



Designation: E 1168 – 95<sup>ε1</sup>

## Standard Guide for Radiological Protection Training for Nuclear Facility Workers<sup>1</sup>

This standard is issued under the fixed designation E 1168; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

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<sup>ε1</sup> NOTE—Editorial changes were made throughout in February 1996.

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### 1. Scope

1.1 This guide covers general recommendations with respect to standard work practices, procedures, and measurement methods for the radiological protection portion of health and safety training for radiation workers at nuclear facilities. This guide defines the elements of a training program for radiation workers consistent with the philosophy that occupational radiation exposure be kept as low as is reasonably achievable (ALARA). Regulatory agencies have statutory responsibilities to promulgate regulations applying to the training of workers exposed to radiation hazards. This guide shall not take precedence over any such regulations.

1.2 This guide is intended to help ensure that the employer provides the radiation worker with radiological protection training that the worker needs to work safely in a radiologically controlled area and to maintain radiation exposure ALARA.

1.3 The scope of radiological protection training shall be related to the duties and responsibilities of each radiation worker and shall be commensurate with potential radiological protection problems in the radiologically controlled area.

1.4 This guide is also intended to provide guidance that will enable an evaluation of the effectiveness of the radiological protection training program toward achieving the purpose stated in Section 4.

1.5 This guide does not cover the more detailed training requirements for radiation protection professionals or technicians.

1.6 This guide provides reference to the type of radiological protecting training records that should be created, and recommends retention periods for radiological protection training records.

1.7 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

### 2. Referenced Documents

#### 2.1 ASTM Standards:

C 986 Guide for Developing Training Programs in the Nuclear Fuel Cycle<sup>2</sup>

#### 2.2 ANSI Standard:

ANSI/ANS 3.1 American National Standard for Selection, Qualification, and Training of Personnel for Nuclear Power Plants<sup>3</sup>

#### 2.3 ANI/MAELU Documents:

Information Bulletin 80-1A, Nuclear Liability Insurance Records Retention<sup>4</sup>

Training and Qualification Criteria for Nuclear Liability Insurance (Section 2.2.1 of “General Employee Training”)<sup>4</sup>

### 3. Terminology

#### 3.1 Definitions of Terms Specific to This Standard:

3.1.1 *nuclear facility, n*—facility whose operations involve or involved radiation or radioactive materials in such form and quantity that a radiological hazard potentially exists to the employees or the general public. Included are facilities used to produce, process, or store radioactive materials. Some examples are as follows (also see Note 1):

3.1.1.1 Fuel reprocessing plant,

3.1.1.2 Fusion research facility,

3.1.1.3 Nuclear reactor (power, test, or research),

3.1.1.4 Particle accelerator,

3.1.1.5 Radioactive waste disposal site,

3.1.1.6 Radiochemical laboratory,

3.1.1.7 UF<sub>6</sub> production plant, and

3.1.1.8 Uranium or thorium mill.

NOTE 1—This guide is intended to apply to nuclear facilities licensed by the U.S. Nuclear Regulatory Commission, to nuclear facilities operated by the U.S. Department of Energy, and to those nuclear facilities that are under the control of the U.S. Department of Defense and the individual agreement states.

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<sup>1</sup> This guide is under the jurisdiction of ASTM Committee E-10 on Nuclear Technology and Applications and is the direct responsibility of Subcommittee E10.03 on Radiological Protection for Decontamination and Decommissioning of Nuclear Facilities and Components.

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<sup>2</sup> *Annual Book of ASTM Standards*, Vol 12.01.

<sup>3</sup> Available from American National Standards Institute, 11 W. 42nd St., 13th Floor, New York, NY 10036.

<sup>4</sup> Available from American Nuclear Insurers, 29 South Main, (Suite 300S), West Hartford, CT 06107-2445.