Kansas Administrative Regulations

Department of Health and Environment

Article 35.—Radiation

28-35-223c. Waste characteristics.

(a) The following requirements shall be the minimum requirements for all classes of waste:

(1) Radioactive wastes shall be packaged in conformance with the conditions of the license issued to the site operator to which the waste will be shipped. If the conditions of the site license are more restrictive than the provisions of these regulations, the site license conditions shall govern.

(2) Wastes shall not be packaged for disposal in cardboard or fiberboard boxes.

(3) Liquid waste shall be packaged in sufficient absorbent material to absorb twice the volume of the liquid.

(4) Solid wastes containing liquid shall contain as little free standing and non-corrosive liquid as is reasonably achievable, but in no case shall the liquid exceed 1% of the volume.

(5) Waste shall not be readily capable of detonation or of explosive decomposition or reaction at normal temperatures and pressures, or of explosive reaction with water.

(6) Waste shall not contain, or be capable of generating, quantities of toxic gases, vapors, or fumes harmful to persons transporting, handling, or disposing of the waste. This requirement shall not apply to radioactive gaseous waste packaged in accordance with paragraph (8) of this subsection.

(7) Waste shall not be pyrophoric. Pyrophoric materials contained in wastes shall be treated, prepared, and packaged to be nonflammable.

(8) Wastes in a gaseous form shall be packaged at a pressure that does not exceed 1.5 atmospheres at 20° C. Total activity shall not exceed 100 curies per container.

(9) Wastes containing hazardous, biological, pathogenic, or infectious material shall be treated to reduce, to the maximum extent practicable, the potential hazard from the non-radiological materials.

(b) The requirements in this section are intended to provide stability of the waste:

(1) Waste shall have structural stability. A structurally stable waste form shall maintain its physical dimensions and its form, under the expected disposal conditions. Such proposed conditions may include weight of overburden and compaction equipment, the presence of moisture, and microbal activity, and internal factors, including radiation effects and chemical changes. Structural stability may be provided by the waste form itself, by processing the waste to a stable form, or by placing the waste in a disposal container or structure that provides stability after disposal.

(2) Notwithstanding the provisions of K.A.R. 28-35-223c(a)(2) and (3), liquid wastes, or wastes containing liquid, shall be converted into a form that contains as little free-standing and noncorrosive liquid as reasonably achievable. In no case shall the liquid exceed 1% of the volume of the waste when the waste is in a disposal container designed to ensure stability, or 0.5% of the volume of the waste for waste processed to a stable form.

(3) Void spaces within the waste and between the waste and its package shall be reduced to the extent practicable.

(Authorized by and implementing K.S.A. 1984 Supp. 48-1607; effective, T-86-37, Dec. 11, 1985; effective May 1, 1986.)