



UNITED STATES  
**NUCLEAR REGULATORY COMMISSION**  
REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

January 15, 2008

Docket No. 03037592  
Control No. 141433

License No. 47-31291-01

Tommy Mullins  
CEO  
Boone Memorial Hospital  
701 Madison Ave.  
Madison, WV 25130

**SUBJECT: BOONE MEMORIAL HOSPITAL, REQUEST FOR ADDITIONAL INFORMATION CONCERNING APPLICATION FOR NEW LICENSE, CONTROL NO. 141433**

Dear Mr. Mullins:

This is in reference to your application dated December 1, 2007 applying for a Nuclear Regulatory Commission license. In order to continue our review, we need the following additional information:

1. 10 CFR 35.12(a) requires an application to be signed by the applicant's or licensee's management. Therefore, your application should have been signed by you rather than Jeffrey Mosteller, your Chief Technologist, to ensure that the hospital is aware of their responsibilities regarding the use of licensed material. Please submit a revised application, including an NRC Form 313 signed by you indicating that management has reviewed the application and concurs in the statements and representations contained therein. Note also that a management representative should sign all future correspondence that requests a change in your license.
2. In your application, you did not specify the type of material authorization that you are requesting. Please confirm that you are requesting material authorization for any byproduct material permitted by 10 CFR 35.200. Also, please note that the Cs-137 check sources are regulated under 35.65 and will not be specially listed on your license.
3. On a detailed version of your facility diagram please provide the information listed below.
  - a. Indicate which rooms are restricted and unrestricted as defined by 10 CFR 20.1003, and provide room numbers.
  - b. Confirm that the room on which the numbers 1 through 5 are superimposed is the hot lab.
  - c. Describe methods used to ensure security of the hot lab (i.e. lockable door is locked when hot lab is unattended).

- d. Confirm that licensed material will be prepared in a shielded area (e.g., behind an L-block shield) and stored in shielding.
  - e. Specify what is located above and below the hot lab and to the right of the hot lab on your diagram (e.g., opposite side from Cardiac Rehab).
4. In your application you stated "Survey meters will be sent to an NRC or Agreement State vendor that has been approved and is qualified for calibration of survey instruments. Typically, our local radiopharmacy that supplies us with unit doses will calibrate our meter and will also provide us with a calibrated loaner when ours is being calibrated."

Please confirm the following statements :

- a. "Radiation monitoring instruments will be calibrated by a person qualified to perform survey meter calibrations." and
  - b. "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."
5. You have requested that Leonard Borelli, M.S., be named Radiation Safety Officer (RSO) on your license. It appears that this individual may be an outside consultant\contractor. If this is so, in support of this request, please address the following:
- a. Describe the control over the radiation safety program that will be delegated so that the consultant-RSO will be able to exercise authority over authorized users when confronted with radiation safety problems that require implementation of corrective actions.
  - b. Describe the relationship that will exist between the consultant-RSO and your institutional management regarding expenditure of funds to facilitate the objectives of your radiation safety program and related regulatory requirements.
  - c. Identify other commitments of the consultant-RSO for other NRC or Agreement State licensed facilities, along with a description of how the consultant-RSO will allocate time to permit the performance of the duties of the RSO as described in the regulations. State the consultant-RSO's minimum amount of on-site time (hours per week).
  - d. Appoint an in-house representative who will serve as the point of contact during the RSO's absence. This person may be allowed to assist the consultant RSO with limited authority.
  - e. Describe the overall availability of the consultant-RSO to respond to questions or operational issues that arise during the conduct of your radiation safety program and related regulatory requirements. Specify the maximum amount of time it will

take the RSO to arrive at the facility in the event of an emergency that requires his presence.

6. In your application, you stated "We will provide dosimetry that meets the requirements listed under "Criteria" in NUREG 1556 Volume 9 dated October 2002."

Please note that you may make the following statement instead:

"Either we will perform a prospective evaluation 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, Rev. 1, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Medical Use Licensees."

7. In your application, you stated "When disposing of depleted radioactive materials, we will show that the radioactive waste is at background levels before being disposed. This will be conducted by a calibrated GM survey meter. It should be noted that this only applies for radioactive materials with a half-life of less than 120 days and non-sealed radioactive sources. Waste Disposition records must still be maintained in order to prove that the radioactive trash was less than background levels. We will indicate the survey instrument used at the time of the survey."

Since you may have to occasionally return/transfer licensed material (e.g. dose calibrator sources), please confirm the following statement:

"We have developed and will implement and maintain written waste disposal procedures for licensed material in accordance with 10 CFR 20.1101, that also meet the requirements of the applicable section of 10 CFR Part 20, Subpart K, and 10 CFR 35.92."

Please be advised that model procedures for waste disposal can be found in Appendix W, NUREG-1556 Vol. 9, Rev. 2.

8. On your application, you did not indicate an accurate certifying officer, please submit this information along with a Curriculum Vitae detailing this individual's previous employment and training history.
9. Please provide a business license to show that you have been registered as a legitimate business entity in the state of West Virginia.
10. The following items were not required to be submitted in your application, and were not reviewed: Training, Leak Testing, Order/Receiving, Opening Packages, Unit Dose Records, and Decommissioning.
11. It appears that your proposed authorized user, Dr. Scott Miller, may not be on-site during licensed activities. Describe the supervision and training Dr. Miller will provide to

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ensure that licensed material is handled in accordance with his instructions (10 CFR 35.27).

12. In your application, you stated "weekly wipes will be performed if the trigger levels of the area surveys have been reached". Please confirm that area surveys including removable contamination surveys will be performed in accordance with 10 CFR 20.1501.

Current NRC regulations and guidance are included on the NRC's website at [www.nrc.gov](http://www.nrc.gov); select **Nuclear Materials; Medical, Academic, and Industrial Uses of Nuclear Material; Regulations, Guidance, and Communications**. You may also obtain these documents by contacting the Government Printing Office (GPO) toll-free at 1-866-512-1800. The GPO is open from 7:00 a.m. to 8:00 p.m. EST, Monday through Friday (except Federal holidays).

We will continue our review upon receipt of this information. Please reply to my attention at the Region I Office and refer to Mail Control No. 141433. If you have any technical questions regarding this deficiency letter, please call me at (610) 337-5169.

If we do not receive a reply from you within 30 calendar days from the date of this letter, we will assume that you do not wish to pursue your application.

Sincerely,

***Original signed by Penny Lanzisera***

Penny Lanzisera  
Senior Health Physicist  
Medical Branch  
Division of Nuclear Materials Safety

cc:  
Leonard Borelli, Radiation Safety Officer

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**SUNSI Review Complete: MSimmons**

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| NAME   | MSimmons/MRS |   | PLanzisera/PL |   |         |  |  |  |
| DATE   | 1/15/2008    |   | 1/15/2008     |   |         |  |  |  |

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