



PONTIFICIA UNIVERSIDAD CATÓLICA DE PUERTO RICO  
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PONCE PR 00717-9997



COLEGIO  
DE CIENCIAS

June 29, 2007

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U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555

**SUBJECT: Reply to Notice of Violation**  
Docket No. 03028659  
License No. 52-13508-04

To the Honorable Commission:

Enclosed please find the reply to the Notice of Violation sent to Pontifical Catholic University of Puerto Rico (PCUPR) dated June 6<sup>th</sup>, 2007 under the referenced docket number.

PUCPR deeply appreciates your participation in the educational programs of our Institution and the activities authorized and licensed by the NRC. We hope this reply satisfies your request and remain at your service for any question regarding this matter.

Cordially yours,

*Carmen L. Velázquez*  
Carmen L. Velázquez  
Dean  
College of Science

sidp

c Regional Administrador  
Region I  
475 Allendale Road  
King of Prussia, Pennsylvania 19406-1415

IE07

FSME

## REPLY TO NOTICE OF VIOLATION

Pontifical Catholic University of Puerto Rico  
Ponce, Puerto Rico  
EA 07-007

Docket No. 03028659  
License No. 52-13508-04

- A. Condition 13.A of License 52-1350804, in part, that the licensee's irradiator sealed source be tested for leakage and/or contamination at intervals no to exceed six months.

**(1) Reason for the violation**

After thoroughly reviewing our records we have not found evidence of leak and/or contamination tests conducted on the months of March 2003 and September 2004. Pontifical Catholic University of Puerto Rico (PCUPR) underwent changes in staff that might have contributed to this situation due to misinformation. This situation is a result of internal procedures and human error for which internal administrative procedures have been established to perform the tests at intervals not to exceed six months.

**(2) Corrective steps taken**

After the concern was identified by NRC Inspector in March 2006, leak test samples have been collected within six month intervals and sent for analysis to Wisconsin Radiological Laboratories, Inc. (US NRC License #48-26319-01).

For your information copy of results of analysis for May 2006, November 2006 and May 2007 are enclosed. None of the tests have shown any leaks.

**(3) Corrective steps to be taken to avoid reoccurrence of violation**

Leak/test samples will be collected in May and November every year and sent for analysis to Wisconsin Radiological Laboratories. Results will be kept for our records in an specific locked file.

Service contract of the consultant was amended to specifically establish that he is responsible for collecting leak test samples in May and November and sending them to Wisconsin Radiological Laboratories. PCUPR will monitor full compliance with the terms therein established.

**(4) Date when full compliance will be achieved**

PCUPR is in full compliance since May 2006.

B. Condition 13.E of License 52-13508-04, in part, that analysis of leak test samples be performed by persons specifically licensed by the NRC or an agreement state to perform such services

**(1) Reason for the Violation**

Leak tests for March 2004, May 2005 and November 2005 were performed by the University's physicist consultant, who previously had a license but did not renew it. The consultant did not inform that his license had not been renewed and that he was performing the leak tests on his own.

**(2) Corrective Steps taken**

After the inspection by NRC Inspector, leak test samples are collected by the consultant and sent to Wisconsin Radiological Laboratories, Inc (US NRC License No. 48-26319-01). This laboratory was recommended by NRC official.

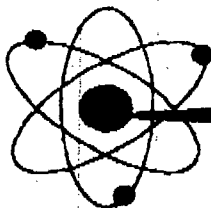
**(3) Corrective Steps that will be taken to avoid reoccurrence of violation**

Service contract of the consultant was amended to specifically establish that he is responsible for collecting leak test samples in May and November and sending them to Wisconsin Radiological Laboratories. PCUPR will monitor full compliance with the terms therein established.

**(4) Date when full compliance will be achieved**

PCUPR is in full compliance since May 2006.

This reply shall not constitute an admission of the violations contained herein by any potential third party claims.



## Wisconsin Radiological Laboratories, Inc.

521 N. Business Park Circle - Stoughton, WI 53589

Phone: 608 - 877 - 0636 Fax: 608 - 877 - 0656

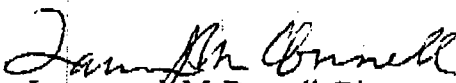
June 25, 2007

**Prof. Carmen I. Asencio**  
**Pontifical Catholic University of Puerto Rico**  
**2250 Las Americas, Suite 654**  
**Ponce, Puerto Rico 00717-9997**

This letter is to report the wipe test results taken from one or more of your gamma-emitting radioactive sealed sources taken on May 30, 2007. The sample analysis was performed on June 25, 2007 in a high efficiency sodium iodide well counter. Results were evaluated by comparison with standard sources whose activity is directly traceable to NIST standards. The sample indicated removable activity of less than 0.005 microCurie. All tests were performed under authorization of State of Wisconsin Agreement License #025-1356-01 issued to Wisconsin Radiological Laboratories (WRL). Tabular summaries of the test results are attached for your permanent records.

If you have any questions or require further assistance, please do not hesitate to call upon me at (608)877-0636.

Sincerely,

  
Lawrence J. McDonnell, Director,  
Laboratory Operations

Post-it <sup>®</sup> Fax Note	7671	Date	6-25-07	# of pages	1
To	Pontifical Catholic	From	L. McDonnell		
Co./Dept.		Co.	WRL		
Phone #		Phone #	608-877-0636		
Fax #	787-842-4697	Fax #			

Jun. 25 2007 11:38AM P2

FAX NO. : 608 244 4608

FROM : WISC RADIOLOGICAL LAB

**Catholic University of Puerto Rico**

**Prof. Carmen I. Asencio**

**Leak Test Results June 25, 2007**

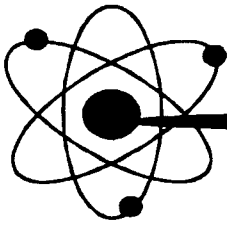
**ORDER NO: C05104**

<b>TEST NO.</b>	<b>SOURCE SERIAL #</b>	<b>MANF</b>	<b>ISOTOPE</b>	<b>DATE WIPED</b>	<b>ACTIVITY (DPM)</b>	<b>ACTIVITY (uCi)</b>	<b>ERROR (uCi)</b>	<b>MDA (uCi)</b>
05695	1035	JL	Cs-137	5/30/07	0.0	<MDA	2.41x10 <sup>-6</sup>	2.9142x10 <sup>-5</sup>
		Shepherd						

**Comments:** Results are reported as Net CPM (net counts per minute), Activity in disintegrations per minute (DPM) and in units of microcuries (uCi). The reported error is the two sigma statistical counting uncertainty, and the MDA is the minimum detectable amount of radioactivity that can be detected by the counting instrument and is reported in units of microcuries (uCi). All results below the MDA are reported as equal to the MDA.

**Wisconsin Radiological Laboratories, Inc.**

**State of Wisconsin Agreement License #025-1356-01**



## ***Wisconsin Radiological Laboratories, Inc.***

521 N. Business Park Circle • Stoughton, WI 53589

Phone: 608 - 877 - 0636 Fax: 608 - 877 - 0656

January 4, 2007

Prof. Carmen I. Asencio  
Pontifical Catholic University of Puerto Rico  
2250 Las Americas, Suite 654  
Ponce, Puerto Rico 00717-9997

This letter is to report the wipe test results taken from one or more of your gamma-emitting radioactive sealed sources taken on November 21, 2006. The sample analysis was performed on January 2, 2007 in a high efficiency sodium iodide well counter. Results were evaluated by comparison with standard sources whose activity is directly traceable to NIST standards. The sample indicated removable activity of less than 0.005 microCurie. All tests were performed under authorization of State of Wisconsin Agreement License #025-1356-01 issued to Wisconsin Radiological Laboratories (WRL). Tabular summaries of the test results are attached for your permanent records.

If you have any questions or require further assistance, please do not hesitate to call upon me at (608)877-0636.

Sincerely,

Lawrence J. McDonnell, Director,  
Laboratory Operations

***Catholic University of Puerto Rico***

**Prof. Carmen I. Asencio**

***Leak Test Results January 2, 2007***

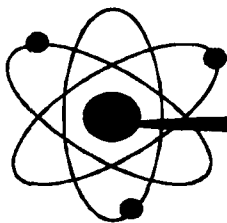
***ORDER NO: C05104***

<b><i>TEST NO.</i></b>	<b><i>SOURCE SERIAL #</i></b>	<b><i>MANF</i></b>	<b><i>ISOTOPE</i></b>	<b><i>DATE WIPED</i></b>	<b><i>ACTIVITY (DPM)</i></b>	<b><i>ACTIVITY (uCi)</i></b>	<b><i>ERROR (uCi)</i></b>	<b><i>MDA (uCi)</i></b>
05509	1035	JL	Cs <sup>-137</sup>	11/21/06	38.28	<MDA	2.41x10 <sup>-6</sup>	2.9142x10 <sup>-5</sup>
	Shepherd							

Comments: Results are reported as Net CPM (net counts per minute), Activity in disintegrations per minute (DPM) and in units of microcuries (uCi). The reported error is the two sigma statistical counting uncertainty, and the MDA is the minimum detectable amount of radioactivity that can be detected by the counting instrument and is reported in units of microcuries (uCi). All results below the MDA are reported as equal to the MDA.

**Wisconsin Radiological Laboratories, Inc.**

**State of Wisconsin Agreement License #025-1356-01**



## ***Wisconsin Radiological Laboratories, Inc.***

521 N. Business Park Circle · Stoughton, WI 53589

Phone: 608 - 877 - 0636 Fax: 608 - 877 - 0656

May 11, 2006

Prof. Carmen I. Asencio  
Pontifical Catholic University of Puerto Rico  
2250 Las Americas, Suite 654  
Ponce, Puerto Rico 00717-9997

This letter is to report the wipe test results taken from one or more of your gamma-emitting radioactive sealed sources and on the wipes from the waste room floor taken on April 26, 2006. The sample analysis was performed on May 2, 2006 in a high efficiency sodium iodide well counter. Results were evaluated by comparison with standard sources whose activity is directly traceable to NIST standards. The sample indicated removable activity of less than 0.005 microCurie. All tests were performed under authorization of USNRC license 48-26319-01 issued to Wisconsin Radiological Laboratories (WRL). Tabular summaries of the test results are attached for your permanent records.

The waste room wipe analysis for the  $C^{14}$  and  $H^3$  radionuclides was performed on May 11, 2006 in the above instrument and levels were found to be less than the detectable amount.

If you have any questions or require further assistance, please do not hesitate to call upon me at (608)877-0636.

Sincerely,

Lawrence J. McDonnell, Director,  
Laboratory Operations



***Catholic University of Puerto Rico***

**Prof. Carmen I. Asencio**

***Leak Test Results May 2, 2006***

***ORDER NO: C05104***

<i>TEST NO.</i>	<i>SOURCE SERIAL #</i>	<i>MANF ISOTOPE</i>	<i>DATE WIPED</i>	<i>ACTIVITY (DPM)</i>	<i>ACTIVITY (uCi)</i>	<i>ERROR (uCi)</i>	<i>MDA (uCi)</i>	
05507	1035	JL Shepherd Cs-137	4/26/06	0.00	<MDA	$2.85 \times 10^{-6}$	$3.5203 \times 10^{-5}$	Irrad. Plate
05508	1035	JL Shepherd Cs-137	4/26/06	0.00	<MDA	$2.86 \times 10^{-6}$	$3.5203 \times 10^{-5}$	Source Mech.
05510	FE120	Wipe (Floor) Cs-137	4/26/06	0.00	<MDA	$2.86 \times 10^{-6}$	$3.5203 \times 10^{-5}$	
05511	FE120	Wipe (Floor) Cs-137	4/26/06	0.00	<MDA	$2.84 \times 10^{-6}$	$3.5203 \times 10^{-5}$	
05512	FE120	Wipe (Floor) Cs-137	4/26/06	10.17	<MDA	$2.88 \times 10^{-6}$	$3.5203 \times 10^{-5}$	

Comments: Results are reported as Net CPM (net counts per minute), Activity in disintegrations per minute (DPM) and in units of microcuries (uCi). The reported error is the two sigma statistical counting uncertainty, and the MDA is the minimum detectable amount of radioactivity that can be detected by the counting instrument and is reported in units of microcuries (uCi). All results below the MDA are reported as equal to the MDA.