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ST LOUIS CANCER AND
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Fax

To:	Colleen Casey, ^{US} NRC	From:	Todd Grigorest
Fax:	(630) 515-1078	Pages:	2 incl cover
Phone:	(630) 829-9500	Date:	8/24/07
Re:	Control # 316230	CC:	

Corrected letter attached

St. Louis Cancer and Breast Institute
(Ballas Cancer Center)
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August 24, 2007

Colleen Casey
Materials Licensing Branch
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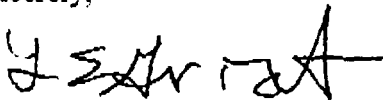
Re: Control # 316230 **CORRECTIONS IN BOLDFACE TYPE 8/24/07**
Clarification of Application for Materials License Amendment to USNRC license # 24-32151-01.

The numerical values of the exposure rates measured at 450 N. New Ballas Road and the last two leak tests done by the vendor for the Nucletron HDR unit were inadvertently omitted from the amendment request dated May 2, 2007. The exposure rates observed during the area survey did not deviate from the background exposure rate anywhere in the space, all of which was carefully surveyed. Those background rates ranged from 0 to 20 **microRoentgens per hour**. The last two leak tests performed on the HDR unit are attached.

The area survey done for decommissioning of the 450 N. New Ballas location was performed with a Victoreen 450P pressurized ion chamber survey meter. The 450P ion chamber is a sealed unit pressurized to 6 atmospheres with a gas mixture of 80/20 nitrogen/neon which enhances its sensitivity well beyond a typical ion chamber and renders it comparable to a GM tube. The operation is entirely electronic so that there are no electro-mechanical device failures or time lags; the response time is very fast: less than 5 seconds on the lowest scale (zero to 500 **microRoentgen**) while the integrate mode features a 100 millisecond response time. The meter autoranges so that inadvertent saturation and false low readings are not a problem, as can occur with Geiger-Muller tubes. The meter is sufficiently sensitive to detect quantities as low as a few microcuries during a walking sweep of the floor. A few microcuries of Cs-137, for example, raise the exposure level about 20 microR/hr at one foot which is easily detectable during a slow surface sweep. Quantities of contamination smaller than that should be picked up on the wipe tests.

Thank you for your patience and assistance. Our new fax number appears at the top of this page.

Sincerely,



Todd E. Grigereit, Ph.D.
Radiation Safety Officer