

SAFETY PROGRAM GUIDE FOR SALES & SERVICE PROVIDERS

Rule .1603 of 15A NCAC 11 the “North Carolina Regulations for Protection Against Radiation” requires each registrant to “develop, document and implement a radiation protection program commensurate with the scope and extent of licensed or registered activities and sufficient to ensure compliance with the provisions of this Section.”

Each service registrant must develop procedures utilized by personnel performing installation and service of radiation equipment. The following sections of the regulations, when applicable, need to be addressed: 15A NCAC 11 .0100 .0200, .0500, .0600, .0800, .1000, .1100 and .1600:

This guide may be used to help create a Radiation Protection Program specific for your company but **cannot** be used to substitute your Radiation Protection Program. The Radiation Protection Section no longer provides the “**Model Guide for Preparation of Operating and Safety Procedures”.

ITEMS TO INCLUDE IN A RADIATION SAFETY PROGRAM:

❖ General Information [.1603]

- Provide name and duties of the Radiation Safety Officer. [.0203] (see glossary)
- Describe retention schedule for all records, to include but not limited to: training, radiation safety and operating procedures, and personnel dosimetry. [.1600]
- Address occasions requiring an update of the Notice of Registration (NOR) [.0209]
- Identify location for posting of the following items:
 - Notice to Employees [.1002]
 - NC Regulation Book [.1002]
 - Notice of Registration [.1002]
 - Written Safety Program [.1636]
 - Review of Written Safety Program [.1603] [.1636]
 - Location of records of calibration of radiation measurement equipment [.0213]

❖ Policies & Procedures to include but not limited to:

Personnel Safety Policy [.1603]

- Address location of service technicians during exposures.
 - If service technician is required to be in the room during exposures, describe safety precautions to be taken.
 - Address ALARA principle.
 - Describe measures to keep exposure to a minimum.
 - Address procedures for prohibiting exposure of human subjects except for healing arts purposes.
- Address policy regarding persons allowed in the x-ray room during exposures. [.1603]
- Closing of all doors during exposures to prevent exposure to staff or members of public. [.0604(b)]
- Describe any additional radiation safety practices. [.1603]

Radiation Exposure Limits

❖ Personnel

- Describe the personnel exposure policy [.1603] [.1614]
 - Time frame for exchanging badges.
 - Address storage of control badge and personnel monitoring devices.
 - Retention of exposure records (keep all dosimetry reports) [.1640]
- Occupational dose limits for adults [.1604]
- Acquiring prior occupational dose for new service technicians [.1638]
- Retention of exposure records (keep all dosimetry reports) [.1640]

❖ **General Public**

- Describe compliance methods to ensure minimal dose limits to general public.[.1612]

❖ **Exceeding Exposure Limits [.1647]**

- Describe methods of reporting any exposures that exceed limits [.1647]
- Describe information to be reported [.1647]
- Describe method of notification of appropriate individuals and agencies. [.1647]

**If you have a copy of the “Model Guide For Preparation of Operating and Safety Procedures” that was once provided, you may use the information in that document as part of your safety program; however, you must:

- modify the information to distinguish the document as the procedures specifically for your company;
- remove any wording that suggests “model procedures”;
- describe the method of compliance for annual review of the safety program and the method of documentation and maintenance of these records.

Glossary

“ALARA”: (acronym for “as low as reasonably achievable”) means making every reasonable effort to maintain exposures to radiation as far below the dose limits in the rules as is practical.

Exposure: Means being exposed to ionizing radiation or to radioactive materials.

Personnel Monitoring Equipment: Devices such as film badges, pocket dosimeters, and thermoluminescent dosimeters, designed to be worn or carried by an individual for the purpose of estimation the dose received by the individual.

Radiation Safety Officer (RSO): An individual named by the licensee or registrant who has knowledge of, responsibility for, and authority to ensure compliance with appropriate radiation protection rules, standards, and practices on behalf of the licensee or registrant and who meets the requirements of 15A NCAC 11 .0510(g) of this the North Carolina Regulations for Protection Against Radiation.

Other Links: **NC Radiation dictionary:** <http://ncradiation.net/xray/dictionary.htm>

The NC Radiation website: http://ncradiation.net has the following information:	
Inspection Check List	information that will be reviewed by inspectors during an inspection
Tips For Answering Violations	instructions on how to respond and comply to violations
Reference Guides For Facilities	guidance to assist facilities in creating a radiation safety program
Plan Reviews & Surveys	service providers registered to perform plan reviews & surveys
Writing Safety Program Outline	an outline to help a facility create a radiation safety program
Postings	documents required to be posted in a facility
Registration Forms	applications to register a facility and x-ray machines or make amendments; and applications for service providers