

**Radioactive Material License  
# 32-35165-01**



Tuesday, January 04, 2022

Michael Reichard  
Division of Nuclear Materials Safety  
U.S. Nuclear Regulatory Commission, Region I  
2100 Renaissance Boulevard, Suite 100  
King of Prussia, PA 19406-2713  
Phone: (610) 337-5000

**RE: Amendment Request to License No. 32-35165-01**

Dear Mr. Reichard;

Siemens Medical Solutions USA, Inc. (SMS) respectfully requests to discontinue extremity monitoring (rings) when performing licensed activities under our Service License 32-35165-01. The sources used to perform licensed activities are small, calibration sources handled briefly by our engineers when calibrating PET and SPECT systems. The historical information provided indicates that annual exposures are well below 10% of the annual limits pursuant to 10 CRF 20.1502.

Historically, our Engineers do not see that kind of exposure to their hands. The types of sources used as well as the low level and infrequent use of said sources guarantees they remain well below the annual limit.

The chart below shows aggregated extremity data for the last 3 years for our Field Service Authorized Users. The data shows that 96% (average) of wearers received less than 100 mrem and only 4% (average) of wearers received an extremity dose of more than 100 mrem for the year. In no instance did anyone receive more than 10% of the annual limit for extremities (5000 mrem).

<b>Extremity Results</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>	<b>Avg</b>
<b>Issued Rings</b>	386	403	424	<b>1213</b>	404.3
<b># Rings Below 100 mrem</b>	364 (94%)	390 (97%)	412 (97%)	<b>1166 (96%)</b>	(96%)
<b># Rings Below 10% of Annual Limit</b>	22 (6%)	13 (3%)	12 (3%)	<b>47 (4%)</b>	(4%)
<b># Rings Above 10% of Annual Limit</b>	0 (0%)	0 (0%)	0 (0%)	<b>0 (0%)</b>	(0%)

Based on the review of our extremity exposures, SMS believes that extremity monitoring is not required and can be discontinued. SMS is requesting NRC approval and will provide additional information or update our Dosimetry SOP accordingly.

Thank you for your time and feel free to contact me if you have additional questions.

With Best Regards,

Matthew D. Daut  
Chief Radiation Safety Officer  
Sr, Manager EH&S  
Siemens Medical Solutions, USA, Inc.  
221 Gregson Drive  
Cary, NC 27511  
(919) 208-3026

—