

APPLICATION GUIDE FOR HIGH DOSE RATE AFTERLOADER

A review of the North Carolina Regulations for Protection Against Radiation must be done with particular consideration to the section that is applicable to the license you are applying for and section .1600, Standards for Protection Against Radiation. Items that need to be addressed in section .1600 include:

- a) .1603 Radiation Protection Program
- b) .1604 Occupational Dose Limits for Adults, including establishment of investigational levels.
- c) .1610 Dose to an Embryo/fetus
- d) .1611 Dose Limits for Individual Members of the Public
- e) .1612 Compliance with Dose Limits for Members of Public
- f) .1624 Posting Requirements
- g) .1627 Procedures for Receiving and Opening Packages

All of these items need to be addressed in the form of a policy or procedure. These policies and procedures must be written according to the regulations, so you must review each area before you write your policy or procedure.

1. Fill out the enclosed Application for Radioactive Material License form completely. Use attachments when necessary. ***This form must be signed and dated by highest ranking company officer.*** Please state who may sign for future amendments in the form of a memorandum from the president.

Item 1 a- State name and mailing address. This is the mailing address and should include the nine digit Zip Code.

Item 1 b- Provide telephone number and extension if applicable

Item 1 c- Provide facsimile number.

Item 1 d- This is the physical address at which radioactive materials will be used (DO NOT LIST A P.O. BOX HERE).

Item 2- Please indicate what departments will be using radioactive material.

Item 3- Please indicate current license number or if you are applying for a new license, please state.

Item 4- All individual users (people who authorize the use of radioactive material) must be listed.

Item 5- Indicate who will serve as the Radiation Safety Officer.

NOTE: The information referenced in Items 6 through 15 should be included as attachments to the application

Item 6- Please indicate the isotope in item 6a and describe the source completely in item 6b.

Item 7- Describe what the material will be used for and include all information about the HDR manufacturer.

Item 8&9- Please reference the North Carolina license # users of radionuclides are listed on. If they are not listed on any license, a preceptor statement or a copy of their board certification must be submitted, specifically for HDR's.

Item 10- All survey meters used must be listed.

Item 11- Indicate all information concerning the calibration of the survey meters, who performs calibrations and at what frequency.

Item 12- Indicate what dosimetry service you will be using and frequency of exchange.

Item 13- Indicate which attachment is the sketch of your facility. Please show where the sources will be stored when not in use.

Item 14- This is to be incorporated into the radiation protection program already discussed on page one. Please enclose all information about leak testing sealed sources. State frequency of test and who will perform them.

Item 15- Describe how you will dispose of your sources.

Item 16- ***The application must be dated and signed by the owner, manager or someone in management within the company.*** Mail the entire application packet to Chief, Radioactive Materials Section, Division of Radiation Protection, 3825 Barrett Drive, Raleigh, NC 27609-7221. ***Be sure to retain a copy for your records. If the form is not signed, the application will be mailed back to you.***

2. Fill out the enclosed form-Memorandum To All Licensees.

3. Submit procedures for the following areas:

- a) Emergency procedure for accidents and disconnects.
 - b) Misadministration policy with regard to 15A NCAC 11 .0350
 - c) Written procedures posted at the console to include manually retracting the source, removing the source from the patient and removing the patient from the room in the event the source cannot be retracted back to the shielded position, securing the room against unauthorized entry and who to notify in case of an emergency.
 - d) Physical Inventory performed every six months.
4. Indicate how you will receive prior written approval from an authorized user before the use of radioactive material.
 5. Describe security of the HDR and training of ancillary personnel in regard to the hazards of radiation.
 6. Please describe what surveys will be performed of the patient after removal of the source.
 7. Describe what type of observation is used during treatment of the patient.
 8. Please describe the following areas concerning the HDR unit:
 - a) Warning on/off light at console
 - b) Locking device to lock source in place
 - c) Timer that terminates exposure and retracts source
 - d) If HDR is used in an accelerator room, describe the switch mechanism that disengages the accelerator when the HDR is being used
 9. Please submit your quality management program. Please read 15A NCAC 11 .0356 to reference your quality management program.
 10. Please read 15A NCAC 11 .0322, .0701 and .0702. Submit policies and procedures to ensure that the applicable portions of these regulations are met.
 11. Address security of sources.
 12. Provide qualifications and training of therapists and periodic retraining/in-services provided.
 13. Address training of ancillary personnel.
 14. Provide information concerning the Radiation Safety Committee duties and responsibilities if your facility may be licensed pursuant to 15A NCAC 11 .0319(b).
 15. If you do not own the building or property listed in Section 1(d). of the application form, you must supply a notarized letter from the landlord stating that he/she is aware of the storage and/or use of radioactive materials at the facility.
 16. All applicants for a Radioactive Materials License must provide documentation from the N.C. Secretary of State which indicates their legal business name in North Carolina. Other forms of this documentation may be acceptable to the agency. If you have questions, call the Radioactive Materials Branch for assistance.

Additional information is being compiled for inclusion in our website. Please visit the site often to check for the most up-to-date information (www.drp.enr.state.nc.us).