From: Deason, Harold W CIV USARMY AMCOM (USA)

To: <u>Ullrich, Betsy</u>

Subject: [External_Sender] RE: [Non-DoD Source] RE: RE: termination request

Date: Monday, May 3, 2021 5:11:15 PM

Attachments: Response to NRC questions original termination request SIGNED.pdf

Hopefully, the attached memo will help in the accounting of licensed material relative to our termination request of NRC License 01-00126-21. The attached memo contains short tables and a presupposed scenario that may help clear up some of the questions resulting from our correspondence of December 2, 2019.

From: Ullrich, Betsy <Elizabeth.Ullrich@nrc.gov>

Sent: Friday, April 16, 2021 2:21 PM

To: Deason, Harold W CIV USARMY AMCOM (USA) charold.w.deason.civ@mail.mil

Subject: [Non-DoD Source] RE: RE: termination request

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

No hurry, I won't be available next week at all,

Betsy

From: Deason, Harold W CIV USARMY AMCOM (USA) harold.w.deason.civ@mail.mil

Sent: Friday, April 16, 2021 3:19 PM

To: Ullrich, Betsy <<u>Elizabeth.Ullrich@nrc.gov</u>>

Subject: [External_Sender] RE: termination request

I will surely need a little time to review. Let me look this over this week-end and try to arrive at a path to closure. I appreciate the consideration and will get back to you soonest.

Respectfully, Wayne

Harold W. Deason AMCOM RSO Desk 256-842-3250 Cell 256-425-3100 From: Ullrich, Betsy < Elizabeth.Ullrich@nrc.gov > >

Sent: Friday, April 16, 2021 12:45 PM

To: Deason, Harold W CIV USARMY AMCOM (USA) < harold.w.deason.civ@mail.mil harold.w.deason.civ@mail.mil harold.w.deason.civ@mail.mil harold.w.deason.civ@mail.mil harold.w.deason.civ@mail.mil <a href="mailto:harold.w.deason.civ@m

Subject: [Non-DoD Source] termination request

Mr. Deason,

I am contacting you to clarify the number of sources you possessed and their transfer, loss, or disposal, in order to ensure that all materials possessed under the license are accounted for.

In February 2019, you were cited for possessing approximately 1048 plated foils, each containing 4.5 microcuries of Am241, as of February 15, 2019. This is a total of approximately 4.7 millicuries of foils.

In a letter dated December 2, 2019, you reported that you had 1 source in Temple TX, 38 sources lost; 225 sources sold; and 260 sources disposed of. If each of these sources contained 4.5 microcuries, this accounts for a total of 524 sources with a total of 2.4 millicuries. Of these, the 260 sources disposed of would account for 1.2 millicuries.

In your termination request signed March 4, 2021, you confirmed 6 disposal as follows:

8/15/18	0.54 millicuries	
1/10/18	0.27 millicuries	
1/9/19	0.54 mCi	
7/11/19	0.378 mCi>	sub-total of 1.7 millicuries disposed of between
8/18 and 7/19		
1/23/20	0.343 mCi	
1/23/20	0.009 mCi	
TOTAL	2.08 millicuries	

The relationship between the information provided in the December 2, 2019 letter and the March 4, 2021 letter, given that disposals listed in the 2021 letter appear to cover some of the disposals that may have been referred to in the December 2019 letter. And the sum total does not meet the 4.7 millicuries in 1048 foils referred to in the February 2019 letter.

If we need to set up a time to discuss this, that is fine. I suspect you will need to take some time to sort this out first.

Thanks, 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) <u>Elizabeth.ullrich@nrc.gov</u> < Caution-mailto:Elizabeth.ullrich@nrc.gov >

MEMO TO FILE 03 May 2021

SUBJECT: Response Concerning Email Termination Request, April 16, 2021 12:45PM

Our letter of 02 December 2019 lacked clarity in reporting "lasers" (laser assemblies) failing to affirm that each laser assembly contained two individual 4.5 μ Ci Am-241 (9.0 μ Ci/Laser assembly). Likely issues in the reported accounting are noted.

- 1) The single laser assembly and its associated two sources, reported in 02 December 2019 as being in Temple, TX has since been disposed [Manifest #AL-2020-003]. That single laser assembly, when included in the disposed category total of the tabulation in paragraph 2.b (1) of the 02 December 2019 letter, raises the disposed laser assemblies total to 261.
- 2) Additional reviews of all Certificates of License Transfer revealed an inconsistency in Manifest #AL-2018-001. The inventory sheet accompanying that manifest, along with a corrected NRC Form 540 and forms 541, 542, and a form WI-VE-1109-051, indicate 60 laser assemblies were processed for disposal. The Certificate of Transfer lists 0.27 mCi for the 60 laser assemblies. Sixty laser assemblies would, in fact, contain 120 sources with a total of 0.54 mCi.

If Manifest #AL-2018-001 is corrected to 0.54 mCi, the following table, reflecting the "Disposed" category would result:

TABLE A DISPOSED

Manifest #	Activity	Laser Assemblies	Sources	
AL-2020-003	0.009 mCi	1	2	
AL-2019-349	0.343 mCi	38	76	
AL-2019-201	0.378 mCi	42	84	
AL-2018-379	0.540 mCi	60	120	
AL-2018-244	0.540 mCi	60	120	
AL-2018-001	0.540 mCi*	60	120*	
Total	2.35 mCi*	261*	522*	

^{*}Quantity based upon 60 laser assemblies disposed on Manifest #AL-2018-001

Table B is the summation of Table A and the December 2, 2019 corrected totals:

TABLE B SUMMARY

Category	Laser Assembly Totals	μCi Total	mCi
Crash/Loss	38	342	0.342
Foreign Military Sales	225	2025	2.025
Disposed	261	2349	2.349
Totals	524	4716	4.716

Inventory activities for license 01-00126-21 often have been stated as "Laser" inventory. This accounting "unit" may have historically been used since the Army could not open the laser assembly and directly access, see, or confirm each individual source. Over time, however, it seems "inventory" imprecisely applied to laser assemblies and/or sources interchangeably. A request has been sent to the program office for a correction in the Manifest # AL-2018-001.

Respectfully,

Harold W. Deason

AMCOM RSO

MEMO TO FILE 03 May 2021

SUBJECT: Response Concerning Email Termination Request, April 16, 2021 12:45PM

Our letter of 02 December 2019 lacked clarity in reporting "lasers" (laser assemblies) failing to affirm that each laser assembly contained two individual 4.5 μ Ci Am-241 (9.0 μ Ci/Laser assembly). Likely issues in the reported accounting are noted.

- 1) The single laser assembly and its associated two sources, reported in 02 December 2019 as being in Temple, TX has since been disposed [Manifest #AL-2020-003]. That single laser assembly, when included in the disposed category total of the tabulation in paragraph 2.b (1) of the 02 December 2019 letter, raises the disposed laser assemblies total to 261.
- 2) Additional reviews of all Certificates of License Transfer revealed an inconsistency in Manifest #AL-2018-001. The inventory sheet accompanying that manifest, along with a corrected NRC Form 540 and forms 541, 542, and a form WI-VE-1109-051, indicate 60 laser assemblies were processed for disposal. The Certificate of Transfer lists 0.27 mCi for the 60 laser assemblies. Sixty laser assemblies would, in fact, contain 120 sources with a total of 0.54 mCi.

If Manifest #AL-2018-001 is corrected to 0.54 mCi, the following table, reflecting the "Disposed" category would result:

TABLE A DISPOSED

Manifest #	Activity	Laser Assemblies	Sources	
AL-2020-003	0.009 mCi	1	2	
AL-2019-349	0.343 mCi	38	76	
AL-2019-201	0.378 mCi	42	84	
AL-2018-379	0.540 mCi	60	120	
AL-2018-244	0.540 mCi	60	120	
AL-2018-001	0.540 mCi*	60	120*	
Total	2.35 mCi*	261*	522*	

^{*}Quantity based upon 60 laser assemblies disposed on Manifest #AL-2018-001

Table B is the summation of Table A and the December 2, 2019 corrected totals:

TABLE B SUMMARY

Category	Laser Assembly Totals	μCi Total	mCi
Crash/Loss	38	342	0.342
Foreign Military Sales	225	2025	2.025
Disposed	261	2349	2.349
Totals	524	4716	4.716

Inventory activities for license 01-00126-21 often have been stated as "Laser" inventory. This accounting "unit" may have historically been used since the Army could not open the laser assembly and directly access, see, or confirm each individual source. Over time, however, it seems "inventory" imprecisely applied to laser assemblies and/or sources interchangeably. A request has been sent to the program office for a correction in the Manifest # AL-2018-001.

Respectfully,

Harold W. Deason

AMCOM RSO