

APPLICATION GUIDE FOR INDUSTRIAL RADIOGRAPHY (PERMANENT)

A review of the North Carolina Regulations for Protection Against Radiation 15A NCAC 11 must be done with particular consideration to the sections that are applicable to the license for which you're applying. Sections .0500 and .1600, Standards for Protection Against Radiation are most applicable. 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) .1615 Control of access to high radiation areas
- h) .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- Name of the department which will be using the radioactive materials.
- Item 3- Please indicate current license number or if you are applying for a new license, please state.
- Item 4- All individual users must be listed.
- Item 5- Indicate who will be the Radiation Safety Officer.

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

- Item 6 a- Indicate what isotopes you are requesting.
- Item 6 b- The isotopes will be in the form of a sealed source, indicate as such. Please state the manufacturer, model and maximum activity you will possess at one time for each isotope.
- Item 7- List all uses the radioactive material will be used for. List cameras & source changers also.
- Item 8&9- Please submit all training for the radiographers and assistant radiographers listed in item 4.
- Item 10- All survey meters must be listed. Indicate how & how often an operability check

- will be performed.
- Item 11- Indicate all information concerning the calibration of the survey meters and who will calibrate them.
- Item 12- Indicate what dosimetry service & exchange you use.
- Item 13- Indicate which attachment(s) contain the sketch(s) for the use and storage areas at your facility. Be sure to indicate the storage location.
- 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 under an attachment and indicate here. State frequency of leak test and who will perform them.
- Item 15- State how radioactive material will be disposed of when no longer needed. All records for receipt and disposal must be maintained. Please state how this will be done.
- Item 16- ***The application must be dated and signed by the highest ranking corporate official (e.g., President, CEO, 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. Please submit shipping papers that will be used for transporting your sources.
3. The following areas need to be addressed in detail. Refer to 15A NCAC .0500 and .1600:
- a) Locking of camera or container when not in use
 - b) Indicate what must be done before moving camera from one jobsite to the next
 - c) Describe how you will lock and physically secure the transport package in the transporting vehicle
 - d) Quarterly physical inventory of sealed sources
 - e) Utilization log for each sealed source
 - f) Periodic training for radiographers and assistants
 - g) Describe how RSO will ensure that radiation safety activities are being performed during daily operations and perform semi-annual audits on radiographers
 - h) Daily and quarterly inspection/maintenance of equipment
 - i) Depleted uranium contamination test and frequency
 - j) Describe all aspects of self reading pocket dosimeters, including calibration
 - k) Describe all aspects of alarming ratemeters, including calibration
 - l) Submit operating and emergency procedures
 - m) Describe continuous direct surveillance of operations
 - n) Describe surveys performed after each exposure and whenever a source is put into storage
 - o) Supervision of assistant radiographers by radiographers
 - p) If training for radiographers will be in-house, submit training manual and test with the lowest score allowed
 - q) Describe alarm system for permanent radiographic installations and frequency of tests of this system
 - r) Performance requirements for radiography equipment
 - s) Address record retention for all records
 - t) Describe all labeling and in accordance with what rules
 - u) Security of sources
 - v) Semi-annual audits of radiographers

- w) Source change-out and storage
 - x) Perimeter survey prior to work
 - z) Postings
 - z) Control of access to high radiation areas
 - aa) Labeling of cameras
 - bb) Reporting requirements
 - cc) Records of industrial radiography
4. 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.
5. 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).