

APPLICATION GUIDE FOR FIXED NUCLEAR GAUGES

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
- 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) .1627 Receipt of radioactive material

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- State which department of the company will use and be responsible for the gauges.
- Item 3- Indicate current license number or if you are applying for a new license, please state.
- Item 4- All individual users (people who are authorized to use the gauge) 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 a- State the isotope that is contained in the gauge.
- Item 6 b- The isotope is in the form of a sealed source. Indicate here along with the source model or drawing number. Also, indicate the maximum amount of radioactive material you plan to possess for each isotope.
- Item 7- Describe what kind of gauge you want and what it will be used for along with the gauge manufacturer model and/or series number.
- Item 8&9- Please submit documented training for each user listed in Item 4. If the manufacturer who will be installing the gauges will be doing the training, send an outline of the training course and the personnel attending. If the radiation safety officer will not be a user, please submit a training documents for them also.
- Item 10- Provide radiation detection instruments by manufacturer and model and the range of each instrument.
- Item 11- Indicate who will be performing calibrations of the instruments and at what frequency.
- Item 12- Indicate which dosimetry service you will be using and the frequency of change, or why monitoring is not required. The dosimetry service must be NVLAP certified.
- Item 13- Not applicable

Item 14- This is very important and should be included in attachments. Provide procedures for installation and removal of gauges containing radioactive sources should you want to do this type of work. Indicate who will perform leak tests and frequency of tests. If a manufacturer leak test kit is used, please state that the instructions contained in the kit will be followed. If you must enter a vessel that contains a radiation source you must provide "lock out procedures" to assure personnel will not enter the vessel with the source in the open position. If you make your own radiation surveys, you should provide copies of survey forms in the application. These forms should include a space for survey meter, date calibrated, date of survey and person making survey. If gauges have shutters you should provide procedures for making this test either with a survey meter or a visual test to assure the shutter does operate. Please indicate how often shutter tests will be performed and by whom.

Item 15- Indicate how gauge will be disposed of if no longer needed.

Item 16- ***The application must be dated and signed by the highest representative of company management (e.g., President, Vice President, etc.).*** 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. Provide written emergency procedures of how you would handle an accident in which the gauge was damaged. Give area roped off, whom you would call, telephone numbers and what would be done with the damaged gauge.
3. Describe the semi-annual physical inventory kept of the gauges which must include date of inventory, type and amount of isotope and where the physical location of the gauge is.
4. Submit procedures for security of gauge.
5. Address training of ancillary personnel.
6. Review 15A NCAC 11 .0353 & .0354 concerning financial assurance for decommissioning. If the calculations demonstrate that no financial assurance is necessary, simply state in the application that it is not required. If some form of surety is necessary, contact the Radioactive Materials Section and ask to speak with a health physicist. They will be able to assist you in this process.
7. 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.
8. 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).