

Kansas Administrative Regulations

Department of Health and Environment

Article 35.—Radiation

28-35-135e. Definitions.

As used in these regulations, each of the following terms shall have the meaning assigned in this regulation: (a) "Effective dose equivalent (H_E)" means the sum of the products of the dose equivalent to each organ or tissue (H_T) and the weighting factor (w_T) applicable to each of the body organs or tissues that are irradiated ($H_E = \sum w_T H_T$).

(b) "Embryo or fetus" means the developing human organism at any stage of development until the time of birth.

(c) "Emergency" means an event requiring prompt action to mitigate a threat to the health and safety of workers or the public or a threat of damage to the environment.

(d) "Emergency planning zone" means a geographic area surrounding a specific facility for which special planning and preparedness efforts are carried out to ensure that prompt and effective protective actions will reduce or minimize the impact of releases of radioactive material on public health and safety or the environment.

(e) "Energy compensation source (ECS)" means a small sealed source, with an activity not exceeding 3.7 Mbq (100 microcuries), used within a logging tool or other tool components to provide a reference standard to maintain the tool's calibration when in use.

(f) "Entrance exposure rate" means the roentgens per unit of time at the point where the center of the useful beam enters any individual.

(g) "Entrance or access point" means any opening through which an individual or extremity of an individual could gain access to radiation areas or to licensed or registered radioactive materials. This term shall include entry and exit portals of sufficient size to permit human entry, irrespective of the intended use.

(h) "Evacuation" means the urgent removal of people from an area to avoid or reduce high-level, short-term exposure.

(i) "Event" means a situation reasonably discrete in time, location, and consequences.

(j) "Exercise" means a multifaceted activity that test the plans, procedures, adequacy of training, resources, and integrated capability of an emergency response system.

(k) "Existing equipment" means therapy systems subject to K.A.R. 28-35-250a that were manufactured on or before January 1, 1985.

(l) "Explosive material" means any chemical compound, mixture, or device that produces a substantial, instantaneous release of gas and heat spontaneously or by contact with sparks or flame.

(m) "Exposure" means the quotient of dQ divided by dm . " dQ " is the absolute value of the total charge of the ions of one sign produced in air when all the electrons, negatrons, and positrons liberated by photons in a volume element of air having mass, expressed as " dm ," are completely stopped in air. The special unit of exposure is the roentgen (R). One roentgen equals 2.58×10^{-4} coulombs per kilogram of air.

(n) "Exposure head" means a device that locates the sealed source in the selected working position. For the purposes of these regulations, "source stop" is an equivalent term.

(o) "Exposure rate" means the exposure per unit of time, including roentgens per minute (R/ min) and milliroentgens per hour (mR/hr).

(p) "External beam radiation therapy" means therapeutic irradiation in which the source of radiation is at a distance from the body.

(q) "External dose" means that portion of the dose equivalent received from any source of radiation outside the body.

(r) "Extremity dose" means the external dose equivalent to the hand, elbow, arm below the elbow, foot, knee, and leg below the knee.

(s) "Eye dose equivalent" means the external dose equivalent to the lens of the eye, at a tissue depth of 0.3 centimeter or 300 mg/cm^2 .

(Authorized by K.S.A. 48-1607; implementing K.S.A. 48-1603 and 48-1607; effective Dec. 30, 2005.)