



February 27, 2013

Mr. Dennis Lawyer  
Health Physicist  
Licensing Assistance Section  
Nuclear Materials Safety Branch  
U. S. Nuclear Regulatory Commission, Region I, DNMS  
2100 Renaissance Boulevard, Suite 100  
King of Russia, PA 19406-2713

NRC license number: 06-30480-01

Docket number: 030-34841

Dear Mr. Lawyer,

Thank you very much for your call on February 21, 2013 requesting additional information, clarifications and/or wipe test surveys for several additional rooms. The following responses are being provided for your review below:

Set 1 Wipes, LSC – Errata

As a follow-up to your inquiry regarding Radiation Safety Associates Laboratories' (RSA Labs) reported elevated wipe test result for sample #19 (Set 1 Wipes, LSC) where 5,396.00 counts per minute were listed in the carbon-14 column with no reference to activity in the corresponding DPM column, RSA Labs was contacted on 2/22/13 for clarification. Mr. Dockendorff confirmed that this was a typo and should have read as 5.69. This has been corrected in the attachment, Set 1 Wipes, LSC\_corrected, page 2. Mr. Dockendorff's message is also copied below:

Survey Meter Calibration Date

The Ludlum GM survey meter, model # 3, and detector probe, model # 44-9, used for the meter scan surveys were calibrated on December 20, 2011, and January 20, 2012.

Rooms Scanned with Survey Meters:

Rooms 201, 300, 305, 306, 141, RW1, RW2, 131-134, 174, 427, 309, 310, and 322.



### Set 3 Wipes, LSC-Recounts

In an effort to be as conservative as possible, all wipe sampling tests that were reported as elevated on RSA Lab's list, Wipe Sets 1 and 2, were recounted 10 times consecutively for 20 minutes each to determine if tritium was present and to rule out any chemiluminescence being potentially responsible for the elevated counts. Specifically, eight wipe test sample numbers # 129, 130, 273, 416, 417, 419, 85, 264 were recounted by RSA Labs. As a result, samples # 129, # 130, # 273, # 416, and # 417 were determined to have tritium present. These were all samples of melted ice water and/or ice chips of samples obtained from the small undercounter refrigerator freezer unit in 201, as described on the list of wipe test survey locations, descriptions and in the decommissioning report dated February 19, 2013. Set 3 Wipes, LSC-Recounts of recounted wipe test samples # 419, #85 and #264 were determined to be at background levels. This data was attached in the original February 19 report, and is attached to this report for your reference.

-----Original Message-----

From: Jay Dockendorff <[jrd@radpro.com](mailto:jrd@radpro.com)>

To: jmtamkin <[jmtamkin@aol.com](mailto:jmtamkin@aol.com)>

Sent: Mon, Feb 25, 2013 5:18 pm

Subject: errata

June,

Re: Sample # 19 (LSC Set 1). the C-14 cpm of 5396.00 is a typo and should read 5.69.

If there are others that you are aware of, please let me know

Jay

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### Updated Isotope Room Descriptions

*Rooms 131-134, 174, 427, 309, 310, 322 and RW2:*

Although rooms 131-134, 174, 427, 309, 310, 322 and RW2 were requested for licensed material use and storage in the NRC's license renewal letter in March 3, 2009, the RSO and Management Representative believe to the best of their knowledge that these rooms were never used for this purpose. However, we proceeded to thoroughly survey these rooms as if they have been used, including several random and representative ceiling wipe tests, as demonstrated in the Wipe Maps PowerPoint file in this submission. Please refer to the survey details under the methodology section in the Wipe Maps file. In addition, in an effort to be as conservative as possible, representative surveys were previously performed, with the results included in the decommissioning report dated February 19, 2013.



#### *Rooms 164 and 165:*

As for the use of isotopes in rooms 164 and 165, the best available evidence from floor plans indicates that these rooms were not constructed in either of the two buildouts of the facility on 23 Business Park Drive. Specifically, no rooms were ever assigned the numbers of “164” or “165.” As a founder of the company, the Management Representative has seen no records pertaining to these rooms and their existence or their use, isotopic or otherwise. Hence, references to them are, in the view of the RSO and the Management Representative, a clerical error. Further, these rooms numbers, 164 and 165, were inappropriately worded and, therefore, submitted in error in the renewal letter dated April 3, 2009

#### *Rooms 201, 300, 305, 306, 141, RW1:*

In response to your inquiries regarding the survey locations in several of the above rooms, supplemental wipe test surveys were performed in Rooms 201, 300, 305, 306, 141 and RW1. These were also conducted in an effort to be highly conservative over those having been previously submitted with results that were background and well below the DCGL levels. In addition, several random and representative ceiling wipe tests were performed in these rooms, as demonstrated in Wipe Map file attached with this submission.

#### Termination/Decommissioning Surveys: Rooms and Wipe Test Locations

As a follow-up to your inquiry regarding the report dated February 19, 2013, the original list has been revised to reflect the clarifications for wipe test survey locations in room 322, the surgical suite. This revised list, a pdf file named Room Descriptions 1, is attached for your review. In addition, the new wipe test locations are listed in a pdf separate file, Room Descriptions 2.

#### Disposal of Radioactive Waste

The Institutes for Pharmaceutical Discovery did not use any of the following alternate disposal procedures for unsealed materials with half-lives greater than 120 days, 10 CFR 20.2002 (alternate disposal procedures, including burial authorized prior to January 28, 1981), 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, according to the records and historical review.

#### Sanitary Sewer Releases

As requested, the data for the sanitary sewer releases as stated in 10 CFR 20.2003 (average monthly concentration each year and percentage of the requirement) are being provided for the years 1999 through 2007 in a table attached as IPD Sewer Releases Table.xls. Even in 2002 when the values were at their highest, the percentages never



exceeded the maximum allowable limits (2% for tritium and 9% for carbon-14). Please note that the sanitary disposal logs were submitted in the February 19, 2013 letters.

The results were well below the maximum allowable limits in 10 CFR 20, Appendix B, Table 3, for licensed material with half lives greater than 120 days, tritium and carbon-14. Further, sanitary sewer releases did not occur after 2007 at IPD. In support of this, wipe tests were performed in the sink traps, and the results were below 220 DPM/100 sq cm and also significantly below DCGL levels, as per the NRC's guidance provided in the Federal Register, Vol. 63, No. 222, Wednesday, November 18, 1998, page 64134, Table 1. for DCGL values for building surface contamination levels.

Records Important for Decommissioning as described in 30.35(g), 40.36(f) and 70.25(g): As per a thorough historical review of IPD's documents and decommissioning survey results and associated records, IPD did not have any records of locations of inaccessible contamination such as buried pipes, sink drains, or residual contamination areas. Therefore, since there were no records pertaining to 30.35(g), 40.36(f) and 70.25(g) to be included in this submission, we view these as not applicable.

#### Summary of Final Status Surveys:

In the previous decommissioning report submission dated February 19, 2013, there were 427 wipe test samples performed. Except for a small refrigerator/freezer unit in room 201 involving melted ice sampling described in the February 19, 2013 report, all results were well below 220 dpm/100 sq cm levels and also significantly below DCGL levels, as per the NRC's guidance provided in the Federal Register, Vol. 63, No. 222, Wednesday, November 18, 1998, page 64134, Table 1. for DCGL values for building surface contamination levels. Similarly, for the additional 457 wipe test results attached (Set 4 Wipes, LSC.xls and Set 5 Wipes, LSC-Recounts<sup>1</sup> for wipes 5, 28, 139, and 378) to this

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<sup>1</sup> -----Original Message-----

From: Jay Dockendorff <[jrd@radpro.com](mailto:jrd@radpro.com)>

To: jmtamkin <[jmtamkin@aol.com](mailto:jmtamkin@aol.com)>

Cc: michael.fare <[michael.fare@gmail.com](mailto:michael.fare@gmail.com)>; june.tamkin-price <[june.tamkin-price@yale.edu](mailto:june.tamkin-price@yale.edu)>

Sent: Wed, Feb 27, 2013 11:47 am

Subject: Re: Set 4

June,

Report 5 is attached. I corrected RSA Sample ID. The recounts of the elevated samples are attached. They are all OK, it was chemo-luminescence. I have included corrections to two sheets of report 1 and that is all of the errors I could find. This should be what you need.

I will need an address for you so I can send back the racks that you delivered the samples in.

Jay



addendum decommissioning report as described above and in the Wipe Map file along with facility diagrams, wipe test descriptions and locations in the Room Description 2 file, all results were well below 220 dpm/100 sq cm levels and also significantly below DCGL levels as per the NRC's guidance provided in the Federal Register, Vol. 63, No. 222, Wednesday, November 18, 1998, page 64134, Table 1. for DCGL values for building surface contamination levels.

Sincerely,

A handwritten signature in cursive script that reads "Michael J. Fare".

Mr. Michael Fare  
Management Representative  
Chief Operating Officer  
The Institutes for Pharmaceutical Discovery, L.L.C.  
317 Nortontown Road  
Guilford, CT 06437

cc: June Tamkin-Price, RSO

attachments:

1. Set 1 Wipes, LSC\_Corrected.pdf
2. Set\_3\_Wipes\_LSC-Recounts.xls
3. Wipe Maps.ppt
4. Room Descriptions 1.pdf
5. Room Descriptions 2.pdf
6. IPD Sewer Releases Table
7. Set 4 Wipes, LSC.xls
8. Set 5 Wipes, LSC-Recounts.xls