

**1988
Rationale for Revisions**

**Part H
Radiation Safety Requirements for Analytical X-Ray Equipment**

Introduction

The Suggested State Regulations for Control of Radiation (SSRCR) Part H Working Group has carefully considered the items in the Matters for Future Consideration (MFC) of the last edition of Volume I (Ionizing Radiation) of the SSRCR. MFC No. 1 suggested that "chirper" type personal dosimeters be used by users of analytical x-ray units as warning devices. Tests of one such device and a review of the operating specifications of others suggests that these units are not suitable for this purpose. Item 1.b. suggested the use of leaded glasses be required. Although visual alignment techniques are sometimes used with analytical x-ray units, our knowledge of accident history indicates that most accidental exposures affect primarily the extremities, especially the fingers and hands. Item 1.c. regarding the use of leaded gloves was also considered. The Working Group does not know of any leaded gloves which would not interfere with the safe operation and/or adjustment of analytical x-ray units. In review of MFC No. 2, the Part H Working Group felt that the phrase "or words having similar intent" in Subparagraph H.3(f)(1) of the last SSRCR edition allows an appropriate substitute for "X-RAY ON" when radioactive materials are used. The Part H Working Group members are not aware of any situation where the words "X-RAY ON" were used inappropriately. The other suggestions in MFC No. 2 were either incorporated in Part H as indicated below, or were retained as a MFC.

Specific Changes

1. Paragraphs H.3(b) and H.3(f) were combined as they address the same matter.
2. Some paragraphs and a subparagraph of Section H.3 were redesignated for continuity.

Specific Provisions

H.3(b) Warning Devices was amended to include specific warning lights under warning devices. The new provision combines requirements for warning devices into the same paragraph.

H.3(f) Warning Lights (previous edition). The provisions of Paragraph H.3(f) were incorporated into Paragraph H.3(b) as stated above.

H.3(g) Radiation Source Housing (previous edition) was redesignated as Paragraph H.3(f) for continuity.

H.3(h) Generator Cabinet (previous edition) was redesignated as Paragraph H.3(g) for continuity.

Matter for Future Consideration

1. The SSRCR Technical Review Committee recommends that the Part H Working Group consider removal of all references to radioactive material so that Part H relates to machine-produced radiation only.