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1. **Agency:** Virginia Department of Health
2. **VAC Number/Chapter Title:** 12VAC5-481, Virginia Radiation Protection Regulations
3. **Effective Date of Final Regulation (leave blank for proposed stage):** 7/5/2016
4. **Name of Document Incorporated by Reference (include edition or effective/revised date):**
5. **Summary or description of the document incorporated by reference:**
   NCRP Report No. 69 describes a dosimetric process that will allow the delivery of a prescribed absorbed dose from x-ray and gamma-ray sources to a uniform phantom within the accuracy needed for radiation therapy. The radiations considered in the Report are x-rays with peak energies in the range from 10 keV to 50 MeV and gamma-rays from radionuclide therapy units. The Report describes and discusses the many recommended procedural details for the continuing proper delivery of absorbed dose by radiation therapy machines. The Report also considers the salient features of exposure and absorbed dose measurement that relate them to the national radiation standards, and includes a discussion of the uncertainty in the delivery of the absorbed dose.
6. **Is a copy of the document incorporated by reference in custody of the agency and available to the public for inspection and copying as required by §2.2-4103?**
   - ✔ YES
   - NO
7. **Document may be inspected at the following agency location:**
   - Virginia Dept. of Health
   - Office of Radiological Health
   - James Madison Bldg., 7th Floor Library
   - 109 Governor St.
   - Richmond, VA 23219
8. **Document may be obtained from the following entity (include website and cost of document):**
   - $ 35.00 - hardcopy
   - $ 28.00 - PDF
9. **Explain why it is impractical to file a copy of the document incorporated by reference:**
   The Office of Radiological Health has a hard copy of NCRP Report #69 that is available for public review. Purchasing another hard copy of the report would be an unnecessary expenditure. Also, the NCRP Terms and Conditions for electronic purchases (of a PDF copy) prohibits distributing or posting PDF files without written permission of NCRP.
10. **Attach a copy of the document cover, title page, and copyright page.**

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**Requested by:** Joe Hilbert / 804-864-7006

**Print Name/Telephone Number of Agency Regulatory Coordinator**

**Signature of Agency Regulatory Coordinator**

**March 31, 2016**

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**Approved:** Jane Chappin

**Registrar of Regulations**

**Date:** 3-31-2016

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Form RR11 (rev. 1/15) Virginia Code Commission - Virginia Register of Regulations - 201 North 9th St., 2nd Fl. - Richmond, VA 23219
Dosimetry of X-Ray and Gamma-Ray Beams for Radiation Therapy in the Energy Range 10 keV to 50 MeV
Dosimetry of X-Ray and Gamma-Ray Beams for Radiation Therapy in the Energy Range 10 keV to 50 MeV

Recommendations of the
NATIONAL COUNCIL ON RADIATION PROTECTION AND MEASUREMENTS

Issued December 15, 1981

National Council on Radiation Protection and Measurements
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Prefa

The purpose of the human exposure to radiation in a certain region should be to establish the dose the individual absorbs from the sources in the region. The scope of this report includes the specific sources of radiation and their effects on human beings. The conclusion of this report is that the time required to convert the units of absorbed dose to the time required for the units to be converted to the standard units of absorbed energy is given by the expression:

\[ D = E \times t \]

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