

## Hardesty, Duane

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**From:** Cronin, Dan <[dcronin@ufl.edu](mailto:dcronin@ufl.edu)>  
**Sent:** Monday, October 03, 2016 5:59 PM  
**To:** Hardesty, Duane  
**Cc:** Berglund, Matthew; Shea, Brian C  
**Subject:** [External\_Sender] Re: I asked this before, but I don't recall the answer...

Sounds good. Thank you.

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Dan Cronin  
University of Florida | 352-454-0424 Cell

On Oct 3, 2016, at 5:40 PM, Hardesty, Duane <[Duane.Hardesty@nrc.gov](mailto:Duane.Hardesty@nrc.gov)> wrote:

This wording is fine given we will add "but not separate."

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**From:** Cronin, Dan [<mailto:dcronin@ufl.edu>]  
**Sent:** Monday, October 03, 2016 5:23 PM  
**To:** Hardesty, Duane <[Duane.Hardesty@nrc.gov](mailto:Duane.Hardesty@nrc.gov)>  
**Cc:** Berglund, Matthew <[berglund@ufl.edu](mailto:berglund@ufl.edu)>; Shea, Brian C <[bshea@ufl.edu](mailto:bshea@ufl.edu)>  
**Subject:** [External\_Sender] Re: I asked this before, but I don't recall the answer...

Hi Duane,

Based on our discussion earlier, I propose we make the Pu-239 sealed source license limit 39 grams. So it reads something to the effect of "To receive, possess, and use in connection with operation of the facility, up to a total of 39 grams of Pu-239 in the form of sealed plutonium-beryllium neutron sources".

In the event our current 55 year old one curie PuBe source fails a leak test for some reason, this amount allows the UFTR enough flexibility to transfer / borrow a sealed one curie PuBe source from the UF radiation control office to continue operation while maintaining possession of the failed source until we can properly dispose of it. The choice of 39 grams is large enough to accommodate two one curie sources with some tolerance and it's a number that should be easy for operators to recall / memorize. (Pu-239 as in Pu-2"39" => 39 grams).

Thanks,

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Daniel J. Cronin  
Licensing Engineer | University of Florida Training Reactor  
[dcronin@ufl.edu](mailto:dcronin@ufl.edu) | 352-294-2103 | 352-454-0424 Cell

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**From:** Duane Hardesty <[Duane.Hardesty@nrc.gov](mailto:Duane.Hardesty@nrc.gov)>  
**Date:** Monday, October 3, 2016 at 12:16 PM  
**To:** Brian Shea <[bshea@ufl.edu](mailto:bshea@ufl.edu)>  
**Cc:** Matt Berglund <[berglund@ufl.edu](mailto:berglund@ufl.edu)>, Dan Cronin <[dcronin@ufl.edu](mailto:dcronin@ufl.edu)>  
**Subject:** I asked this before, but I don't recall the answer...

What is the size in grams of the pu-be source? I need it for the license;

“to receive, possess, and use, but not separate, in connection with operation of the facility, a xx gram, 1-curie sealed plutonium-beryllium neutron source”

Duane A. Hardesty  
Sr. Project Manager - Research & Test Reactors  
U.S. Nuclear Regulatory Commission  
MS O-12D20  
Washington, DC 20555  
Phone: (301) 415-3724  
fax: (301) 415-1032