (L) x 1 cm (D)	No source to exceed 0.01 millicuries 0.02 millicuries total

The sources in item 2.2 above are in good condition and are strong welded construction (double stainless steel encapsulation) and able to sustain use as an instrument check source. The sources are gamma sources with most beta emissions and all alpha emissions stopped in the steel encapsulation, Leak tests of these sources have been performed using both a standard leak test method and a 24-h radon emanation test with less than 0.001 uCi (alpha) detected. We have conducted a visual examination of the sources in Item 2.2, they are not marked with any identification such as manufacturer or model number or any other identifying numbers or information. Our assay of these sources shows that they each have an activity of less than 10 microcuries.

The sources described above in Item 2.1 are to be used in the Wallac LKB Model 1217 and 1218 liquid scintillation counters for automatic determination of quench and the sources in Item 2.2 are to be used by GWU for calibration and checking of ow radiation surveying and monitoring instruments (specifically checking of a wall mounted area monitor.

We will follow the leak test procedure and provide training to personnel regarding operating and emergency procedures regarding the use of these sources as submitted in our broad scope license application,

If you need any additional information or clarification please contact Daniel Hibbing, Sr. Radiation Safety Technician or Gregory D. Smith GWU Radiation Safety Officer, CHP at 202-994-2630.

Sincerely,

Gregory D. Smith, CHP
Radiation Safety Officer for George Washington University