1 15A NCAC 11 .0361 is proposed for amendment as follows: 2 3 15A NCAC 11.0361

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MEDICAL USE OF UNSEALED RADIOACTIVE MATERIAL

4 (a) A licensee may use any unsealed radioactive material prepared for use for uptake, dilution, or excretion studies, 5 imaging and localization studies and radiopharmaceutical therapy that is: studies, and use requiring a written 6 directive in accordance with Rule .0104 of this chapter that is:

- 7 Obtained from a manufacturer or preparer licensed under 10 CFR 32.72 or equivalent Agreement (1)8 State requirements; requirements;
- 9 (2)Prepared by: Obtained from a positron emission tomography (PET) radioactive drug producer 10 licensed under 10 CFR 30.32(j), 15A NCAC 11 .0333, or equivalent Agreement State 11 requirements;
- 12 An authorized nuclear pharmacist; (A)
- 13 (B) - A physician who is an authorized user identified on a North Carolina Radioactive 14 Materials License, an Agreement State Radioactive Materials License, or a license issued 15 by the U.S. Nuclear Regulatory Commission or who meets the requirements in 15A 16 NCAC 11 .0117(a)(2);
 - (C) An individual under the supervision, as specified in Rule .0318 of this Section, of the authorized nuclear pharmacist in Part (a)(2)(A) of this Rule or the physician who is an authorized user in Part (a)(2)(B) of this Rule;
- 20 (3) Excluding production of PET radionuclides, prepared by:
 - An authorized nuclear pharmacist; (A)
- 22 A physician who is an authorized user identified on a North Carolina Radioactive (B) 23 Materials License, an Agreement State Radioactive Materials License, or a license issued by the U.S. Nuclear Regulatory Commission or who meets the requirements in 15A 24 25 NCAC 11 .0117(a)(2); or
- 26 (C) An individual under the supervision, as specified in Rule .0318 of this Section, of the 27 authorized nuclear pharmacist in Part (a)(2)(A) of this Rule or the physician who is an 28 authorized user in Part (a)(2)(B) of this Rule;
- 29 (3) (4) Obtained from and prepared by an NRC or Agreement State licensee for use in research in 30 accordance with a Radioactive Drug Research Committee-approved protocol or an Investigational 31 New Drug (IND) protocol accepted by the FDA; or
- 32 (4) (5) Prepared by the licensee for use in research in accordance with a Radioactive Drug Research 33 Committee-approved protocol or an Investigational New Drug (IND) protocol accepted by the 34 FDA.

35 (b) A licensee shall not administer to humans a radiopharmaceutical containing that contains; more than 0.15 36 microcurie (0.15 kilobecquerel) of molybdenum 99 per millicurie (megabecquerel) of technetium 99m.

1	(1)	more than 0.15 microcurie (0.15 kilobecquerel) of molybdenum-99 per millicurie (megabecquerel)
2		of technetium-99m; or
3	(2)	more than 0.02 microcurie (0.02 kilobecquerel) of strontium-82 per millicurie (megabecquerel) of
4		rubidium-82 chloride, or 0.2 microcurie (0.2 kilobecquerel) of strontium-85 per millicurie
5		(megabecquerel) of rubidium-82 chloride.
6	(c) A licensee that uses molybdenum 99/technetium 99m generators for preparing a technetium 99m	
7	radiopharmaceutical shall measure the molybdenum 99 concentration in the first eluate after receipt of a generator to	
8	demonstrate compliance with Paragraph (b) of this Rule.	
9	(c) <u>A licensee that uses molybdenum-99/technetium-99m generators for preparing a technetium-99</u>	
10	radiopharmaceutical shall measure the molybdenum-99 concentration in the first eluate after receipt of a generator to	
11	demonstrate compliance with Paragraph (b) of this Rule.	
12	(d) A licensee that uses strontium-82/rubidium-82 generators for preparing a rubidium-82 radiopharmaceutical shall	
13	measure the concentrations of strontium-82 and strontium-85 before the first patient use of the day to demonstrate	
14	compliance with Paragraph (b) of this Rule.	
15	(d)(e) A licensee that must measure molybdenum molybdenum-99, or strontium-82 and strontium-85, concentration	
16	shall retain a record of each measurement for three years. The record shall include for each measured elution of	
17	technetium 99m: include:	
18	(1)	for each measured elution of technetium-99m: the ratio of the measures expressed as microcuries
19		of molybdenum-99 per millicurie of technetium-99m (or kilobecquerels of molybdenum-99 per
20		megabecquerel of technetium-99m);
21	(2)	for each measured elution of rubidium-82: the ratio of the measures expressed as microcuries of
22		strontium-82 and strontium-85 per millicurie of rubidium-82 (or kilobecquerel strontium-82 and
23		strontium-85 per megabecquerel rubidium-82); and
24	(2)(3)	the time and date of the measurement; and
25	(3)<u>(4)</u>	the initials of the individual who made the measurement.
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27	History Note:	Authority G.S. 104E-7(a)(2); 104E-10(b); 104E-12;
28		Eff. April 1, 1999;
29		Amended Eff. <u>October 1, 2013;</u> November 1, 2007.