



**American Association of Physicists in  
Medicine**

One Physics Ellipse  
College Park, MD 20740-3846  
(301) 209-3350  
Fax (301) 209-0862  
<http://www.aapm.org>



**ASTRO**  
AMERICAN SOCIETY FOR THERAPEUTIC  
RADIOLOGY AND ONCOLOGY  
8280 Willow Oaks Corporate Drive, Suite 500  
Fairfax, VA 22041  
(703) 502-1550  
Fax (703) 502-7852  
<http://www.astro.org>

DOCKETED  
USNRC

December 11, 2006 (10:44am)

Annette Vietti-Cook  
Secretary  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

December 6, 2006

Re: Comments on Proposed Rule on *Occupational Dose Records, Labeling Containers, and the Total Effective Dose Equivalent* [RIN 3150-AH40] (71 FR 55382)

Dear Ms. Vietti-Cook:

The American Association of Physicists in Medicine (AAPM) and the American Society for Therapeutic Radiology and Oncology (ASTRO) offer the following comments on the Proposed Rule on *Occupational Dose Records, Labeling Containers, and the Total Effective Dose Equivalent* (71 FR 55382).

General Comments:

Although the proposed changes were generated from concerns/issues raised by the nuclear power industry, as currently proposed these changes will affect ALL radiation workers. Especially because Agreement States regulate all occupational personnel who use radioactive materials and radiation producing-machines, the ramifications of these proposed changes will extend significantly beyond the nuclear power industry. The largest component of occupational workers nationally is medical and research radiation workers. This group has been neglected in NRC reporting summaries of 10 CFR § 20.2206. As a result, the largest, low-dose, occupationally exposed population has no historical assessment by the NRC.

We are concerned that materials licensees may not have focused on the initial request for input since these proposed changes were originally proposed for 10 CFR Part 50. We believe that it is not appropriate for the Commission to construe that materials licensees are not concerned

Template = SECY-067

SECY-02

**Page 2 - Comments to Proposed Rule on Occupational  
Dose Records, Labeling Containers, and the  
Total Effective Dose Equivalent [RIN 3150-AH40] (71 FR 55382)**

because they may not have responded to the Advanced Notice of Rulemaking over two years ago for what appeared as changes to Part 50 only.

- A. Annual Dose reports to Workers - We support the general need to change 10 CFR § 19.13(b) on providing annual reports to workers who are occupationally exposed. However, we recommend that the Commission consider a two-tiered revision: (1) 100 mrem for whole-body & lens of the eye, and (2) 1,000 mrem for extremities/organ because there is a 10-fold difference in dose limits involved. This will not affect monitoring because this is determined by a percentage of the expected whole body limit, which is much lower. Medical/research workers most often receive their highest doses to extremities or lens of the eye although well within allowable regulatory and safety limits. This change would result in major administrative savings for this group and be consistent with the original recommended notification threshold.
- B. Total Effective Dose Equivalent (TEDE) Definition - The proposed rule commentary does not address how this change is consistent with the International Commission on Radiological Protection (ICRP) and the National Council on Radiation Protection and Measurements (NCRP) recommendations. The NRC needs to describe clearly what differences, if any, this proposed definition has compared to the latest recommendations of the NCRP in Reports 116 and 122 and of the ICRP. Current NRC approved methodology may be inconsistent with contemporary literature on combining collar and waist measurements for workers exposed to x-rays in the range used in Diagnostic Radiology who wear shielding garments.
- C. Labeling – AAPM and ASTRO do not support this proposed change to 10 CFR Part 20 as currently presented in that it applies only to nuclear power plants. For example, an area of conceivable applicability is the management of low-level radioactive waste in large medical/university settings. The current exemptions in 10 CFR 20.1905 pertain to the labeling of specific container types with applicability to ALL licensees. It appears that the basis for limiting this exemption to nuclear power facilities ONLY is based on the justifications presented in 71 FR 55382, which demonstrate an incomplete understanding of the safety measures in large medical and research facilities and indicates a special regard for the nuclear power licensee. If an undue burden has been placed on the nuclear power industry because of an overly conservative interpretation of rule(s), the NRC should specifically be tasked to broaden that interpretation, not exempt a single licensee category from a rule applicable to all other licensees.
- D. Cumulative Occupational Dose - We agree that the proposed change to 10 CFR §20.2104 will reduce the burden to all NRC licensees. However, we note the following potential consequences of the change:
  - a) eliminate lifetime dose records and the ability to do any retrospective, low dose, occupational risk assessments.
  - b) create in the future a larger burden, or at best, will fail to reduce the burden on licensees. If the NRC should implement currently suggested ICRP dose limits, which

**Page 3 - Comments to Proposed Rule on Occupational  
Dose Records, Labeling Containers, and the  
Total Effective Dose Equivalent [RIN 3150-AH40] (71 FR 55382)**

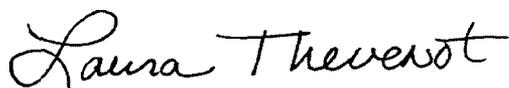
recommend dose limits averaged over several years, licensees will be forced to recreate previous dose histories for its workers.

Please contact Lynne Fairbent, AAPM's Manager of Legislative and Regulatory Affairs at 301.209.3364 or via email at [lynn@AAPM.org](mailto:lynn@AAPM.org) or Emily Wilson, ASTRO's Director of Government Relations at 703.839.7300 or via email at [emilyw@astro.org](mailto:emilyw@astro.org) if you have additional questions.

Sincerely,



Gerald L. White, Jr., FAAPM  
Chair AAPM Professional Council



Laura I. Thevenot  
Executive Director, ASTRO

**From:** Evangeline Ngbea  
**To:** SECY  
**Date:** Mon, Dec 11, 2006 9:26 AM  
**Subject:** Fwd: Comment letter on Occupational Dose Records, Labeling Containers and TEDE

>>> Carol Gallagher 12/08/2006 10:56 AM >>>  
Van,

Attached for docketing is a comment letter on the above noted proposed rule from Gerald L. White, Jr., and Laura I. Thevenot that I received via the rulemaking website on December 7, 2006.

Carol

**Mail Envelope Properties** (45798B21.133 : 5 : 35764)

**Subject:** Comment letter on Occupational Dose Records, Labeling Containers and TEDE  
**Creation Date** 12/08/2006 10:56:17 AM  
**From:** Carol Gallagher  
**Created By:** CAG@nrc.gov

**Recipients**

nrc.gov  
 TWGWPO01.HQGWDO01  
 ESN (Evangeline Ngbea)

**Post Office**

TWGWPO01.HQGWDO01

**Route**

nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	662	12/08/2006 10:56:17 AM
TEXT.htm	508	
1761-0011.pdf	58800	12/08/2006 10:52:00 AM

**Options**

**Expiration Date:** None  
**Priority:** Standard  
**ReplyRequested:** No  
**Return Notification:** None

**Concealed Subject:** No  
**Security:** Standard

**Junk Mail Handling Evaluation Results**

Message is not eligible for Junk Mail handling  
 Message is from an internal sender

**Junk Mail settings when this message was delivered**

Junk Mail handling disabled by User  
 Junk Mail handling disabled by Administrator  
 Junk List is not enabled  
 Junk Mail using personal address books is not enabled  
 Block List is not enabled