

**From:** [Zhu, Shen CIV USARMY USAMC \(USA\)](#)  
**To:** [Ullrich, Betsy](#)  
**Subject:** [External\_Sender] RE: [Non-DoD Source] RE: your license amendment - a request for additional information  
**Date:** Wednesday, June 9, 2021 3:27:01 PM  
**Importance:** High

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Good afternoon Ms. Ullrich,

We request a separate line item for the Am-241 plated source: 1 millicurie per radionuclide and 20 millicurie total. In the original amendment application the total amount is 2 millicurie. Since I may need multiple sets in future, the total is increased to 20 millicurie. If you need additional documents to increase the total amount, I will keep the requested amendment as the original one (I needs the source amendment ASAP for testing). Please advise. Thank you very much for the help.

R,  
Shen

Shen Zhu, Ph.D.  
Chief, Army Radiation Standards Laboratory  
RSO, US Army TMDE Activity  
Building 5417  
Redstone Arsenal, Alabama 35898  
Ph: 256-876-8825  
Fx: 256-955-6413

**From:** Ullrich, Betsy <Elizabeth.Ullrich@nrc.gov>  
**Sent:** Monday, June 7, 2021 8:09 AM  
**To:** Zhu, Shen CIV USARMY USAMC (USA) <shen.zhu.civ@mail.mil>  
**Subject:** [Non-DoD Source] RE: your license amendment - a request for additional information

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Dr Zhu,

My apologies, I thought your license condition 13 was the more restrictive version that provided NO financial assurance. I see that you are authorized at the \$1,125 level. However, this would limit you to 1 1-millicurie Am241 source and you could have NO other material under Line Item B.

Betsy

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**From:** Ullrich, Betsy  
**Sent:** Monday, June 07, 2021 9:03 AM

**To:** Zhu, Shen CIV USARMY USAMC (USA) <[shen.zhu.civ@mail.mil](mailto:shen.zhu.civ@mail.mil)>

**Subject:** your license amendment - a request for additional information

Dr. Zhu,

The amendment requested that we change Item B as follows:



However, in “any” form, quantities of Am241 (At No 95) and Ra-226 (At No. 88), as well as any other alpha emitter that is not listed on Appendix B to Part 30, exceeding 0.01 millicuries will require provision of financial assurance at the \$225,000 level’ at 0.1 millicuries, FA at the \$1,125,000 level, and above 1 millicurie requires a decommissioning funding plan. I cannot write this line item as you requested above, because you cannot comply with Condition 13 with that 1 millicurie quantity.

However, the amendment explains that you plan to purchase plated sources, which are considered “sealed sources or played foils and would not require financial assurance until you possessed a quantity greater than 100 curies. I would suggest that you revise your amendment to request a separate line item for the Am241 as plated sources, and provide the manufacture and model information for those sources. Alternately, if you do not need any of Item B in an unsealed form, we could amend the license to list the form as “sealed sources, plated sources, or foils”.

I will need a response in writing. Please let me know if you will either

- Provide financial assurance to possess the quantities in “any” form as requested; or
- Will request a separate line item for sealed/plated sources of Am241. If so, state the maximum per source and the total amount [please note that, if you are expecting multiple sets with 1 millicurie sources, the 2 millicurie total may not be sufficient; or
- Will request that Item B be changed from “any” form to “sealed/plated sources”

You should send a pdf of a letter to R1DRSSMail

[ResourceR1DRSSMail.Resource@nrc.gov](mailto:ResourceR1DRSSMail.Resource@nrc.gov) < Caution-mailto:R1DRSSMail.Resource@nrc.gov > , listing the Mail Control No. 625516 so it gets to processed correctly. You may also cc me on the email so I can work on it immediately to keep this moving.

Let me know if you have any questions.

Betsy

Betsy Ullrich, Senior Health Physicist  
USNRC Region I  
2100 Renaissance Boulevard, Suite 100  
King of Prussia, PA 19406  
610-337-5040 (office)  
240-704-4575 (cell)

[Elizabeth.ullrich@nrc.gov](mailto:Elizabeth.ullrich@nrc.gov) < Caution-mailto:Elizabeth.ullrich@nrc.gov >