

1 10A NCAC 15 .0502 is proposed for amendment as follows:

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3 **10A NCAC 15 .0502 DEFINITIONS**

4 ~~(a) As used in this Section, In addition to terms found in Rule .0104 of this Chapter, the following definitions shall~~
5 ~~apply: apply to this Section:~~

6 (1) "Annual refresher safety ~~training~~ training," as defined in 10 CFR 34.3, means a review conducted
7 or provided by the licensee or registrant for its employees on radiation safety aspects of industrial
8 radiography. The review may ~~include, as appropriate,~~ include the results of internal inspections, new
9 procedures or equipment, new or revised regulations, ~~accidents or accidents~~ or errors that have been
10 ~~observed, observed, and shall~~ The review shall also provide opportunities for employees to ask
11 safety questions.

12 (2) "Associated equipment" means equipment used in conjunction with a radiographic exposure device
13 to make radiographic exposures that drives, guides or comes in contact with the sealed source or
14 radiation machines [~~e.g.~~ e.g. guide tube, control tube, control (guide) tube, removable source stop,
15 "J" tube and collimator when it is used as an exposure head].

16 ~~(3) "Cabinet radiography using radiation machines" means industrial radiography using radiation~~
17 ~~machines, which is conducted in an enclosed, interlocked cabinet, such that the radiation machine~~
18 ~~will not operate unless all openings are securely closed, and which cabinet is so shielded that every~~
19 ~~location on the exterior meets conditions for an unrestricted area as specified in Rule .1611 of this~~
20 ~~Chapter.~~

21 ~~(4)~~ (3) "Certifying entity" means an independent certifying organization meeting the requirements in Rule
22 .0525 of this Section.

23 ~~(5)~~ (4) "Collimator" means a radiation shield that is placed on the end of the guide tube or directly onto a
24 radiographic exposure device to limit the size, shape, and direction of the primary radiation when
25 the sealed source is cranked into position, to make a radiographic exposure.

26 ~~(6)~~ (5) ~~"Control device",~~ "Control device," commonly called a crank-out, means the control cable, the
27 protective sheath and control drive mechanism used to move the sealed source from the shielded
28 position in the radiographic device or camera to an unshielded position outside the device for the
29 purpose of making a radiographic exposure.

30 ~~(7)~~ (6) "Control drive mechanism" means a device that enables the source assembly to be moved to and
31 from the exposure device.

32 ~~(8)~~ (7) "Control tube" means a protective sheath for guiding the control cable. The control tube connects
33 the control device mechanism to the radiographic exposure device.

34 ~~(9)~~ (8) ~~"Exposure head",~~ "Exposure head," commonly called a source stop, means a device that locates the
35 gamma radiography sealed source in the selected working position.

36 ~~(10)~~ (9) "Field examination" means a practical examination.

- 1 ~~(11)~~ (10) "Field station" means a facility where licensed material or registered equipment may be stored or
2 used and from which licensed material or registered equipment is dispatched.
- 3 ~~(12)~~ (11) "~~Guide tube~~" ~~(Projection sheath)~~ "Guide tube," commonly called a projection sheath, means a
4 flexible or rigid tube (~~i.e.,~~ i.e., "J" tube) for guiding the source assembly and the attached control
5 cable from the exposure device to the exposure head. The guide tube may also include the
6 connections necessary for attachment to the exposure device and to the exposure head.
- 7 ~~(13)~~ (12) "Hands-on experience" means experience in all of those areas considered to be directly involved in
8 the radiography process.
- 9 ~~(14)~~ (13) "Independent certifying organization" means an independent organization that meets all of the
10 requirements of Rule .0525 of this Section.
- 11 ~~(15)~~ (14) "Industrial radiography" means the examination of the structure of materials by nondestructive
12 methods utilizing ionizing radiation to make radiographic images.
- 13 ~~(16)~~ (15) "Lay-barge radiography" means industrial radiography performed on any water vessel used for
14 laying pipe.
- 15 ~~(17)~~ (16) "Off-shore platform radiography" means industrial radiography conducted from a platform over a
16 body of water.
- 17 ~~(18)~~ (17) "Periodic training" means ~~a periodic review conducted or provided~~ instruction provided at least
18 every 12 months by the licensee or registrant for ~~its employees~~ operators and individuals subject to
19 the requirements of Rule .1003 of this Chapter on radiation safety aspects of radiography. The
20 review topics shall include the results of internal inspections, new procedures or equipment,
21 accidents or errors that have been observed, and opportunities for employees to ask safety questions.
- 22 ~~(19)~~ (18) "Permanent radiographic installation" means an enclosed shielded room, cell, or vault not located
23 at a temporary job-site in which radiography is performed.
- 24 ~~(20)~~ (19) "~~Projection sheath~~", "Projection sheath" means a guide tube.
- 25 ~~(21)~~ (20) "Practical examination" means a demonstration through practical application of the safety rules and
26 principles in industrial radiography including the use of all appropriate equipment and procedures.
- 27 ~~(22)~~ (21) "Radiation safety officer" means an individual named by the licensee or registrant who has
28 knowledge of and responsibility for the overall radiation safety program on behalf of the licensee or
29 registrant and who meets the requirements of Rule .0510(h) of this Section.
- 30 ~~(23)~~ (22) "Radiographer" means any individual who performs or who, in attendance at the site where sources
31 of radiation are being used, personally supervises industrial radiographic operations and who is
32 responsible to the licensee or registrant for assuring compliance with the requirements of these Rules
33 and all license or registration conditions.
- 34 ~~(24)~~ (23) "Radiographer certification" means written approval received from ~~a~~ an independent certifying
35 organization stating that an individual has satisfactorily met certain established radiation safety,
36 testing, and experience criteria.

1 ~~(25)~~ (24) "Radiographer's assistant" means any individual who, under the direct supervision of a radiographer,
2 uses radiographic exposure devices, sources of radiation, related handling tools, or survey
3 instruments in industrial radiography.

4 ~~(26)~~ (25) "~~Radiographic exposure device~~", "Radiographic exposure device," commonly called a camera or
5 projector, means any instrument containing a sealed source fastened or contained therein, in which
6 the sealed source or shielding thereof may be moved, or otherwise changed, from a shielded to
7 unshielded position for purposes of making a radiographic exposure.

8 ~~(27)~~ (26) "Radiographic operations" means all activities associated with the presence of radioactive or x-ray
9 sources in a radiographic exposure device during use of the device or transport (except when being
10 transported by a common or contract transport), ~~to include~~ including surveys to confirm the
11 adequacy of boundaries, setting up equipment and any activity inside restricted area boundaries.

12 ~~(28)~~ (27) "S-tube" means a tube through which the radioactive source travels when inside a radiographic
13 exposure device.

14 ~~(29)~~ (28) "Sealed source" means any radioactive material that is encased in a capsule designed to prevent
15 leakage or escape of the radioactive material.

16 ~~(30)~~ (29) "Shielded position" means the location within the radiographic exposure device or source changer
17 where the sealed source is secured and restricted from movement. This position incorporates
18 maximum shielding for the sealed source.

19 ~~(31)~~ (30) "Source assembly" means an assembly that consists of the sealed source and a connector that
20 attaches the source to the control cable. The source assembly also includes the stop ball if one is
21 used to secure the sealed source in the shielded position. The connector attaches to the control cable.

22 ~~(32)~~ (31) "Source changer" means a device designed and used for replacement of sealed sources in
23 radiographic exposure devices, including those also used for transporting and storage of sealed
24 sources.

25 ~~(33)~~ (32) "~~Storage area~~ area," as defined in 10 CFR 34.3, means any location, facility or vehicle which is
26 used to store or secure a radiographic exposure device, a storage ~~container~~ container, or a sealed
27 source when it is not in use and which is locked or has a physical barrier to prevent accidental
28 exposure, tampering with or unauthorized removal of the device, storage container or sealed source.

29 ~~(34)~~ (33) "Storage container" means a device in which sealed sources are secured and stored.

30 ~~(35)~~ (34) "Temporary jobsite" means a ~~location~~, location where radiographic operations are conducted and
31 where licensed material may be stored other than those location(s) of use authorized on the license.

32 ~~(36)~~ (35) "Underwater radiography" means industrial radiography performed when the radiographic exposure
33 device or related equipment are beneath the surface of the water.

34 ~~(b) Other definitions applicable to this Section may be found in Rule .0104 of this Chapter.~~

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36 *History Note: Filed as a Temporary Amendment Eff. August 20, 1994, for a period of 180 days or until the*
37 *permanent rule becomes effective, whichever is sooner;*

1 *Authority G.S. 104E-7; 10 CFR 34.3;*
2 *Eff. February 1, 1980;*
3 *Amended Eff. April 1, 1999; May 1, 1995; January 1, 1994; June 1, 1989;*
4 *Transferred and Recodified from 15A NCAC 11 .0502 Eff. February 1, ~~2015~~ 2015;*
5 *Amended Eff. October 1, 2015.*