

**From:** Rodriguez-Luccioni, Hector  
**To:** ["Mark V. Gorecki"](#)  
**Cc:** [Xu, Shirley](#)  
**Subject:** RE: Mail Control No. 584518  
**Date:** Thursday, September 25, 2014 8:26:00 AM  
**Attachments:** [image001.png](#)  
[image002.png](#)

---

Mr. Gorecki,

10 CFR 40.52 states the requirements for an application for a specific license to apply source material to, incorporate **source material** into, manufacture, process, or produce the products specified in 40.13(c) or to initially transfer for sale or distribution any products containing **source material** for use under 40.13(c).

10 CFR 32.14 states the requirements for an application for a specific license to apply **byproduct material** to, or to incorporate byproduct material into, the products specified in 30.15 or to initially transfer for sale or distribution such products containing **byproduct material** for use pursuant to 30.15.

Your application is for a vacuum electron tube containing thorium. Thorium is a source material as define in 10 CFR 40.4, which means that your device falls under 10 CFR 40.13. 10 CFR 40.13(c)(1) states the applicable quantities or concentration limits.

The first question in the RAI, as you stated in your email below, it reference 10 CFR 40.52(b)(3). Depending on the purpose of your device, 40.13(c)(1) states the applicable quantities or concentration limits of thorium. As you stated in your email dated 9/21/14, the vacuum tubes that you will be distributing are rectifier tubes to be used by U.S. military in high voltage power supplies supporting radar installations. Vacuum tubes for this purpose can contain any quantity of thorium in accordance with 40.13(c)(1)(ii), there is no applicable quantity or concentration limit. Which means that you are not required to submit a quality control procedure and a quality control standard as required by 40.52(b)(3). Please disregard question one of our request for additional information dated September 9, 2014.

Regarding 10 CFR 40.52(b)(4), labeling requirements are independent on the applicable quantities or concentration limits. You are required to label or mak each unit, and/or its container as requested in question 2 of our RAI.

If you have any further questions please let me know.

*Hector Luis Rodriguez-Luccioni, Ph.D.*  
*U.S. Nuclear Regulatory Commission*  
*Office of Federal and State Materials and Environmental Management Programs*  
*Division of Materials Safety and State Agreements*  
*Licensing Branch*  
*(301)415-6004*  
*MS: T-8E18*  
[Hector.Rodriguez-Luccioni@nrc.gov](mailto:Hector.Rodriguez-Luccioni@nrc.gov)

---

**From:** Mark V. Gorecki [mailto:markg@rell.com]  
**Sent:** Wednesday, September 24, 2014 9:33 AM  
**To:** Rodriguez-Luccioni, Hector  
**Cc:** Mark V. Gorecki  
**Subject:** FW: Mail Control No. 584518

---

**From:** Mark V. Gorecki  
**Sent:** Wednesday, September 17, 2014 2:09 PM  
**To:** [Hector.Rodriguez.Luccioni@nrc.gov](mailto:Hector.Rodriguez.Luccioni@nrc.gov)  
**Subject:** Mail Control No. 584518

Hello Hector,

In your Letter dated September 9, 2014 you requested additional information in regards to Richardson Electronics, Ltd application for an NRC Exempt-Distribution Materials License. Question number one asks for quality control procedures and control standards. It sites these requirement as part of 10 CFR 40.52(b)(3) for products with “applicable quantity or concentration limits”. Please define “applicable quantity or concentration limits” and site guideline. In my research 10 CFR 32.14 (c) leads to 10 CFR 30.15 (8) with no applicable quantities or concentrations given for Thorium in vacuum tubes.

- 1. 10 CFR 40.52(b)(3) requires for products with applicable quantity or concentration limits, quality control procedures to be followed in the fabrication of production lots of the product and the quality control standards the product will be required to meet. Please provide the quality control procedures and the quality control standards.**

Question number two asks for the methods that will be used to label or mark the vacuum tube and/or its container. It sites these requirements as part of 10 CFR 40.52(b)(4). However if our product does not meet the “applicable quantity or concentration limits”, do we need to label the vacuum tube and/or its container?

- 2. Please provide the method of labeling or marking each unit, and/or its container with the identification of the manufacturer or initial transferor of the product and the source material in the product as required by 10 CFR 40.52(b)(4)**

Thank you in advance for your time and patience in this matter.

Mark V. Gorecki

Facility Superintendent  
Richardson Electronics, Ltd  
[markg@rell.com](mailto:markg@rell.com)  
Office: 630-208-2276  
Fax: 630-208-2955