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ANSI N14.29-1988

American National Standards

*for Radioactive Materials –
Guide for Writing Operating Manuals
for Packaging*

 **ANSI** American National Standards Institute
11 West 42nd Street
New York, New York
10036

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Secretariat
Institute of Nuclear Materials Management

Approved May 19, 1988
American National Standards Institute

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National Standard

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requirements for rigorous tests of the transport packaging, these tests being related to the potential hazard of the contents of the packages. However, the desired safety can be attained only by making certain that the packages are fabricated in accordance with approved design requirements and specifications and are adequately maintained and properly used. Specifications for the quality assurance in the design, maintenance, and use of packages must be translated into practice in each facility receiving and shipping these packages.

Federal regulations (10 CFR 71 and 49 CFR 173) call for maintenance directly or indirectly of a program suitably documented and approved by the NRC for shipping packages for radioactive materials. Implicit in these requirements is the provision that each step in the procedures for receiving, packaging, certifying, and marking of packages be adequately described. This standard is intended as a guide for the writing of company manuals describing the steps appropriate to the type of package and materials being handled by the company. Uniformity of organization will facilitate reference and assist in assuring completeness.

Dimensions and weights have been shown in U.S. customary units in the examples, in accordance with prevailing practice in the industry at the time this standard was written. It is expected that specifications for future packaging will utilize metric units. The manual should utilize the same system as that used in the specifications.

It is hoped that the recommendations herein will assist industry in setting up an effective packaging guidance program.

Suggestions for improvement of this standard will be welcome. They should be sent to the Institute of Nuclear Materials Management, 60 Revere Drive, Suite 500, Northbrook, IL 60067.

This standard was processed and approved for submittal to ANSI by Accredited Standards Committee on Packaging and Transportation of Radioactive Materials, N14. Committee approval of the standard does not necessarily imply that all members voted for its approval. At the time it approved this standard, the N14 Committee had the following members:

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1. Scope and Purpose.....	5
1.1 Scope.....	5
1.2 Purpose.....	5
2. Compliance with Codes and Regulations.....	5
3. Definitions.....	5
4. Requirements for Approvals and Authorizations.....	5
5. Distribution of Operating Manuals.....	5
6. Contents of Operating Manuals.....	5
7. Format.....	6
Appendixes	
Appendix A Partial Listing of Current Codes, Regulations, and Standards.....	7
Appendix B Sample Radioactive Materials Packaging Manual.....	8
Figure B1 Sample Manual.....	8
Appendix C Certificates of Compliance/Competent Authority and User Registration Letter Samples.....	15
Figures	
Figure C1 NRC Certificate of Compliance.....	15
Figure C2 DOE Certificate of Compliance.....	16
Figure C3 Sample of DOT-IAEA Certificate of Competent Authority for Special-Form Radioactive Material.....	17
Figure C4 Sample of DOT Certificate of Competent Authority (Canada).....	18
Figure C5 Sample of Radioactive Material Type B(U) Package Design Approval Certificate (Canadian).....	19
Figure C6 User Registration Letter.....	23

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for Radioactive Materials – Guide for Writing Operating Manuals for Packaging

1. Scope and Purpose

1.1 Scope. This guide describes the preparation and distribution of operating manuals for the use, maintenance, and inspection of packages for shipping radioactive material. It prescribes the contents of such a manual and their arrangement, and contains a sample manual that can be used as a model. This guide is generally applicable to manuals for packages containing fissile material or Type B quantities of radioactive material for which an NRC Part 71 certificate of compliance has been issued, but it should also be used to the extent applicable for other packages, such as those for Type A quantities of fissile materials.

1.2 Purpose. The purpose of this guide is to facilitate the writing of a manual that will provide the user with essential information for the safe packaging and transport of radioactive materials. This guide describes general requirements that should be included in the detailed operating procedures prepared for any package without addressing the special equipment and techniques that may differ among packages and sites.

2. Compliance with Codes and Regulations

Procedures described shall be in compliance with applicable codes and regulations, which are partially listed in Appendix A.

Consideration shall be given to any other pertinent federal, state, or local requirements. In addition, export shipments shall be required to conform to international regulations and the regulations of countries en route. *Certificate of Compliance/Competent Authority (COCA)* shall be on file for each cask.

3. Definitions

Definitions and terms used in a manual shall conform to American National Standard Glossary of Terms in

Nuclear Science and Technology, ANSI N1.1-1976, to applicable terminology in the Code of Federal Regulations, and to usage in the nuclear industry. Unusual terms shall be explained or defined.

4. Requirements for Approvals and Authorizations

Operating manuals and revisions thereto shall be approved in a manner authorized by the owner of the package and in accordance with the quality assurance program established by the package owner and should include, as a minimum, approval by the managers of the departments that are responsible for their preparation and use.

5. Distribution of Operating Manuals

Each manual and revisions thereto shall be dated and sequentially numbered, and shall be distributed in a controlled manner. Each page of the manual should carry the manual title and have provision for the appropriate revision number. The distribution of manuals for each type of package shall be specified. A list of holders shall be maintained as well as documentation that revisions have been received.

6. Contents of Operating Manuals

Operating manuals shall include, where applicable, but shall not be limited to:

6.1 A description of the package, with capacity and rating information (weight, activity, whether material is in normal or special form, chemical and physical form, radionuclides, heat release, pressure, shielding, inner container, and transport index or criteria as applicable).