**Section 350.30 Definitions**

As used in this Part, the following definitions apply:

"Agency" means the Illinois Emergency Management Agency.

"ALARA" means as low as is reasonably achievable as defined in 32 Ill. Adm. Code 310.20.

"Annual refresher safety training" means a review conducted or provided by the licensee or registrant for its employees on radiation safety aspects of industrial radiography.

"Associated equipment" means equipment used in conjunction with a radiographic exposure device to make radiographic exposures where the equipment drives, guides, or comes into contact with the source (e.g., guide tube, control tube, control device cable, removable source stop, "J" tube and collimator when it is used as an exposure head).

"Cabinet radiography" means industrial radiography conducted in an enclosure or cabinet so shielded that doses to individual members of the public at every location on the exterior meet the limitations specified in 32 Ill. Adm. Code 340.310(a).

"Cabinet x-ray system" means an x-ray system with the x-ray tube installed in an enclosure which, independent of existing architectural structures except the floor on which it may be placed, is intended to contain at least that portion of a material being irradiated, provide radiation attenuation and exclude personnel from its interior during generation of x radiation. Included are all x-ray systems designed primarily for the inspection of carry-on baggage at airline, railroad and bus terminals and in similar facilities. An x-ray tube used within a shielded part of a building or x-ray equipment which may temporarily or occasionally incorporate portable shielding is not considered a cabinet x-ray system.

"Certifying entity" means an independent certifying organization meeting the requirements in Appendix A of 10 CFR 34 or an Agreement State meeting the requirements in Appendix A, Parts II and III of 10 CFR 34.

"Collimator" means a radiation shield of lead or other heavy metal which is placed on the end of a guide tube or directly onto a radiographic exposure device to restrict the size and shape of the radiation beam when the sealed source is moved into position to make a radiographic exposure.

"Control cable" or "Drive cable" means the cable that is connected to the source assembly and used to drive the source to and from the exposure location.

"Control drive mechanism" means a device that enables the source assembly to be moved to and from the exposure device.

"Control tube" means a protective sheath for guiding the control cable. The control tube connects the control drive mechanism to the radiographic exposure device.

"Drive cable" (see "Control cable").

"Enclosed radiography" means industrial radiography conducted in an enclosed cabinet or room and includes cabinet radiography and shielded-room radiography.

"Exposure head" or "Source stop" means a device that locates the gamma radiography sealed source in the selected working position.

"Field examination" or "Practical examination" means a demonstration through practical application of the safety rules and principles of industrial radiography, including use of all appropriate equipment and procedures.

"Field station" means a facility where licensed material may be stored or used and from which equipment is dispatched.

"GED" means general equivalency diploma.

"Guide tube" or "Projection sheath" means a flexible or rigid tube (i.e., "J" tube) for guiding the source assembly and the attached control cable from the exposure device to the exposure head. The guide tube may also include the connections necessary for attachment to the exposure device and to the exposure head.

"Hands-on experience" means experience in all of those areas considered to be directly involved in the radiography process, and includes taking radiographs, calibration of survey instruments, operational and performance testing of survey

instruments and devices, film development, posting of radiation areas, transportation of radiography equipment, posting of records and radiation area surveillance, etc., as applicable. Excessive time spent in only one or two of these areas, such as film development or radiation area surveillance, should not be counted toward the 2 years of experience required for a radiation safety officer in Section 350.4020(b)(3) or the experience for a radiographer as required by 32 Ill. Adm. Code 405.80.

"Independent certifying organization" means an independent organization that meets all the criteria of Appendix A of 10 CFR 34.

"Industrial radiography" or "radiography" means an examination of the structure of materials by non-destructive methods, utilizing ionizing radiation to make radiographic images.

"Lay-barge radiography" means industrial radiography performed on any water vessel used for laying pipe.

"Lixiscope" means a portable light-intensified imaging device using a sealed source. Lixiscopes are exempted from the requirements of this Part.

"Lock-out survey" means a radiation survey performed to determine that a sealed source is in its shielded position. The lock-out survey is performed before moving the radiographic exposure device or source changer to a new location. The lock-out survey is also performed when securing the radiographic exposure device or source changer against unauthorized removal.

"Permanent radiographic installation" means an enclosed shielded room, cell, or vault, not located at a temporary jobsite, in which radiography is performed.

"Permanent use or storage location" means a location listed on a radioactive material license or a certificate of registration where sources of radiation are used or stored.

"Personal supervision" means the provision of guidance and instruction to a radiographer trainee by a radiographer who is:

physically present at the site;

in visual contact with the radiographer trainee while the trainee is using sources of radiation; and

in such proximity that immediate assistance can be given if required.

"Pigtail" (see "Source assembly").

"Pill" (see "Sealed source").

"Projection sheath" (see "Guide tube").

"Radiation safety officer for industrial radiography" means an individual with the responsibility for the overall radiation safety program on behalf of the licensee and who meets the requirements in Section 350.4020.

"Radiographer" means any individual who performs or personally supervises industrial radiographic operations. Radiographers shall meet the requirements of Section 350.2010(a) and shall comply with the requirements of 32 Ill. Adm. Code: Chapter II, Subchapters b and d, all license conditions, if any, and orders of the Agency.

"Radiographer certification" means written approval, received from the Agency in accordance with 32 Ill. Adm. Code 405, stating that an individual has satisfactorily met certain established radiation safety and experience criteria.

"Radiographer trainee" means any individual who uses sources of radiation and related handling tool or radiation survey instruments under the personal supervision of a radiographer. Radiographer trainees shall meet the requirements of Section 350.2010(b) and shall comply with the requirements of 32 Ill. Adm. Code: Chapter II, Subchapters b and d, all license conditions, if any, and orders of the Agency.

"Radiographic exposure device" means any instrument containing a sealed source fastened or contained therein, in which the sealed source or shielding thereof may be moved or otherwise changed from a shielded to an unshielded position for purposes of making a radiographic exposure (i.e, camera).

"Radiographic operations" means all activities associated with the presence of radioactive sources in a radiographic exposure device during use of the device or transport (except when being transported by a common or contract transport) to include surveys to confirm the adequacy of boundaries, setting up equipment and any activity inside restricted area boundaries.

"Radiography" (see "Industrial radiography").

"S-tube" means a tube through which the radioactive source travels when inside a radiographic exposure device.

"Sealed source" or "Pill" means any capsule or matrix as defined in 32 Ill. Adm. Code 310.20.

"Shielded position" means the location within the radiographic exposure device or storage container which, by manufacturer's design, is the proper location for storage of the sealed source.

"Shielded-room radiography" means industrial radiography conducted in a room so shielded that doses to individual members of the public at every location on the exterior meet the limitations as specified in 32 Ill. Adm. Code 340.310(a) (i.e., bay, bunker, cell).

"Source assembly" or "Pigtail" means an assembly that consists of the sealed source and a connector that attaches the source to the control cable. The source assembly may also include a stop ball used to secure the source in the shielded position.

"Source changer" means a device designed and used for replacement of sealed sources in radiographic exposure devices, including those source changers also used for transporting and storage of sealed sources.

"Storage container" means the structure in which sealed sources are secured and stored at a permanent storage location as described in Section 350.4010(c)(5).

"Source stop" (see "Exposure head").

"Temporary jobsite" means any location where licensed material is used or stored for 180 days or less during any consecutive 12 months, and not specifically listed on a radioactive material license.

"Transport container" means a package that is designed and constructed to provide radiation safety and security when sealed sources are transported and meets all applicable regulations of the U.S. Department of Transportation.

"Underwater radiography" means industrial radiography performed when the radiographic exposure device and related equipment are beneath the surface of water.

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