



UNITED STATES  
**NUCLEAR REGULATORY COMMISSION**  
REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

September 28, 2007

Docket No. 03009100  
Control No. 140452

License No. 37-15434-01

Ralph Vassallo, M.D.  
Radiation Safety Officer  
American Red Cross  
Musser Blood Center  
700 Spring Garden Street  
Philadelphia, PA 19123-3594

SUBJECT: AMERICAN RED CROSS, CORRECTED COPY OF LICENSE, CONTROL NO.  
140452

Dear Dr. Vassallo:

Enclosed is the Corrected Copy of Amendment No. 15 for License No. 37-15434-01. In accordance with the telephone call on September 27, 2007, Condition No. 11.C. has been corrected to remove the name of Dr. Scott Murphy as an authorized user.

We apologize for any inconvenience this error may have caused.

Sincerely,

***Original signed by Michelle Beardsley***

Raymond K. Lorson, Chief  
Decommissioning Branch  
Division of Nuclear Materials Safety

Enclosure:  
Corrected Copy of Amendment No. 15

DOCUMENT NAME: C:\FileNet\ML072720007.wpd

**SUNSI Review Complete: MBeardsley**

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OFFICE	DNMS/RI	N	DNMS/RI	N	DNMS/RI			
NAME	MBeardsley /MRB/		RLorson <i>By MRB for RKL/</i>					
DATE	9-28-07		9-28-07					

OFFICIAL RECORD COPY

**CORRECTED COPY**

**MATERIALS LICENSE**

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

<p style="text-align: center;">Licensee</p> <p>1. American Red Cross Blood Services Penn-Jersey Region Musser Blood Center</p> <p>2. 700 Spring Garden Street Philadelphia, Pennsylvania 19123-3594</p>	<p>In accordance with the letter dated April 23, 2007,</p> <p>3. License number 37-15434-01 is amended in its entirety to read as follows:</p> <hr/> <p>4. Expiration date July 31, 2014</p> <hr/> <p>5. Docket No. 030-09100 Reference No.</p>
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<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Any byproduct material permitted by 10 CFR 35.100</p> <p>B. Sulfur 35</p> <p>C. Hydrogen 3</p> <p>D. Phosphorus 32</p> <p>E. Chromium 51</p> <p>F. Carbon 14</p>	<p>7. Chemical and/or physical form</p> <p>A. Any</p> <p>B. Any</p> <p>C. Any</p> <p>D. Any</p> <p>E. Any</p> <p>F. Any</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. As needed</p> <p>B. 10 millicuries</p> <p>C. 10 millicuries</p> <p>D. 10 millicuries</p> <p>E. 10 millicuries</p> <p>F. 10 millicuries</p>
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9. Authorized use:

A. Any uptake, dilution and excretion study permitted by 10 CFR 35.100.

B. through F. For use in conducting in vitro research.

**CONDITIONS**

10. Licensed material may be used or stored only at the licensee's facilities located at Musser Blood Center, 700 Spring Garden Street, Philadelphia, Pennsylvania.
11. Licensed material is authorized for use by, or under the supervision of:

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number  
37-15434-01

Docket or Reference Number  
030-09100

Amendment No. 15

**CORRECTED COPY**

- A. Individuals permitted to work as an authorized user in accordance with 10 CFR 35.13 and 35.14.
- B. The following individuals are authorized users for medical use as indicated:

Authorized Users

Material and Use

Ralph R. Vassallo, M.D.

35.100

- C. The following individuals are authorized users for non-medical uses as indicated:

Authorized Users

Material and Use

Ralph R. Vassallo, M.D.

Sulfur 35; Hydrogen 3; Phosphorus 32; Chromium 51;  
Carbon 14 for in vitro research

12. The Radiation Safety Officer for this license is Ralph R. Vassallo, M.D.
13. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 10 CFR 30.35(d) for establishing decommissioning financial assurance.
14. The licensee is authorized to hold radioactive material with a physical half-life of less than or equal to 120 days for decay-in-storage before disposal in ordinary trash, provided:
- A. Waste to be disposed of in this manner shall be held for decay a minimum of 10 half-lives.
- B. Before disposal as ordinary trash, the waste shall be surveyed at the container surface with the appropriate survey instrument set on its most sensitive scale and with no interposed shielding to determine that its radioactivity cannot be distinguished from background. All radiation labels shall be removed or obliterated.
- C. A record of each such disposal permitted under this license condition shall be retained for 3 years. The record must include the date of disposal, the date on which the byproduct material was placed in storage, the radionuclides disposed, the survey instrument used, the background dose rate, the dose rate measured at the surface of each waste container, and the name of the individual who performed the disposal.
15. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**License Number  
37-15434-01Docket or Reference Number  
030-09100

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16. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. This license condition applies only to those procedures that are required to be submitted in accordance with the regulations. Additionally, this license condition does not limit the licensee's ability to make changes to the radiation protection program as provided for in 10 CFR 35.26. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.
- A. Application dated January 29, 2004 (ML040450009)
  - B. Letter dated March 17, 2004 (ML040850441)
  - C. Letter dated July 1, 2004 (ML041950358)
  - D. Application dated September 17, 2004 (ML042670429)
  - E. Letter dated October 5, 2004 (ML042940239)



For the U.S. Nuclear Regulatory Commission

***Original signed by Michelle Beardsley***Date September 28, 2007

By \_\_\_\_\_

Michelle Beardsley  
Decommissioning Branch  
Division of Nuclear Materials Safety  
Region I  
King of Prussia, Pennsylvania 19406