

## SECTION .0500 - INDUSTRIAL RADIOGRAPHY X-RAY MACHINES

Codifier's Note: 10 NCAC 03G .2600 was transferred to 15A NCAC 11 .0500 effective January 4, 1990. Recodification pursuant to G.S. 143B-279.3.

### 10A NCAC 15 .0501 INDUSTRIAL RADIOGRAPHIC OPERATIONS OF ELECTRONIC RADIATION MACHINES FOR NON-HUMAN USE

(a) Persons conducting industrial radiographic operations using radiation machines shall comply with the following provisions of 10 CFR 34, which are hereby incorporated by reference including subsequent amendments and editions, except references to and the requirements of 10 CFR 30, 37, 71, 150 and 171 contained therein shall not apply:

- (1) 10 CFR 34.1, "Purpose and Scope;"
- (2) 10 CFR 34.3, "Definitions;" except that the definition of becquerel, control (drive) cable, control drive mechanism, control tube, exposure head, field station, guide tube (projection sheath), S-tube, source assembly, source changer, and storage container, shall not apply. Prior to using industrial radiography all persons shall be registered in accordance with rules in Section .0200 of this Chapter. The following terms apply:
  - (A) "agreement state" shall have the same meaning as "agency" as defined in G.S 104E-5(2);
  - (B) "license" shall have the same meaning as "registration" as defined in Rule .0104(131) of this Chapter;
  - (C) "licensed" shall have the same meaning as "registered" pursuant to the rules in Section .0200 of this Chapter;
  - (D) "licensee" shall have the same meaning as "registrant" as defined in Rule.0104(130) of this Chapter;
  - (E) "radiation source" shall have the same meaning as "radiation machine" in G.S. 104E-5(13);
  - (F) "radiographic exposure device" shall have the same meaning as "radiation machine" in G.S 104E-5(13); and
  - (G) "sealed source" shall have the same meaning as "radiation machine" in G.S 104E-5(13).
- (3) 10 CFR 34.25, "Radiation survey instruments." The term "radioactive material" used in 10 CFR 34.25 shall have the same meaning as "radiation machine" in G.S. 104E-5(13);
- (4) 10 CFR 34.31(a), (b)(1), and (c), "Inspection and maintenance of radiographic exposure devices, transport and storage containers, associated equipment, source changers, and survey instruments;"
- (5) 10 CFR 34.33, "Permanent radiographic installations." The term "radioactive source" used in 10 CFR 34.33 shall have the same meaning as "radiation machine" in G.S. 104E-5(13);
- (6) 10 CFR 34.35(c), "Labeling, storage, and transportation;"
- (7) 10 CFR 34.41, "Conducting industrial radiographic operations;"
- (8) 10 CFR 34.42, "Radiation Safety Officer for industrial radiograph;"
- (9) 10 CFR 34.43, "Training;"
- (10) 10 CFR 34.45(a)(1) through (a)(3), (a)(5), (a)(7) through (a)(11), (a)(13), and (b), "Operating and emergency procedure;"
- (11) 10 CFR 34.46, "Supervision of radiographers' assistants;"
- (12) 10 CFR 34.47, "Personnel monitoring;"
- (13) 10 CFR 34.49, "Radiation surveys;"
- (14) 10 CFR 34.51, "Surveillance;"
- (15) 10 CFR 34.53, "Posting;"
- (16) 10 CFR 34.61, "Records of the specific license for industrial radiography;"
- (17) 10 CFR 34.65, "Records of radiation survey instrument;"
- (18) 10 CFR 34.71, "Utilization logs;"
- (19) 10 CFR 34.73, "Records of inspection and maintenance of radiographic exposure devices, transport and storage containers, associated equipment, source changers, and survey instruments;"
- (20) 10 CFR 34.75, "Record of alarm system and entrance control checks at permanent radiographic installations;"
- (21) 10 CFR 34.79, "Records of training and certification;"
- (22) 10 CFR 34.81, "Copies of operating and emergency procedures;"
- (23) 10 CFR 34.83, "Records of personnel monitoring procedures;"

- (24) 10 CFR 34.85, "Records of radiation surveys;"
  - (25) 10 CFR 34.87, "Form of records;"
  - (26) 10 CFR 34.89(a), (b)(1 through 10), "Location of documents and records;" and
  - (27) Appendix A to 10 CFR 34-Radiographer Certification.
- (b) Copies of these regulations are available free of charge at <https://www.nrc.gov/reading-rm/doc-collections/cfr/part034/index.html>.

*History Note:* Authority G.S. 104E-7;  
Eff. February 1, 1980;  
Amended Eff. May 1, 1993;  
Transferred and Recodified from 15A NCAC 11 .0501 Eff. February 1, 2015;  
Pursuant to G.S.150B-21.3A, rule is necessary without substantive public interest Eff. June 22, 2019;  
Amended Eff. May 1, 2024.