FOREWORD

CRCPD Dynamic Document

From the first publication of the Suggested State Regulations for Control of Radiation (SSRCR) in 1962 through the 8th Edition, published in June of 1990, the document has been published as a "single" publication. The exception was in 1984 when there was an Interim Revision to certain Parts of the document.

With the publication of this September 1991 edition, an entirely new approach has been taken in publishing this document. Specifically, this document now becomes a "Dynamic Document" which will be changed as frequently and as quickly as possible, as new or revised Parts become available.

The intent of the Dynamic Document is to have suggested regulations that are more current than allowed by a single publication every three to four years. For example, for those persons who have subscribed to the Dynamic Document (does not include those persons who have purchased a single copy), if there is a revision that affects only one page, that new page will be sent to the holder of this Dynamic Document, requesting that he or she simply replace the old page with the new page. The new page will be appropriately numbered and dated to easily identify when it became effective.

It is not anticipated that many single page amendments will occur, since most changes are likely to affect an entire Part, and therefore, the new Part, in total, will be sent to the holder. When this occurs, the holder will be asked to totally replace the old Part with the new Part. Again, each page of the new Part will be dated to reflect its effective date.

The contents of this first publication of the CRCPD Dynamic Document contains the 8th Edition, initially published in June 1990. However, for clarification, after the first amendment is made to this document, it should no longer be referred to as the 8th Edition. It should be referred to as the "CRCPD Dynamic Document of Suggested State Regulations for Control of Radiation".

It is the desire of the Executive Board of the Conference of Radiation Control Program Directors, Inc. (CRCPD) that each state radiation control program, and all other interested parties now have a document that is current.

For more information on how to obtain this document, please refer to the attachment at the end of this document.

SSRCR Development

Applicable Federal statutes require that certain state regulations be compatible with, identical to, or as effective as, Federal regulations issued under authority of those statutes.

Some of the provisions in this edition were developed or revised to reflect compatibility with current Nuclear Regulatory Commission (NRC) regulations for use by Agreement States and those states preparing for an agreement with the NRC to assume regulatory responsibility over source, byproduct, and certain special nuclear materials under Section 274b of the Atomic Energy Act of 1954, as added by Public Law 86-373 (42 U.S.C. 2021(b)). Under Section 360F of the Public Health Service Act, as added by Public Law 90-602 (42 U.S.C. 263n), no state or political subdivision of a state shall have any authority either to establish, or to continue in effect, any standard which is applicable to the same aspect of performance of an electronic product for which there is a Federal standard unless the state regulation is identical to the Federal standard. The various Parts of the model regulations have been prepared so that, if adopted by the states, there should be no conflict between their regulations and the Federal performance standards issued under Section 358 of the Public Health Service Act (42 U.S.C. 263f).

As revision of the SSRCR is a continuous process, the Federal Register will continue to be used as a mechanism for publishing a notice of availability on the SSRCR inviting interested persons to submit comments and suggestions on the latest revision. Copies of the latest revision will also be provided to state and local radiation control program directors, Federal agencies, standards setting groups, professional organizations, industrial associations, and international organizations for their information and soliciting of comments and suggestions for the next revision. In most cases where an extensive revision is anticipated in certain sections or a particular part, a notice is sent to those most directly affected in order to obtain their ideas and recommendations for the revision. The draft of a major revision is prepared on the basis of all available resources, including standards and experts in the field, and is sent out for review and comment to those groups indicated above. The comments are analyzed by the working group for that part and a revised draft is prepared on the basis of the analysis of comments. A Regulations Overview Committee (ROC), composed of representatives of CRCPD and the participating Federal agencies, conducts the final review of each of the revised parts and rationale and the analysis of comments. Each of the participating groups is then asked to concur in the final draft.

SSRCR History and Structure

The SSRCR were initially published in 1962 by the Council of State Governments, with the advice and assistance of the U.S. Atomic Energy Commission (now the NRC) and the U.S. Public Health Service. These regulations were updated and revised in 1964, 1966, 1970, 1974, 1978, 1982, and 1984 (Interim Revision). The revisions incorporated changes resulting from amendments to NRC regulations and other changes to clarify various parts of the regulations. Those parts of the 4th Edition (1970) of the regulations dealing with radiation machines were revised to be consistent with the recommendations of the National Council on Radiation Protection and Measurements (NCRP) which were current at that time.

The 5th Edition (1974) of the SSRCR included certain provisions of the electronic product radiation safety performance standards. It also included three new parts: Part H (Radiation Safety Requirements for Analytical X-Ray Equipment); Part I (Radiation Safety

Requirements for Particle Accelerators); and Part J (Notices, Instructions, and Reports to Workers; Inspections). Part J is based on requirements of the Occupational Safety and Health Administration of the U.S. Department of Labor and incorporates provisions from Title 10 of the Code of Federal Regulations (CFR), Part 19.

The 6th Edition (1978) of the SSRCR was prepared to reflect changes in the NCRP recommendations, new amendments to the NRC regulations (10 CFR Chapter I), and amendments to the electronic product radiation safety performance standards issued by the Bureau of Radiological Health (now the Center for Devices and Radiological Health (CDRH)) of the U.S. Food and Drug Administration (FDA) (21 CFR Chapter I, Subchapter J).

The 7th Edition (1982) of the SSRCR included recent U.S. Environmental Protection Agency (EPA) standards (Title 40 CFR), amendments to NRC regulations (10 CFR Chapter I), and amendments to FDA regulations (21 CFR Chapter I), a new Part W addressing requirements for wireline services and subsurface tracer studies, and revision based on numerous substantive constructive comments received since publication of the 6th Edition.

An Interim Revision to Volume I (Ionizing Radiation) of the SSRCR was published between the 7th Edition and the 8th Edition of the SSRCR. The Interim Revision included amendments to Part C (Licensing of Radioactive Material), Part D (Standards for Protection Against Radiation), Part F (X-Rays in the Healing Arts), and Part G (Use of Sealed Radioactive Sources in the Healing Arts); and a complete new Part M (Licensing Requirements for Land Disposal of Radioactive Waste). The main purpose of the Interim Revision was to provide companion regulations consistent and in conformity with certain amendments to Federal standards in 10 CFR Part 20, Part 35, and Part 61 and in 21 CFR Part 1020.

The 8th Edition of the SSRCR includes a new Section F.11 on Computed Tomography X-Ray Systems, and a new Part T on Transportation of Radioactive Material. A new Part U on Licensing Requirements for Source Material Milling Facilities is to be included in the near future. Part G, previously titled "Use of Sealed Radioactive Sources in the Healing Arts", has been extensively revised to incorporate the amendments to 10 CFR Parts 30, 31, 32, and 35 on Medical Use of Byproduct Material. The new Part G is titled "Use of Radionuclides in the Healing Arts".

Prior to final publication, all the SSRCR must be endorsed by the CRCPD Executive Board, and concurred by the FDA, NRC, and EPA.

These SSRCR require the licensing of all radioactive material and the registration of all other sources of ionizing radiation. In certain parts of the model regulations, states are given an option as to their method of control for any specific source. Two types of footnotes are used throughout. Footnotes which are designated by numbers are intended to be part of the regulations. Footnotes which are designated by asterisk(s) provide information intended to assist states in drafting their regulations and should not be incorporated as part of such regulations. The regulations also contain expressions which have been set off by brackets. The bracketed portions contain either optional provisions or are used to indicate a need for states to add appropriate language or reference to local codes.

A rationale report has been prepared and is included for each of the revised parts of the 8th Edition of the SSRCR to provide the states and others using and reviewing the model regulations with background information on the basis and approaches of the working group that prepared each part. The rationale for the 5th, 6th, and 7th Editions and the Interim Revision are also included in order to provide background information on the new parts added and other significant changes made in the revisions and should be used in conjunction with the rationale for the 8th Edition. Some of the proposed changes and concepts presented by members of the working groups and others were not included in the model regulations at this time because of need for further study or possible conflict with current Federal regulations. Some of these concepts were recorded as Matters for Future Consideration (MFC) by appropriate Federal agencies and those working groups responsible for revision of that part at a later date.

Part A (General Provisions) was amended by the addition or deletion of certain definitions based on the new Part T on Transportation of Radioactive Material being included in this edition of the SSRCR. Also, Appendix A on Transport Grouping of Radionuclides and Appendix B on Tests for Special Form Licensed Material were removed from Part A because of the new Part T based on amendments to Federal regulations and consistency with international transportation standards. Certain definitions from Part M (Licensing Requirements for Land Disposal of Radioactive Waste) have been moved to Part A as they are used outside of Part M in another part of the SSRCR. The definition of Licensing State was revised to reflect the designation of a state as a Licensing State by the CRCPD.

In Part B (Registration of Radiation Machine Facilities and Services), there are no significant changes for this edition of the SSRCR. There are some MFC for Part B under review for the next revision of the SSRCR.

In Part C (Licensing of Radioactive Material), major changes were made for this edition of the SSRCR to conform with requirements of the NRC. The requirements for the use of radioactive material in the healing arts were deleted and placed in the revised Part G consistent with the provisions of 10 CFR Part 35. The requirements for uranium mills were also deleted and placed in a new Part U (Licensing Requirements for Source Material Milling Facilities) of the SSRCR. Changes were also brought about because of the new Part T (Transportation of Radioactive Material). Certain changes in terminology were made to Appendix A (Exempt Concentrations) and with the elimination of the group license and the revision of Part G, Appendix C (Groups of Medical Uses of Radioactive Material) was deleted. A new Agency Form T (Certificate-Disposition of Radioactive Materials) has been included in the SSRCR and Agency Form U (Certificate-Medical Use of Radioactive Material Under General License) has been deleted. New paragraphs were added to Section C.31 on Specific Terms and Conditions of Licenses that require the licensee to notify the Agency following bankruptcy as a result of amendments to NRC regulations (52 FR 1292).

Part D (Standards for Protection Against Radiation) was updated to be compatible with amendments to 10 CFR 20 and to reflect the addition of Part T and Part U to this edition of the SSRCR. Amendments to Part D include the requirements that whole body film badges and

thermoluminescent dosimeters be obtained from suppliers accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) of the National Institute of Standards and Technology. Changes to the requirements for picking up, receiving, and opening packages were also made as a result of the addition of Part T to the SSRCR. Appendix A (Concentrations in Air and Water Above Natural Background) has been amended by certain terminology changes and the addition of selected radionuclides. Certain terminology changes were also made to Appendix B (Quantities for Use with D.203 and D.303). There were other minor editorial and reference changes, as well.

Part E (Radiation Safety Requirements for Industrial Radiographic Operations) was revised significantly for this edition of the SSRCR. Significant features relevant to improved radiation safety include the "two-man" rule and the optional requirement for state or third party testing of radiographers. Certain definitions were added because of their use within the regulations and some of these are based on wording identical to the American National Standards Institute definition. Other definitions were revised or deleted to meet the needs of new or revised provisions within Part E. The section on Training and Testing was changed to improve the training that an individual receives prior to use of sources of radiation. The requirements for a radiographer's assistant have been deleted and replaced with requirements for a radiographer trainee. The NRC is currently reevaluating its position with regard to licensing of industrial radiographic operations. Nothing in these suggested regulations should be interpreted as reflecting current or future NRC policy with regard to industrial radiographic operations.

Part F (X-Rays in the Healing Arts) was revised most significantly by the addition of a new Section F.11 on Computed Tomography X-Ray Systems, which is based on amendments to the Federal performance standard on diagnostic x-ray systems (21 CFR 1020.33) published as a final rule in the Federal Register on August 31, 1984 (49 FR 34698) and became effective on September 3, 1985, except for selected provisions which became effective on November 29, 1984. Definitions were added to Part F in support of the new Section F.11. In addition, certain editorial and technical changes were made throughout Part F for greater clarity and consistency with the Federal standard and to conform with amendments to FDA regulations.

Part G (Use of Radionuclides in the Healing Arts) was revised extensively for this edition of the SSRCR for conformity with amendments to NRC regulations on the Medical Use of Byproduct Material published as a Final Rule in the Federal Register on October 16, 1986 (51 FR 36932) and effective on April 1, 1987. Although Part G was included in the SSRCR before sealed radioactive sources, this revision of Part G merged the requirements for sealed sources in therapy with nuclear medicine, which was originally planned as a separate Part L. The basic purpose of the revision is to clarify and consolidate all essential radiation safety requirements into a single source of requirements related specifically to the medical use of radioactive material. Section G.13 on Records and Reports of Misadministrations in Part G is equivalent to 10 CFR 35.33 which the NRC considers as a matter of compatibility for adoption by all Agreement States.

Part H (Radiation Safety Requirements for Analytical X-Ray Equipment) was amended for this edition of the SSRCR by incorporating Paragraph H.3f. on Warning Lights into

Paragraph H.3b. on Warning Devices and recodifying the previous paragraphs g. and h. of Section H.3 accordingly.

Part I (Radiation Safety Requirments for Particle Accelerators) was not revised significantly for this edition of the SSRCR. Certain editorial changes were made for consistency with regulatory language and with other parts of the SSRCR.

The changes to Part J (Notices, Instructions, and Reports to Workers; Inspections) for this edition of the SSRCR were mainly editorial for consistency with other parts of the SSRCR.

Part M (Licensing Requirements for Land Disposal of Radioactive Waste), a new part added to the SSRCR Interim Revision, was amended for this edition by the transfer of certain definitions to Part A as those definitions are used in other parts outside of Part M. New paragraphs were added to Section M.12 on Conditions of Licenses that require the licensee to notify the Agency following bankruptcy as a result of amendments to NRC regulations (52 FR 1292).

A new Part T (Transportation of Radioactive Material) was added to this edition of the SSRCR. Part T covers the requirements for packaging, preparation for shipment, and transportation of radioactive material and applies to any person who transports radioactive material or delivers radioactive material to a carrier for transport. With adoption of the amendments of the NRC's regulations for the transportation of radioactive material to make them compatible with those of the U.S. Department of Transportation and the International Atomic Energy Agency, it was deemed appropriate to consolidate all transportation requirements, within the jursidiction of state and local governments, in a separate part of the SSRCR.

A new Part U (Licensing Requirements for Source Material Milling Facilities) is anticipated in the near future. Part C is generally applicable to all NRC Agreement States and Naturally Occurring and Accelerator-Produced Radioactive Material (NARM) Licensing States. Also, Part C is already a very large part in itself, and because only a few states are potentially involved with licensing facilities which would generate extensive uranium mill tailings and mill wastes (byproduct material), a separate part of the SSRCR is deemed appropriate for this topic.

Part W (Radiation Safety Requirements for Wireline Service Operations and Subsurface Tracer Studies) was revised for this edition of the SSRCR to maintain compatibility with the new 10 CFR Part 39 of NRC regulations and to address the MFC from the Part W Rationale of the last edition of the SSRCR.

In preparation of this edition and the earlier Interim Revision of the SSRCR, the assistance of the following individuals is greatly appreciated:

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The 8th Edition of the SSRCR has been endorsed by the Executive Board of the CRCPD, the NRC, the CDRH, FDA, and the EPA.