

1 10A NCAC 15 .0807 is proposed for amendment as follows:

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3 **10A NCAC 15 .0807 PERMANENT RADIOGRAPHIC INSTALLATIONS AND INDUSTRIAL**
4 **RADIOGRAPHY RGDs SECURITY SCREENING EQUIPMENT REQUIREMENTS FOR**
5 **GOVERNMENT USE ONLY**

6 ~~(a) Permanent radiographic installations and industrial radiography RGDs are exempt from the requirements of the~~
7 ~~rules of this Section except Rule .0802 and Rule .0804(a), (b)(1)(A), (b)(1)(C), (b)(2), and (b)(3).~~

8 ~~(b) Permanent radiographic installations and industrial radiography RGDs shall comply with the following rules of~~
9 ~~this Chapter:~~

10 (1) ~~_____~~.0501;

11 (2) ~~_____~~.0502;

12 (3) ~~_____~~.0506;

13 (4) ~~_____~~.0509 .0520;

14 (5) ~~_____~~.0522;

15 (6) ~~_____~~.0523(a)(1);

16 (7) ~~_____~~.0523(a)(3);

17 (8) ~~_____~~.0523(a)(6) ~~_____~~.0523(a)(15);

18 (9) ~~_____~~.0523(b)(1) ~~_____~~.0523(b)(4);

19 (10) ~~_____~~.0523(b)(6) ~~_____~~.0523(b)(7);

20 (11) ~~_____~~.0523(b)(9) ~~_____~~.0523(b)(12);

21 (12) ~~_____~~.0523(c); and

22 (13) ~~_____~~.0525.

23 (a) All security screening devices shall meet the following additional requirements:

24 (1) Security screening RGDs shall only be utilized by accredited bomb squads, certified bomb
25 technicians, law enforcement agencies, or forensic investigators.

26 (2) The operator must be present and maintain access control during operation of the RGD. If the RGD
27 is not operated in a restricted area and the RGD is capable of producing a radiation area, the operator
28 shall:

29 (A) establish a visible barrier;

30 (B) perform a visual check of the controlled area to ensure all unauthorized individuals are
31 removed prior to activating or initiating the RGD; and

32 (C) if the operator is unable to maintain visual control of the area during operation of the RGD,
33 an additional means to control the area shall be provided.

34 (3) Utilization logs shall be maintained each time the RGD is used and accurately include the following:

35 (A) date and time of use;

36 (B) location of use; and

37 (C) operator of the RGD.

1 (4) Records of utilization logs shall be available for agency review during inspection.

2 (b) All security screening systems shall meet the following additional requirements:

3 (1) Security screening systems shall only be utilized in a correctional institution, detention center, jail,
4 or prison for public safety and security screening purposes.

5 (2) No individual shall be exposed to the useful beam unless authorized by a law enforcement agency
6 representative.

7 (3) No individual shall be exposed to the useful beam for demonstration or training purposes.

8 (4) Screening of staff for training purposes is prohibited.

9 (5) Policies and procedures shall be established for screening of minors and pregnant individuals.

10 (6) An inspection zone shall be:

11 (A) established around the system where bystanders are prohibited during operation;

12 (B) visibly marked; and

13 (C) the ambient dose equivalent outside the inspection zone shall not exceed 2 mrem (20
14 microSv) in any 1 hour.

15 (7) The system shall be stationary, and the exposure switch shall be located in a manner requiring the
16 operator to remain behind a protected barrier during the entire exposure while able to view the
17 following:

18 (A) the individual being scanned;

19 (B) the inspection zone; and

20 (C) any access areas.

21 (8) Equipment surveys shall be conducted to verify compliance with reference effective dose limits, the
22 inspection zone, and manufacturer specified parameters. Surveys shall be performed:

23 (A) upon installation;

24 (B) every 12 months; and

25 (C) after maintenance that may affect the system's shielding or x-ray beam.

26 (9) Reference effective dose limits shall be met as follows:

27 (A) General-use systems reference effective dose shall not exceed 25 microrem (.25 microSv)
28 per screening.

29 (B) Limited-use systems reference effective dose shall not exceed 1 mrem (10 microSv) per
30 screening.

31 (C) The reference effective dose received by an individual shall not exceed 25 mrem (250
32 microSv) in a 12-month period for both general use and limited-use systems.

33 (10) Compliance to reference effective dose limits shall be demonstrated by the registrant maintaining
34 records of each individual screened. Records shall show one of the following:

35 (A) the number of screenings each individual received, for General-use systems, does not
36 exceed 1,000 in a 12-month period; or

1 (B) the reference effective dose multiplied by the number of screenings, for both General-use
2 and Limited-use systems, does not exceed 25 mrem (250 microSv) in a 12-month period.

3 (11) Records of each individual scanned at the same facility shall be maintained for agency review during
4 inspection.

5 (12) Each individual being screened shall be informed the system emits radiation and be provided with
6 the following prior to scanning:

7 (A) the estimated effective dose from one (1) screening;

8 (B) an example to compare the dose to a commonly known source of radiation; and

9 (C) confirmation the screening complies with the reference effective dose limits in
10 Subparagraph (b)(9) of this Rule.

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12 *History Note:* Authority G.S. 104E-7;
13 Eff. October 1, ~~2015~~. 2015;
14 Amended Eff. October 1, 2024.