Kansas Administrative Regulations

Department of Health and Environment

Article 35.—Radiation—Part 1. Definitions.

28-35-135d. Definitions.

As used in these regulations, each of the following terms shall have the meaning assigned in this regulation: (a) "Deadman switch" means a switch constructed so that circuit closure can be maintained only by continuous pressure by the operator.

(b) "Declared pregnant woman" means a woman who has voluntarily informed her employer, in writing, of her pregnancy and the estimated date of delivery. The written declaration shall remain in effect until the declared pregnant woman withdraws the declaration in writing or is no longer pregnant.

(c) "Decommission" means to remove a facility or site safely from service and reduce residual radioactivity to a level that permits either of the following:

(1) The release of the property for unrestricted use and the termination of the license; or

(2) the release of the property under restricted conditions and the termination of the license.

(d) "Dedicated check source" means a radioactive source that is used to ensure the constant operation of a radiation detection or measurement device over several months or years. This source may also be used for other purposes.

(e) "Deep dose equivalent (H_d)," which applies to external whole body exposure, means the dose equivalent to a tissue depth of one centimeter (1,000 mg/cm^2).

(f) "Deliberate misconduct" means a person's intentional act or omission about which the person knows one of the following:

(1) If not detected, the act or omission would cause a licensee, a registrant, or an applicant to be in violation of any statute, regulation, or order or any term, condition, or limitation of any license issued by the secretary.

(2) The act or omission constitutes a violation of a requirement, procedure, instruction, contract, purchase order, or policy of a licensee, registrant, applicant, contractor, or subcontractor.

(3) The act or omission involves the person's deliberate submission to the department, a licensee, a registrant, an applicant, or a licensee's contractor or subcontractor of information relating to a licensee's, a registrant's, or an applicant's operations that the person knows to be incomplete or inaccurate in some respect.

(g) "Dentistry" means the functions authorized by K.S.A. 65-1421 et seq., and amendments thereto.

(h) "Department" means the department of health and environment.

(i) "Depleted uranium" means source material uranium in which the isotope uranium 235 is less than 0.711 percent of the total weight of uranium present. This term shall not include special nuclear material.

(j) "Derived air concentration (DAC)" means the concentration of a given radionuclide in air that, if breathed by the reference man for a working year of 2,000 hours under conditions of light work, results in an intake of one ALI. For purposes of these regulations, the condition of light work is an inhalation rate of 1.2 cubic meters of air per hour for 2,000 hours in a year. The DAC are values specified in "appendices to part 4: standards for protection against radiation," effective April 1994, which is adopted by reference in K.A.R. 28-35-135a.

(k) "Derived air concentration-hour (DAC-hour)" means the product of the concentration of radioactive material in air, expressed as a fraction or multiple of the derived air concentration for each radionuclide, and the time of exposure to that radionuclide, in hours. A licensee or registrant may assume that a total of 2,000 DAC-hours represents one ALI, which is equivalent to a committed effective dose equivalent of 5 rem (0.05 Sv).

(l) "Diagnostic clinical procedures manual" means a collection of written procedures that describes each method and other instructions and precautions by which the licensee performs diagnostic clinical procedures, each of which has been approved by the authorized user and includes the radiopharmaceutical, dosage, and route of administration.

(m) "Diagnostic source assembly" means the tube housing assembly with a beam-limiting device attached.

(n) "Diagnostic-type tube housing" means an X-ray tube housing constructed so that the leakage radiation, at a distance of one meter from the target, does not exceed 100 milliroentgens in one hour when the tube is operated at the maximum rate of continuous tube current and the maximum rate of tube potential.

(o) "Diagnostic X-ray imaging system" means an assemblage of components for the generation, emission, and reception of X-rays and the transformation, storage, and visual display of the resultant X-ray image.

(p) "Diagnostic X-ray system" means an X-ray system designed for irradiation of any part of the human body for the purpose of diagnosis or visualization.

(q) "Direct scattered radiation" means scattered radiation that has been deviated in direction only by materials irradiated by the useful beam.

(r) "Dose" is a generic term that means the absorbed dose, dose equivalent, effective dose equivalent, committed dose equivalent, committed effective dose equivalent, total organ dose equivalent, or total effective dose equivalent. For purposes of these regulations, "radiation dose" shall be considered an equivalent term.

(s) "Dose equivalent (H_T)" means the product of the absorbed dose in tissue, quality factor, and all other necessary modifying factors at the location of interest. The units of dose equivalent are the rem and sievert (Sv).

(t) "Dose limits" means the permissible upper bounds of radiation doses established in accordance with these regulations. For purposes of these regulations, "limits" is an equivalent term.

(u) "Dose-monitoring system" means a system of devices for the detection, measurement, and display of quantities of radiation.

(v) "Dose monitor unit" means a unit response from the dose-monitoring system from which the absorbed dose can be calculated.

(w) "Dosimetry processor" means an individual or an organization that processes and evaluates individual monitoring devices in order to determine the radiation dose delivered to the monitoring devices.

(x) "Doubly encapsulated sealed source" means a sealed source in which the radioactive material is sealed within an inner capsule and that capsule is sealed within an outer capsule.

(y) "Drill" means a supervised, hands-on instruction period intended to test, develop, or maintain a specific emergency response capability. A drill may be a component of an exercise.

(Authorized by K.S.A. 48-1607; implementing K.S.A. 48-1603 and 48-1607; effective Dec. 30, 2005; amended July 27, 2007.)

***** Authenticated Kansas Administrative Regulation *****