



Ohio Administrative Code Rule 3701:1-68-01 Definitions.

Effective: June 30, 2023

(A) As used in this chapter:

(1) "Access panel" means any barrier or panel which is designed to be removed or opened for maintenance or service purposes, needs tools to open, and permits access to the interior of an enclosed fail-safe system.

(2) "Analytical system" means non-medical radiation-generating equipment used to determine properties of materials being measured or analyzed. Analytical systems include, but are not limited to, gauging, x-ray diffraction, and x-ray fluorescence equipment.

(3) "Aperture" means any opening in the external surface of a cabinet or analytical system, other than a port, which remains open during generation of radiation.

(4) "Cabinet system" means non-medical radiation-generating equipment, which is installed in a shielded enclosure that excludes all personnel, including extremities, from the primary beam during the generation of radiation.

(5) "Calibration" means the determination of the response or reading of an instrument relative to a series of known radiation values over the range of the instrument.

(6) "Collimator" means a device or mechanism by which the x-ray beam is restricted in size.

(7) "Control panel" or "control console" means that part of the non-medical radiation-generating equipment used for setting the technique factors.

(8) "Door" means any barrier which is designed to be movable or opened during routine operations, does not generally need tools to open, and permits access to the interior of an enclosed fail-safe system. For the purposes of paragraph (A)(4)(a) of rule 3701:1-68-06 of the Administrative Code,



inflexible hardware rigidly affixed to the door will be considered part of the door.

(9) "External surface" means the outside surface of a cabinet system or analytical system, including the high-voltage generator, doors, access panels, latches, control knobs, and other permanently mounted hardware and including the plane across any aperture or port.

(10) "Fail-safe characteristics" means a design feature which prevents emergence of the primary beam, upon failure of a safety or warning device.

(11) "Gauging Unit" means non-medical radiation-generating equipment designed and manufactured for the purpose of detecting, measuring or controlling thickness, density, or interface location.

(12) "Ground fault" means an accidental electrical grounding of an electrical conductor.

(13) "Hand-held system" means non-medical radiation-generating equipment that is specifically designed to be held in the hand during operation. Hand-held systems include analytical and radiographic systems.

(14) "Independent certifying organization" means an independent organization that meets all of the criteria of the appendix to rule 3701:1-68-02 of the Administrative Code.

(15) "Individual responsible for radiation protection (IRRP)" means an individual designated by the registrant who has the knowledge and responsibility for the radiation protection program at the facility, to include the implementation of the daily radiation safety operations and compliance with the rules.

(16) "Irradiation system" means non-medical radiation-generating equipment used to alter the chemical, biological, or physical properties of materials or to sterilize materials.

(17) "Local components" means parts of an analytical system and includes areas that are struck by x-rays such as radiation source housings, port and shutter assemblies, collimators, sample holders, cameras, goniometers, detectors, and shielding, but does not include power supplies, transformers, amplifiers, readout devices, and control panels.



(18) "Locked out and tagged" means a process for equipment security and safety in which non-medical radiation-generating equipment is locked to prevent operation and tagged with specific information as to why it is not to be used.

(19) "Miniature radiosopic system" means an imaging system with a fixed source and detector configuration that provides a maximum source to image distance of less than forty-five centimeters (eighteen inches) and is not capable of creating a dose rate to any individual forty-five centimeters (eighteen inches) from the primary beam that exceeds twenty microsievert (two millirem) per hour.

(20) "Non-human security screening system" means a non-human use cabinet x-ray system with accessible openings designed for the detection of weapons, bombs, or contraband concealed in baggage, mail, packages or other commodities.

(21) "Non-medical radiation-generating equipment" means any x-ray equipment other than a security screening system designed to scan individuals, or those used on patients or human research subjects for medical or therapy purposes.

(22) "Open-beam analytical system" means an analytical system configured such that an individual could place any part of his or her body in the primary beam during normal operation.

(23) "Particle accelerator system" means non-medical radiation-generating equipment designed for, or capable of, accelerating charged particles.

(24) "Permanent radiographic installation" means a radiographic system enclosed in a shielded room, cell or vault not located at a temporary job site.

(25) "Port" means any opening in the outside surface of a cabinet system or analytical system which is designed to remain open, during generation of radiation, for the purpose of conveying material to be irradiated into and out of the enclosure, or for partial insertion for irradiation of an object whose dimensions do not permit complete insertion into the enclosure.

(26) "Primary beam" means radiation which passes through the collimator in the radiation source



housing by a direct path from the radiation source.

(27) "Radiation Expert" means an individual who meets the qualifications of paragraph (E)(2) of 3701:1-68-02 of the Administrative Code

(28) "Radiographer" means an individual who operates or personally supervises the operation of radiographic systems, related equipment, or radiation survey instruments for radiographic operations.

(29) "Radiographer's assistant" means an individual who, under the personal supervision of a radiographer operates radiographic systems, related equipment, or radiation survey instruments for radiographic operations.

(30) "Radiographic system" means non-medical radiation-generating equipment used to examine the macroscopic structures of material. Radiographic systems include radiographic and radiosopic equipment.

(31) "Shutter" means a device, fixed to any radiation source housing to intercept the primary beam.

(32) "Temporary job site" means a location where radiographic operations are performed and where radiographic systems may be stored other than the locations of use authorized on the registration.

(B) Terms appearing in this chapter, which are not defined in this rule, may be defined in rule 3701:1-38-01 of the Administrative Code.