1 `10A NCAC 15 .1653 is proposed for amendment as follows: 2 3 10A NCAC 15.1653 **RADIOLOGICAL REQUIREMENTS FOR LICENSE TERMINATION** 4 (a) Licensees shall comply with the provisions of 10 CFR Part 20, Subpart E, to meet the requirements for license 5 termination and decommissioning. 6 (b) The agency shall not publish a notice in the Federal Register of the receipt of a license termination plan or 7 decommissioning plan as required by 10 CFR 20.1405(b), but shall make other notices and solicit comments from 8 interested parties as required by 10 CFR 20.1405. 9 (c) Notwithstanding Rule .0117 of this Chapter, the regulations cited in this Rule from 10 CFR Chapter I (2015) are 10 hereby incorporated by reference, excluding subsequent amendments and editions. Copies of these regulations are of 11 available free charge at http://www.ecfr.gov/cgi-bin/textidx?SID=2beeece594411a03e50b2468ae31f89b&pitd=20160101&tpl=/ecfrbrowse/Title10/10tab 02.tpl. 12 13 (a) General provisions and scope: 14 The requirements in this Rule apply to the decommissioning of facilities licensed under the rules of (1)15 this Chapter. For low level radioactive waste disposal facilities licensed under Section .1200 of this 16 Chapter, the requirements apply only to ancillary surface facilities that support radioactive waste 17 disposal facilities. 18 The requirements in this Rule do not apply to sites which: (2)19 have been decommissioned prior to the effective date of this Rule in accordance with (A) 20 criteria approved by the agency; or 21 have previously submitted and received agency approval for a license termination plan or (B) 22 for a decommissioning plan. 23 (3)After a site has been decommissioned and the license terminated in accordance with the 24 requirements set forth in this Rule, the agency may require additional cleanup only if, based on new 25 information, the agency determines that the requirements of this Rule were not met and residual 26 radioactivity remaining at the site could result in a significant threat to the public health and safety. 27 (4) When calculating Total Effective Dose Equivalent (TEDE) to the average member of the critical 28 group, the licensee shall determine the peak annual TEDE expected within the first 1,000 years after 29 decommissioning. 30 (b) Radiological criteria for unrestricted use of a site shall be considered acceptable for unrestricted use if the residual 31 radioactivity that is distinguishable from background radioactivity results in a TEDE to an average member of the 32 critical group that does not exceed 25 millirem (0.25 millisievert) per year, including that from groundwater sources 33 of drinking water, and the residual radioactivity has been reduced to levels that are as low as reasonably achievable 34 (ALARA). Determination of the levels, which are ALARA, may take into account consideration of detriments, such 35 as deaths from transportation accidents, expected to potentially result from decontamination and waste disposal. 36 (c) A site shall be considered acceptable for license termination under restricted conditions if:

| 1 | (1) | |
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| 1 | (1) | the licensee can demonstrate that further reductions in residual radioactivity necessary to comply |
| 2 | | with the provisions of Paragraph (b) of this Rule would result in net public or environmental harm |
| 3 | | or were not being made because the residual levels associated with restricted conditions are |
| 4 | | ALARA. Determination of the levels which are ALARA may take into account consideration of |
| 5 | | detriments, such as traffic accidents, expected to result from decontamination and waste disposal; |
| 6 | (2) | the licensee has made provisions for legally enforceable institutional controls that provide |
| 7 | | reasonable assurance that the TEDE from residual radioactivity distinguishable from background |
| 8 | | radioactivity, to the average member of the critical group, will not exceed 25 millirem (0.25 |
| 9 | | millisievert) per year; |
| 10 | (3) | the licensee has provided sufficient financial assurance to enable an independent third party, |
| 11 | | including a governmental custodian of a site, to assume and carry out responsibilities for any |
| 12 | | necessary control and maintenance of the site. Acceptable financial assurance mechanisms to meet |
| 13 | | the requirements of Subparagraph (c)(3) of this Rule are described in Rule .0354 of this Chapter. |
| 14 | (4) | the licensee has submitted to the agency a decommissioning plan or license termination plan, as |
| 15 | | described in Rule .0339 of this Chapter, indicating the licensee's intent to decommission in |
| 16 | | accordance with the requirements of this Chapter, and specifying that the licensee intends to |
| 17 | | decommission by restricting use of the site; |
| 18 | (5) | the licensee has documented in the license termination plan or decommissioning plan how the advice |
| 19 | | of individuals and institutions in the community who may be affected by the decommissioning has |
| 20 | | been sought and incorporated, as appropriate, following analysis of that advice: |
| 21 | | (A) licensees proposing to decommission by restricting use of the site shall have sought advice |
| 22 | | from such affected parties regarding the following matters concerning the proposed |
| 23 | | decommissioning: |
| 24 | | (i) whether provisions for institutional controls proposed by the licensee will provide |
| 25 | | reasonable assurance that the TEDE from residual radioactivity distinguishable |
| 26 | | from background radioactivity to the average member of the critical group will |
| 27 | | not exceed 25 millirem (0.25 millisievert) TEDE per year, will be enforceable and |
| 28 | | will not impose undue burdens on the community or other affected parties; and |
| 29 | | (ii) whether the licensee has provided sufficient financial assurance to enable an |
| 30 | | independent third party, including a governmental custodian of a site, to assume |
| 31 | | and carry out responsibilities for any necessary control and maintenance of the |
| 32 | | site. |
| 33 | | (B) the licensee has provided for: |
| 34 | | (i) participation by representatives of a broad cross section of community interests |
| 35 | | who may be affected by the decommissioning; |
| 36 | | (ii) an opportunity for a comprehensive, collective discussion of the issues by the |
| 37 | | participants represented; and |
| 5, | | Participana represented, and |

| 1 | (iii) a publicly available summary of the results of all such discussions, and the extent |
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| 2 | of agreement and disagreement among the participants on the issues. |
| 3 | (6) residual radioactivity at the site has been reduced so that if the institutional controls were no longer |
| 4 | in effect, there is reasonable assurance that the TEDE from residual radioactivity distinguishable |
| 5 | from background radioactivity to the average member of the critical group is as low as reasonably |
| 6 | achievable and would not exceed either: |
| 7 | (A) 100 millirem (1 millisievert) per year; or |
| 8 | (B) 500 millirem (5 millisievert) per year provided the licensee: |
| 9 | (i) demonstrates that further reductions in residual radioactivity necessary to comply |
| 10 | with the 100 millirem per year (1 millisievert per year) value described in Part |
| 11 | (c)(6)(A) of this Rule, are not technically achievable, would be prohibitively |
| 12 | expensive, or would result in net public or environmental harm; |
| 13 | (ii) makes provisions for durable institutional controls; or |
| 14 | (iii) provides sufficient financial assurance to enable a responsible government entity |
| 15 | or independent third party, including a governmental custodian of a site, both to |
| 16 | carry out periodic rechecks of the site no less frequently than every five years to |
| 17 | assure that the institutional controls remain in place as necessary to meet the |
| 18 | requirements of Subparagraph (c)(2) of this Rule and to assume and carry out |
| 19 | responsibilities for any necessary control and maintenance of those controls. |
| 20 | (d) Alternate criteria for license termination: |
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| 21 | (1) The agency may terminate a license using alternate criteria greater than the dose requirements of |
| 21 22 | (1) The agency may terminate a license using alternate criteria greater than the dose requirements of Paragraph (b), Subparagraph (c)(2), and Subpart (c)(5)(A)(i) of this Rule, if the licensee: |
| | |
| 22 | Paragraph (b), Subparagraph (c)(2), and Subpart (c)(5)(A)(i) of this Rule, if the licensee: |
| 22 23 | Paragraph (b), Subparagraph (c)(2), and Subpart (c)(5)(A)(i) of this Rule, if the licensee: (A) provides assurance that public health and safety would continue to be protected, and that it |
| 22 23 24 | Paragraph (b), Subparagraph (c)(2), and Subpart (c)(5)(A)(i) of this Rule, if the licensee: (A) provides assurance that public health and safety would continue to be protected, and that it is unlikely that the dose from all man made sources combined, other than medical, would |
| 22 23 24 25 | Paragraph (b), Subparagraph (c)(2), and Subpart (c)(5)(A)(i) of this Rule, if the licensee: (A) provides assurance that public health and safety would continue to be protected, and that it is unlikely that the dose from all man made sources combined, other than medical, would be more than 100 millirem TEDE per year (1 millisievert per year) limit described in Rule |
| 22 23 24 25 26 | Paragraph (b), Subparagraph (c)(2), and Subpart (c)(5)(A)(i) of this Rule, if the licensee: (A) provides assurance that public health and safety would continue to be protected, and that it is unlikely that the dose from all man made sources combined, other than medical, would be more than 100 millirem TEDE per year (1 millisievert per year) limit described in Rule .1611 of this Section, by submitting an analysis of possible sources of exposure; |
| 22 23 24 25 26 27 | Paragraph (b), Subparagraph (c)(2), and Subpart (c)(5)(A)(i) of this Rule, if the licensee: (A) provides assurance that public health and safety would continue to be protected, and that it is unlikely that the dose from all man made sources combined, other than medical, would be more than 100 millirem TEDE per year (1 millisievert per year) limit described in Rule .1611 of this Section, by submitting an analysis of possible sources of exposure; (B) has employed, to the extent practical, restrictions on site use according to the provisions of |
| 22 23 24 25 26 27 28 | Paragraph (b), Subparagraph (c)(2), and Subpart (c)(5)(A)(i) of this Rule, if the licensee: (A) provides assurance that public health and safety would continue to be protected, and that it is unlikely that the dose from all man made sources combined, other than medical, would be more than 100 millirem TEDE per year (1 millisievert per year) limit described in Rule .1611 of this Section, by submitting an analysis of possible sources of exposure; (B) has employed, to the extent practical, restrictions on site use according to the provisions of Paragraph (c) of this Rule in minimizing exposures at the site; |
| 22 23 24 25 26 27 28 29 | Paragraph (b), Subparagraph (c)(2), and Subpart (c)(5)(A)(i) of this Rule, if the licensee: (A) provides assurance that public health and safety would continue to be protected, and that it is unlikely that the dose from all man made sources combined, other than medical, would be more than 100 millirem TEDE per year (1 millisievert per year) limit described in Rule .1611 of this Section, by submitting an analysis of possible sources of exposure; (B) has employed, to the extent practical, restrictions on site use according to the provisions of Paragraph (c) of this Rule in minimizing exposures at the site; (C) reduces doses to ALARA levels, taking into consideration detriments such as traffic |
| 22 23 24 25 26 27 28 29 30 | Paragraph (b), Subparagraph (c)(2), and Subpart (c)(5)(A)(i) of this Rule, if the licensee: (A) provides assurance that public health and safety would continue to be protected, and that it is unlikely that the dose from all man made sources combined, other than medical, would be more than 100 millirem TEDE per year (1 millisievert per year) limit described in Rule .1611 of this Section, by submitting an analysis of possible sources of exposure; (B) has employed, to the extent practical, restrictions on site use according to the provisions of Paragraph (c) of this Rule in minimizing exposures at the site; (C) reduces doses to ALARA levels, taking into consideration detriments such as traffic accidents expected to potentially result from decontamination and waste disposal; |
| 22 23 24 25 26 27 28 29 30 31 | Paragraph (b), Subparagraph (c)(2), and Subpart (c)(5)(A)(i) of this Rule, if the licensee: (A) provides assurance that public health and safety would continue to be protected, and that it is unlikely that the dose from all man-made sources combined, other than medical, would be more than 100 millirem TEDE per year (1 millisievert per year) limit described in Rule .1611 of this Section, by submitting an analysis of possible sources of exposure; (B) has employed, to the extent practical, restrictions on site use according to the provisions of Paragraph (c) of this Rule in minimizing exposures at the site; (C) reduces doses to ALARA levels, taking into consideration detriments such as traffic accidents expected to potentially result from decontamination and waste disposal; (D) has submitted a decommissioning plan or license termination plan to the agency indicating |
| 22 23 24 25 26 27 28 29 30 31 32 | Paragraph (b), Subparagraph (c)(2), and Subpart (c)(5)(A)(i) of this Rule, if the licensee: (A) provides assurance that public health and safety would continue to be protected, and that it is unlikely that the dose from all man-made sources combined, other than medical, would be more than 100 millirem TEDE per year (1 millisievert per year) limit described in Rule .1611 of this Section, by submitting an analysis of possible sources of exposure; (B) has employed, to the extent practical, restrictions on site use according to the provisions of Paragraph (c) of this Rule in minimizing exposures at the site; (C) reduces doses to ALARA levels, taking into consideration detriments such as traffic accidents expected to potentially result from decontamination and waste disposal; (D) has submitted a decommissioning plan or license termination plan to the agency indicating the licensee's intent to decommission in accordance with the requirements of this Chapter, |
| 22 23 24 25 26 27 28 29 30 31 32 33 | Paragraph (b), Subparagraph (c)(2), and Subpart (c)(5)(A)(i) of this Rule, if the licensee: (A) provides assurance that public health and safety would continue to be protected, and that it is unlikely that the dose from all man made sources combined, other than medical, would be more than 100 millirem TEDE per year (1 millisievert per year) limit described in Rule .1611 of this Section, by submitting an analysis of possible sources of exposure; (B) has employed, to the extent practical, restrictions on site use according to the provisions of Paragraph (c) of this Rule in minimizing exposures at the site; (C) reduces doses to ALARA levels, taking into consideration detriments such as traffic accidents expected to potentially result from decontamination and waste disposal; (D) has submitted a decommissioning plan or license termination plan to the agency indicating the licensee's intent to decommission in accordance with the requirements of this Chapter, and specifying that the licensee proposes to decommission by use of alternate criteria; |
| 22 23 24 25 26 27 28 29 30 31 32 33 34 | Paragraph (b), Subparagraph (c)(2), and Subpart (c)(5)(A)(i) of this Rule, if the licensee: (A) provides assurance that public health and safety would continue to be protected, and that it is unlikely that the dose from all man-made sources combined, other than medical, would be more than 100 millirem TEDE per year (1 millisievert per year) limit described in Rule .1611 of this Section, by submitting an analysis of possible sources of exposure; (B) has employed, to the extent practical, restrictions on site use according to the provisions of Paragraph (c) of this Rule in minimizing exposures at the site; (C) reduces doses to ALARA levels, taking into consideration detriments such as traffic accidents expected to potentially result from decontamination and waste disposal; (D) has submitted a decommissioning plan or license termination plan to the agency indicating the licensee's intent to decommission in accordance with the requirements of this Chapter, and specifying that the licensee proposes to decommission by use of alternate criteria; (E) has documented in the decommissioning plan or license termination plan how the advice |
| 22 23 24 25 26 27 28 29 30 31 32 33 34 35 | Paragraph (b), Subparagraph (c)(2), and Subpart (c)(5)(A)(i) of this Rule, if the licensee: (A) provides assurance that public health and safety would continue to be protected, and that it is unlikely that the dose from all man made sources combined, other than medical, would be more than 100 millirem TEDE per year (1 millisievert per year) limit described in Rule .1611 of this Section, by submitting an analysis of possible sources of exposure; (B) has employed, to the extent practical, restrictions on site use according to the provisions of Paragraph (c) of this Rule in minimizing exposures at the site; (C) reduces doses to ALARA levels, taking into consideration detriments such as traffic accidents expected to potentially result from decontamination and waste disposal; (D) has submitted a decommission in accordance with the requirements of this Chapter, and specifying that the licensee proposes to decommission by use of alternate criteria; (E) has documented in the decommissioning plan or license termination plan how the advice of individuals and institutions in the community who may be affected by the |

| 1 | | (i) participation by representatives of a broad cross section of community interests |
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| 2 | | who may be affected by the decommissioning; |
| 3 | | (ii) an opportunity for a comprehensive, collective discussion of the issues by the |
| 4 | | participants represented; and |
| 5 | | (iii) a publicly available summary of the results of such discussions, including a |
| 6 | | description of the extent of agreement and disagreement among the participants |
| 7 | | on the issues. |
| 8 | (2) | The use of alternate criteria to terminate a license requires the consideration of any comments |
| 9 | | provided by any other interested state agencies and any public comments submitted pursuant to |
| 10 | | Paragraph (e) of this Rule. |
| 11 | (e) Upon the re | ceipt of a license termination plan or decommissioning plan from the licensee, or a proposal by the |
| 12 | licensee for relea | ase of a site pursuant to Paragraphs (c) and (d) of this Rule, or whenever the agency deems such notice |
| 13 | to be in the publ | ic interest, the agency shall notify and solicit comments from: |
| 14 | (1) | local governments in the vicinity of the site, appropriate state agencies, the U.S. Environmental |
| 15 | | Protection Agency, and any Indian Nation or other indigenous people that have treaty or statutory |
| 16 | | rights that could be affected by the decommissioning; and |
| 17 | (2) | publish a notice in a forum, such as local newspapers, letters to state or local organizations or other |
| 18 | | appropriate forum that is readily accessible to individuals in the vicinity of the site, and solicit |
| 19 | | comments from affected parties. |
| 20 | | |
| 21 | History Note: | Authority G.S. 104E-7(a)(2); 104E-10(b); |
| 22 | | Eff. April 1, 1999; |
| 23 | | Transferred and Recodified from 15A NCAC 11 .1653 Eff. February 1, 2015. 2015; |
| 24 | | Amended Eff. March 1, 2017. |