

1 10A NCAC 15 .1908 is proposed for adoption as follows:

2  
3 **10A NCAC 15 .1908 CALIBRATION OF SURVEY INSTRUMENTS AND DOSIMETRY SYSTEMS**

4 (a) Administrative: Survey Instruments, when employed by the licensee to perform surveys required by this Section:

5 (1) The licensee shall ensure that the survey instruments used to show compliance with this Section  
6 have been calibrated before first use, at intervals not to exceed twelve (12) months and following  
7 repair.

8 (2) To satisfy the requirements of Subparagraph (a)(1) of this Rule, the licensee shall:

9 (A) Calibrate all scale readings up to 10 mSv (1000 mrem) per hour with an appropriate  
10 radiation source that is traceable to the National Institute of Standards and Technology;

11 (B) Calibrate at least two (2) points on each scale to be calibrated. These points should be at  
12 approximately 1/3 and 2/3 of full-scale; and

13 (3) To satisfy the requirements of Subparagraph (a)(2) of this Rule, the licensee shall:

14 (A) Consider a point as calibrated if the indicated dose rate differs from the calculated dose  
15 rate by not more than 10 percent; and

16 (B) Consider a point as calibrated if the indicated dose rate differs from the calculated dose  
17 rate by not more than 20 percent if a correction factor or graph is conspicuously attached  
18 to the instrument.

19 (4) The licensee shall retain a record of each calibration required in Paragraph (a) of this Rule for three  
20 (3) years. The record shall include:

21 (A) A description of the calibration procedure; and

22 (B) A description of the source used and the certified dose rates from the source, and the rates  
23 indicated by the instrument being calibrated, the correction factors deduced from the  
24 calibration data, the signature of the individual who performed the calibration, and the date  
25 of calibration.

26 (5) The licensee may obtain the services of individuals licensed by the Agency, the US Nuclear  
27 Regulatory Commission or an Agreement State to perform calibrations of survey instruments.  
28 Records of calibrations that contain information required by Paragraph (d) of this Rule shall be  
29 maintained by the licensee.

30 (6) The record must include the model and serial number of the instrument, the date of the calibration,  
31 the results of the calibration, and the name of the individual who performed the calibration.

32 (b) Dosimetry system:

33 (1) A licensee shall have a calibrated dosimetry system available for use. To satisfy this requirement,  
34 one of the following two conditions must be met.

35 (A) The system must have been calibrated using a system or source traceable to the National  
36 Institute of Standards and Technology and published protocols accepted by nationally  
37 recognized bodies; or by a calibration laboratory accredited by the American Association

1 of Physicists in Medicine. The calibration must have been performed within the previous  
2 2 years and after any servicing that may have affected system calibration; or

3 (B) The system must have been intercompared with another dosimetry system that was  
4 calibrated within the previous 2 years by the National Institute of Standards and  
5 Technology or by a calibration laboratory accredited by the American Association of  
6 Physicists in Medicine. The results of the intercomparison must indicate that the calibration  
7 factor of the licensee's system had not changed by more than 2 percent.

8 (2) A licensee shall retain a record of the calibration, intercomparison, and comparisons of its dosimetry  
9 equipment done for three years after the record is made. For each calibration, intercomparison, or  
10 comparison, the record must include:

11 (A) The date;

12 (B) The manufacturer's name, model numbers and serial numbers of the instruments that were  
13 calibrated, intercompared, or compared as required by Parts (1)(A) or (1)(B) of this  
14 Paragraph;

15 (C) The correction factor that was determined from the calibration or comparison or the  
16 apparent correction factor that was determined from an intercomparison; and

17 (D) The names of the individuals who performed the calibration, intercomparison, or comparison.

18  
19 *History Note: Authority G.S. 104E-7;*  
20 *Eff. October 1, 2025.*