

**From:** [Lanzisera, Penny](#)  
**To:** [Sciole, Kelly A.](#)  
**Subject:** Request for Additional Information  
**Date:** Tuesday, August 09, 2016 5:06:00 PM

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Licensee: Nemours – Alfred I. DuPont Hospital for Children  
License No. 07-16199-02  
Docket No. 03019939  
Mail Control 591457

Dear Kelly, in order to continue our review of your request to add clinical use of F-18 FDG and its associated facilities and equipment, please submit the following additional information:

1. Confirm that the F-18 comes as a labeled radiopharmaceutical (e.g., FDG) in unit dosages from a commercial radiopharmacy.
2. Provide a diagram that shows the relation of the PET department to the NM department.
3. From the diagram provided, the facility includes 2 stretcher locations, 1 patient toilet, and one scan room. The shielding describes three uptake rooms. Please indicate on the diagram the 3 uptake rooms and describe their shielding if not previously provided. In addition, please clarify that the patient bathroom will be used by PET patients only and will be surveyed daily. Finally, if the bathroom surveys show elevated readings, please describe the mechanisms for controlling exposure to workers or members of the public (e.g., lock the department after hours to control public access and train staff to only use the staff bathroom).
4. From the diagram and shielding description provided, it appears that the floor and ceiling includes from 1.6 to 2.3 inches of concrete and that the wall to the left of the rooms containing the stretchers includes 0.55 inches of lead. The amount of lead in the one wall appears adequate; however, using the methodology in AAPM Task Group 108 (referenced in your letter), from 4 to 5 inches of concrete appears warranted for exterior walls, the ceiling, and the floor. Please provide the installed concrete for this facility for all exterior walls (excluding the lead wall), for all interior walls, and for the floor and ceiling.
5. Describe any specialized handling equipment and shielding used when handling/storing F-18. For instance are L-blocks and syringe shields designed for PET used. In addition, describe any shielded cabinets for storage of F-18 within the hot lab.

You may submit the above information to my attention either via a signed pdf or via fax to 610-337-5269. Please respond within 30 days or we will consider that you no longer require the additional facility and void your request. If you have any technical questions, please feel free to call or email me. With regards to your questions posed to Shawn Seeley on July 22, 2016 for possible uses in the newly constructed Quality Control Lab and Production Lab/Hot Cell; please contact me to discuss the proposed possession limits, authorized users, authorized use (research or clinical), and shielded facilities. Thank you for your assistance,

Penny Lanzisera  
Senior Health Physicist

US NRC, Region I