

From: [William Fendt](#)
To: [Betsy Ullrich](#)
Cc: [Krista Murray](#); [Mark Seifert](#); [William Fendt](#)
Subject: [External_Sender] Re: your action was in-processed and I will work it today or tomorrow... will need that additional information
Date: Thursday, February 29, 2024 9:27:30 AM

Hi Betsy

Thank you for your comments and guidance on how to proceed. We will be sending a prompt response. Bill

On Thu, Feb 29, 2024 at 8:29 AM Betsy Ullrich <Elizabeth.Ullrich@nrc.gov> wrote:

I finally had a chance to pull up your license. Here is why I believe this individual is not qualified for this license: the RSO has to be qualified by training and experience for the types and quantities of materials, and the activities, authorized on the license. The license includes

- Up to 10 curies total of RAM with half-lives less than 120 days
- C-14 up to 10 curies and the other Type B broad quantities of unsealed materials in 33.100 Sch A Col I, 100 Ci tritium etc
- Broad scope ability to open/close facilities – needs decommissioning training/guidance
- Authorization for quantities that require FA,
- Authorization for work shipboard and work with unsealed H3 and C14 at TJS
- Authorization to calibrate your own instruments
- Authorization for animal use
- Authorization to analyze leak test samples

She needs training and experience in handling and surveying for unsealed materials, training and experience in calibration of instruments, waste analyzing leak test samples, waste disposals. the duties of the RSO include ensuring radioactive work is performed safely but she has no experiences with unsealed material; assisting and advising the RSC....okay for sealed sources but not likely much else; training of personnel... I don't see her as credible for unsealed materials training at this time; looking at Item 8 of your application, the RSO is expected to be the person who knows how to deal with volatile RAM, and in Item 9 to provide recommendations on survey instruments; response to Item 10.2 includes in-house calibration of survey instruments using the beam calibrator, in-house calibration of the thyroid counter; in-house calibration of the LSC, gamma-spec, windowless g-f [proportional counter...none of which she has prior experience doing, much less even seen most of those types of analytical instruments. Etcetera

Looking at the recent inspections, there is also use of uranyl acetate etc under

40.22, which have quite different issues. I grant that the actual uses of licensed materials are small (microcuries), few (5 labs using unsealed materials) and infrequent (20-30 packages per year) but she has to be qualified for what is authorized by the license. A 5-day RSO course does not give her the training and experience for most of the issues above. If you want to discuss this more than we did on Monday, let me know. I will be working on a formal RAI letter for this.

I see 2 choices: an extended mentoring program with additional training commitments; or serious reduction in the authorized materials and activities.

Betsy

From: Betsy Ullrich

Sent: Thursday, February 29, 2024 7:24 AM

To: Fendt, William A. <wfendt@udel.edu>

Subject: your action was in-processed and I will work it today or tomorrow... will need that additional information

All of her experience and training, other than working with your for ?? months, is with portable gauges. That is not sufficient for the UDel broad scope program. She also has no experience working with a broad scope license before coming to this one. I grant that the actual use is fairly small these days, but she needs to be trained on unsealed materials, understanding LSC results etc. if she is going to oversee other people using these materials and if she is performing lab surveys, incoming package surveys. Also... do you expect her to continue calibrating instruments?

You should describe the scope of the current program, document her oversight by the RSC and the RSC oversight of the program, and availability of an HP consultant familiar with unsealed materials to assist her as needed. When we did this with the federal agency, we required quarterly mentoring meetings with the consultant [can be remote/telephone], and that the next annual program review be performed by someone other than the new RSO.

Letter should be sent to my email address.

Betsy

Please note that, as of July 3, 2023, I will be working part-time only Monday through Thursday.

Betsy Ullrich, Senior Health Physicist

USNRC Region I

475 Allendale Road – Suite 102

King of Prussia, PA 19406

610-337-5040 (office)

240-704-4575 (cell)

Elizabeth.ullrich@nrc.gov