



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
1600 EAST LAMAR BOULEVARD  
ARLINGTON, TEXAS 76011-4511

February 24, 2012

Fairbanks Memorial Hospital  
ATTN: Mark Burton, M.D.  
Radiation Safety Officer  
1650 Cowles Street  
Fairbanks, Alaska 99701

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION

The U.S. Nuclear Regulatory Commission (NRC) has completed the technical review of Fairbanks Memorial Hospital renewal application of NRC License 50-13648-01 dated October 20, 2011, and the following deficiencies were identified. Please provide the requested information within 30 days of receipt of this letter to enable a timely completion of the renewal process. Make reference to mail control number 576322 when providing your response.

1. The description of the training program for all licensed staff did not include identification and reporting of medical events (10 CFR 35.3045), identification and reporting of dose to embryo/fetus (10 CFR 35.3047), and identification and reporting of leaking sources (10 CFR 35.3067). Submit revised training program.
2. Facility diagram for areas in which unsealed byproduct material therapy is administered - Provide location, room numbers, and principal use of each adjacent room (e.g., office, file, toilet, closet, hallway), including areas above, beside, and below therapy treatment rooms, indicating whether the room is a restricted or unrestricted area as defined in 10 CFR 20.1003.
3. Facility diagram for areas in which manual brachytherapy sealed sources are implanted - Provide location, room numbers, and principal use of each adjacent room (e.g., office, file, toilet, closet, hallway), including areas above, beside, and below therapy treatment rooms, indicating whether the room is a restricted or unrestricted area as defined in 10 CFR 20.1003.
4. Manual brachytherapy - Provide shielding calculations and include information about the type, thickness, and density of any necessary shielding to enable independent verification of shielding calculations, including a description of any portable shields used (e.g., shielding of proposed patient rooms used for implant therapy, including the dimensions of any portable shield, if one is used; source storage safe).
5. Radiation monitoring instruments – Commit to the following statement: "We have developed and will implement and maintain written survey meter calibration procedures in accordance with the requirements in 10 CFR 20.1501 and that meet the requirements of 10 CFR 35.61."

6. Radiation monitoring instruments – Commit to the following statement: "We reserve the right to upgrade our survey instruments as necessary as long as they are adequate to measure the type and level of radiation for which they are used."
7. Occupational dose – Commit to the following statement: "Either we will perform a prospective evaluation Occupational Dose demonstrating that unmonitored individuals are not likely to receive, in 1 year, a radiation dose in excess of 10% of the allowable limits in 10 CFR Part 20 or we will provide dosimetry that meets the requirements listed under 'Criteria' in NUREG-1556, Vol. 9, revision 2, 'Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Medical Use Licenses.'"
8. Area surveys – Commit to the following statement: "We have developed and will implement and maintain written procedures for area surveys in accordance with 10 CFR 20.1101 that meet the requirements of 10 CFR 20.1501 and 10 CFR 35.70."
9. Appendix R of NUREG-1556, Volume 9, revision 2, provides a model procedure for area surveys. Review Appendix R and incorporate the necessary elements in your "Area Survey Procedures". Submit updated "Area Survey Procedures".
10. Safe use of unsealed licensed material – Commit to the following statement: "We have developed and will implement and maintain procedures for safe use of unsealed byproduct material that meet the requirements of 10 CFR 20.1101 and 10 CFR 20.1301."
11. Appendix T of NUREG-1556, Volume 9, revision 2, provides a model procedure for safe use of unsealed licensed material. Review Appendix T and incorporate the necessary elements in your "Safe use of unsealed licensed material" procedure. Submit updated "Safe use of unsealed licensed material" procedure.
12. Spill procedures – Commit to the following statement: "We have developed and will implement and maintain written procedures for safe response to spills of licensed material in accordance with 10 CFR 20.1101."
13. Waste management – Commit to the following statement: "We have developed and will implement and maintain written waste disposal procedures for licensed material in accordance with 10 CFR 20.110, that also meet the requirements of the applicable section of 10 CFR Part 20, Subpart K, and of 10 CFR 35.92."
14. Appendix W of NUREG-1556, Volume 9, revision 2, provides a model procedure for waste disposal by decay-in-storage, generator return, and licensed material return. Review Appendix W and incorporate the necessary elements in your "Waste management" procedure. Also review 10 CFR 35.92, "Decay-in-storage", since this regulation no longer refers to material with a 65-day half life. Submit updated "Waste management" procedure.
15. The procedure for "Written Directive Program" submitted with the renewal application did not contain the necessary information for a manual brachytherapy written directive. Review 10 CFR 35.40 and submit updated "Written Directive Program" procedure.

16. Submit a copy of a manual brachytherapy written directive.
17. The "Release of Patients Administered Radioactive Material" procedure contains references to superseded document Regulatory Guide 8.39. Review this procedure against Appendix U of NUREG-1556, Volume 9, revision 2, and submit updated "Release of Patients Administered Radioactive Material" procedure.

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 document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Thank you for your cooperation.

Sincerely,

**/RA/**

Roberto J. Torres, Senior Health Physicist  
Nuclear Materials Safety Branch B

Docket: 030-03509  
License: 50-13648-01  
Control: 576322