

Radiology Compliance Branch
RADIATION PROTECTION SECTION



Division of Health Service Regulation • N.C. Department of Health and Human Services

THERAPY RADIATION PROTECTION PROGRAM GUIDE

Each registrant shall develop, document, and implement a Radiation Protection Program commensurate with the scope and extent of registered activities to ensure compliance with the provisions of **10A NCAC 15 [.1600]**. In accordance with Rule **[.1603 (c)]**, the registrant shall annually review the radiation protection program content and implementation.

[N.C. Radiation Dictionary](#)

[N.C. Radiation Regulations](#)

REQUIREMENTS TO INCLUDE IN RADIATION PROTECTION PROGRAM AND SAFETY PROCEDURES

Radiation Protection Program: [.1603(a)]

ALARA (As Low As Reasonably Achievable) [Radiation Protection Principles](#)

- Describe procedures and engineering controls used, based upon sound radiation principles to achieve occupational doses, and doses to members of the public ALARA. **[.1603(b)]**

Personnel

- Describe how individuals are notified if occupational doses exceed 1 mSv (100 mrem) TEDE or 1 mSv (100 mrem) to any individual organ or tissue **[.1004] (effective 1/1/14)**
- State the facility's annual occupational dose limits. **[.1604(a)]** [Dose Limits](#)
- Explain how doses an individual may receive in the current year are reduced by the occupational exposures received while employed by another person. **[.1604(f)]**
- State the dose limits to an Embryo/Fetus. **[.1610] [.1614(1)(c)]**
- Explain the facility's personnel voluntary declared pregnancy policy. **[.1640(f)]** [Pregnancy Policy](#)
- Describe the facility's personnel monitoring exposure policy. **[.1614]**
 - Frequency of exchanging badges
 - Storage of control and personnel badges
 - *If personnel monitoring not provided to operators, explain how facility met compliance to regulations.*
- Describe the facility's process to obtain prior occupational dose for new workers. **[.1638(a)(1) & (2)]**
- Explain the facility's retention period for exposure records. *(keep all dosimetry reports)* **[.1640(a)(1) & (g)]**

Exceeding Exposure Limits [.1647)] [Dose Limits](#)

- Identify the facility's reporting process for when a dose limit is exceeded? **[.1646] [.1647]**
- Describe how data of the affected person is reported to both the individual and to Radiation Protection. **[.1647(b)(c)(d)(e)] [.0111]**
 - Estimated dose
 - Cause of elevated exposure
 - Corrective Action
 - Name & Date of Birth
 - The last 4 of the Social security number and/or employee identifier

REVIEW OF RADIATION PROTECTION PROGRAM

In accordance with Rule .1603 (c), the registrant shall annually review the radiation protection program content and implementation.

Signature

Date

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|---|---|
| The N.C. Radiation link https://radiation.ncdhhs.gov/Xray/reference.htm has the following information: | |
| <u>Inspection Check List</u> | Information the inspectors ask to see during an inspection |
| <u>Tips For Answering Violations</u> | How to reply to violations |
| <u>Reference Guides For Facilities</u> | Information to help the facilities write their own safety program |
| <u>Plan Reviews & Surveys</u> | Registered service providers that are qualified to provide this service |
| <u>Registration Requirements</u> | Requirements for new and existing facilities |
| <u>Steps To Install X-Ray Equipment or Register</u> | Guide for installing equipment |
| <u>Registration Forms</u> | Form to register a facility/X-ray machines or amend a registration |
| <u>Registration: Owning or Possessing X-Ray Equipment</u> | Guide for Owning or Possessing X-Ray Equipment in N.C. |
| <u>Postings</u> | Documents that need to be posted in the facility |

Links of Interest:

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| AAPM Reports | http://www.aapm.org/pubs/reports/ |
| AAPM Medical Physics Practice Guidelines | http://www.aapm.org/pubs/MPPG/ |
| CT Protocols | http://www.aapm.org/pubs/CTProtocols/ |