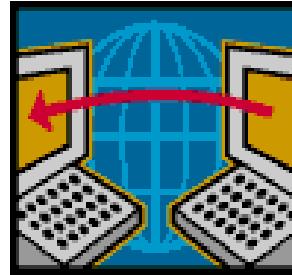




UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
612 EAST LAMAR BLVD., SUITE 400  
ARLINGTON, TEXAS 76011-4125

EMAIL



Name:	Steve A. Fletcher	License: 05-14892-01
Organization:	U.S. Environmental Protection Agency National Enforcement Investigations Center (NEIC)	Docket: 030-08219 Control: 575567
Phone:	303-462-9007	
E-mail Address:	Fletcher.Steve@epamail.epa.gov	
From:	Jacqueline D. Cook	
Date:	October 8, 2011	
Subject:	Emails dated July 5, and August 24, 2011 and Letter dated August 16, 2011 for License Amendment	
Pages:	3	

Mr. Fletcher:

Per your emails dated July 5, August 24, and letter dated August 16, 2011, the items on the next page are deficiencies which require your response. **Please respond to this e-mail by Monday, October 24, 2011.** If you are unable to respond by this due date, please don't hesitate to contact me so we can discuss an extension to the date. Our fax number is (817) 860-8263. You may respond by e-mail in pdf format if you'd like. My email address is [Jackie.Cook@nrc.gov](mailto:Jackie.Cook@nrc.gov). When responding to this e-mail, please include the license, docket and control numbers located at the top of this page.

Thanking you in advance for your cooperation, assistance, and prompt response in this matter.

/RA/  
Jacqueline D. Cook  
Senior Health Physicist

1. The definition of source material is as follows: (1) Uranium or thorium, or any combination thereof, in any physical or chemical form or (2) ores which contain by weight one-twentieth of one percent (0.05%) or more of: (i) Uranium, (ii) thorium or (iii) any combination thereof. Source material does not include special nuclear material.

Please note that in the definition of source material there is no mention of "precious metals".

In addition, please note that zirconium-93 (Zr-93), Zr-95, Zr-97 and hafnium-181 (Hf-181) are listed as byproduct material in 10 CFR 30.71 Schedule B.

Please review the quantity you may possess with the exempt quantity as listed in 10 CFR 30.18. Please clarify if these radioisotopes need to be listed on your specific license.

2. Please note that the quantities set forth in 10 CFR 30.71, Schedule B are for individual quantities not cumulative exempt amount as specified in your email dated July 5, 2011. However, based on the individual quantity specified in 10 CFR 30.71, Schedule B, it appears that the 5 sealed units of Cs-137 are still exempt from the requirements for a license set forth in section 81 of the Act and from the regulations in parts 30 through 34, 36, and 39 of 10 CFR.

Please clarify.

3. Please clarify if the Ni-63 GCs are labeled as a GL device.

4.
  - A. For unsealed materials:
    - Please provide element name with mass number, chemical and/or physical form, and maximum requested possession limit.
  - B. For potentially volatile materials (e.g., I-125, I-131, H-3, Kr-85):
    - Please specify whether the material will be free (volatile) or bound (non-volatile) and the requested possession limit for each form.
  - C. For sealed materials:
    - Please identify each radionuclide (element name and mass number) that will be used and specify the maximum activity per source. Also, specify the maximum number of sources or total activity for each radionuclide;
    - Please provide the manufacturer's (distributor's) name and model number for each sealed source and device requested
    - Please confirm that each sealed source, device, and source/device combination is registered as an approved sealed source or device by NRC or an Agreement State

-- Please confirm that the activity per source and maximum activity in each device will not exceed the maximum activity listed on the approved certificate of registration issued by NRC or by an Agreement State

5. Please confirm the list submitted by Mr. Richard Ross in an email dated August 24, 2011 of the radioactive material you plan to keep. (5 units Ni-63 detectors, 6 units of Cs-137 button sources, and exempt quantity Th-230 plated source).

Please refer to Item 4 above if other items need to be listed on your specific license.

6. Please confirm if any areas in building 25 currently designated as restricted areas will be re-designated as unrestricted areas after disposal of radioactive material. If so, please submit a final status survey for these areas. This survey report should include all areas within this facility where licensed materials were used and stored. The final status survey is one of the most important aspects of decommissioning a site since it is the primary document supporting the decision to release a facility or area within a facility for unrestricted use. Your survey should be performed in accordance with 10 CFR Part 30.36.

You should identify your wipe test results in terms of disintegrations per minute rather than counts per minute. Key the results to specific points on a facility diagram. Indicate the detection equipment that was used to assay the wipes, the method used to calibrate this equipment, the date of calibration, and specific calculations of instrument sensitivity. Optionally, you can choose to send your wipes to a vendor for analysis. Should you choose this option, you should provide the name and Agreement State or NRC license number of the vendor.

7. In your July 5, 2011 email, you mention that you would want to keep a bottle of uranyl acetate. Please note that uranyl acetate, uranyl nitrate, thorium nitrate and other such compounds contain uranium and/or thorium in concentrations greater than 0.05% by mass, and therefore are considered source material under 10 CFR Part 40.
8. I will do some more research to assist in the confirmation of whether the Pb-210 radiogenic lead wire should be specifically licensed.
9. Please note that the Th-230 calibration source is source material. In addition, please note that 10 CFR Part 40 does not address calibration or reference sources; however, you may be exempt from a license for this radioisotope in accordance with 10 CFR 40.13(a) unimportant quantities of source material or possess it under the general license for small quantities of source material, whichever is applicable.

Please clarify.