

Casey, Colleen

From: Casey, Colleen
Sent: Tuesday, June 30, 2015 4:48 PM
To: 'berry.stewart@franciscanalliance.org'
Subject: 586512- Information needed for HDR room move
Attachments: Scan001.PDF

Dear Berry,

Please see the attached file letter, which requests additional information for us to consider amending your license to change the HDR treatment room. I am working Wed. and Thursday, July 1 and 2, if you would like to discuss this information with me over the phone. I think that would be a good idea, to ensure you understand what we need and what we don't.

I will be out on July 3 and July 6, and please note that we are requesting a response within 9 days OR please make alternate arrangements with me, as promptly as you can.

Reaching me via email is usually best, phone/voicemail next best. Thanks very much. I hope to talk with you soon and have a very safe and happy holiday.

Colleen
Colleen Carol Casey
Materials Licensing Reviewer
U.S. Nuclear Regulatory Commission
Region III
2443 Warrenville Road
Suite 210
Lisle, IL 60532-4352
(630) 829-9841 Direct
(630) 515-1078 Fax
NRC 24 HR Operations Center
(301) 816-5100

Gentle Reminders: Unless previously arranged with or requested by me directly, please do not submit any licensing requests, responses or correspondence via e-mail. Please only submit one complete, signed copy of your correspondence to us.

Please prepare your licensing requests in accordance with NUREG 1556 Series Guidance, as appropriate.

Thank you very much!

Please also note that my full-time work schedule includes every other Friday off.

Ensuring the health and safety of
our people, our nation and
our environment

<http://www.nrc.gov/>

-----Original Message-----

From: R3-238-DNMS-A@nrc.gov [mailto:R3-238-DNMS-A@nrc.gov]

Sent: Tuesday, June 30, 2015 6:02 PM

To: Casey, Colleen

Subject: Scan from a Xerox WorkCentre Pro

Please open the attached document. It was scanned and sent to you using a Xerox WorkCentre Pro.

Sent by: Guest [R3-238-DNMS-A@nrc.gov]

Number of Images: 4

Attachment File Type: PDF

WorkCentre Pro Location: DNMS Copy Room

Device Name: R3-238-DNMS-A

For additional copies please contact the IM Center.



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION III
2443 WARRENVILLE RD. STE 210
LISLE, IL 60532-4352

Berry L. Stewart, M.S.
Radiation Safety Officer
Franciscan St. Francis Health
8111 South Emerson Avenue
Indianapolis, IN 46237

JUN 30 2015

Dear Mr. Stewart:

This refers to your letter dated April 13, 2015, requesting a change in the area of use for your high dose rate remote afterloading brachytherapy device (HDR unit) under your NRC Material License No. 13-02128-03.

We have reviewed your letter above and the copy of a blueprint diagram that accompanied it and find that we need the information below in order to continue our review.

We were unable to approve the move of the HDR unit to the proposed new area of use at this time because the information provided in your letter dated April 13, 2015, was insufficient to complete our review.

If you wish to pursue this matter, please provide only one complete, written response, that is currently dated and signed, within 9 days from the date of this letter (by July 9, 2015).

If an alternate timeframe to respond is needed, please contact me to make other arrangements. These details will help to ensure that your response is processed correctly in our offices.

Your written response should be addressed to my attention at the above address, as "additional information to control number 586512." Your complete, signed and dated response may be submitted to me as a PDF file sent to my email at colleen.casey@nrc.gov. We will then continue our review.

In preparing your response, please also be reminded of the provisions in 10 CFR 30.9(a), "Completeness and accuracy of information,"..."(a) Information provided to the Commission by an applicant for a license or by a licensee or information required by statute or by the Commission's regulations, orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects."

- 1. We noted that your licensing correspondence was signed only by you, Berry L. Stewart, the Radiation Safety Officer. Pursuant to 10 CFR 35.12(a), management must sign all licensing requests.**

In the future, it is best to have all initial licensing correspondence signed by management and to feature this signed document prominently, i.e., first, in every submission. The RSO may co-sign licensing correspondence but should not be the only signatory.

The RSO may serve as the "point of contact" and sign subsequent responses for a particular licensing action.

2. The 8.5 by 11 inch blueprint copy you submitted for the proposed new HDR room was not very useful, as blueprints and copies of blueprints typically show much information that we do not need, and they show very little information that we do need. The use of blueprints and copies of blueprints are discouraged for these reasons.

As your HDR room diagram showed very little of what we need and lacked the details we do need, we were unable to gain a full understanding of your proposed new HDR facilities.

Please provide revised diagrams (simple, hand-drawn diagrams are good) that clearly show the proposed HDR treatment room and the location and functional identity of all contiguous rooms, areas and/or spaces surrounding it, especially the areas above it and beneath it. Your letter stated nothing about the space beneath the proposed treatment room.

Please also identify the proposed HDR treatment room with a room number another, similar identifier. The address for the proposed HDR treatment room should also be clearly stated and marked on at least the first diagram in your resubmission, if you submit more than one diagram in response.

Some of this information was included in your letter but most of it was not.

- A. Your diagrams should be either drawn to scale or show actual dimensions;
- B. Provide correct room numbers for all spaces (if none, please so state or identify the room by another means);
- C. Show the direction of north;
- D. Show the functional identity of each room, space or area immediately surrounding the HDR room and whether they are restricted (R) or unrestricted areas (U);
- E. Show the elevation/grade clearly described and what spaces are above and beneath the HDR room, their functional identity and whether they are restricted (R) or unrestricted areas (U);
- F. Indicate clearly on the diagram where you anticipate the patient/"exposed source" to be located within the room;

- G. For each barrier in each direction, including the floor and ceiling:
- H. The specific composition (poured concrete, block concrete, Ledite (concrete with added metal aggregates enhancing shielding ability), lead, steel, gypsum board/drywall, etc.);
- I. Thicknesses (individually and total, expressed in inches, feet or centimeters, consistently); and,
- J. The distances from the patient/exposed source" to the opposite, occupiable places for barriers/walls/ceilings/floors in all directions.

Please indicate clearly whether persons may gain access to any area adjacent to, below or above the proposed HDR treatment room.

If areas may be occupied during treatment, please either submit exposure rate calculations to demonstrate that the doses received will not exceed the limits in 10 CFR 20.1301 or describe the administrative controls (training, posting, surveillance, closed circuit television surveillance, lock-out, key control, etc.) that will be put in place to prevent occupation during HDR treatments or source exposures.

- 3. Please provide simple and complete shielding calculations, using traditional units (preferred), showing your work, barrier transmission factors (and calculation of them), detailed assumptions, defined terms, equations, constants, substitutions and parameters to demonstrate that radiation levels in all adjacent areas, including above and below the room, will not exceed levels in 10 CFR 20.1301.

Please include the following details in your calculations:

- a. expected radiation levels for each adjacent area, under the most adverse and typical source orientations and maximum installed source activity;
- b. all parameters used to perform the calculations, including: distance to each area of concern, the type and thickness of material(s) used as shields, especially if portable shields will be used;
- c. the maximum "beam-on time" per hour and per week; the number of patients/treatments/exposures expected per week(i.e., workload);
- d. occupancy factors used for all adjacent areas, including areas above and below;
- e. demonstrate by calculation that the dose received by an individual member of the public likely to receive the highest dose from HDR procedures when present in unrestricted area (in mrem/hr and mrem/yr) will not exceed the limits specified in 10 CFR 20.1301(a);

B. Stewart

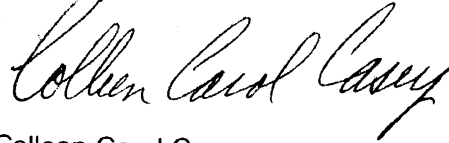
- 4 -

- f. sufficient information, in a readily understandable format, to permit us to independently evaluate the adequacy of shielding in your proposed room.
4. Please confirm that all other elements in your HDR program, including the procedures required by 10 CFR 35.610 and 10 CFR 35.643, will be continued for the HDR device after it is relocated.

If you have any specific questions concerning this letter or the information we are requesting, please contact me at either (630) 829-9841 or (800) 522-3025, ext. 9841. My fax number is 630-515-1078. My email address is colleen.casey@nrc.gov.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Sincerely,



Colleen Carol Casey
Materials Licensing Branch

License No. 13-02128-03
Docket No. 030-09398
Control No. 586512