

Kansas Administrative Regulations

Kansas Department of Agriculture

Article 4.—Commercial Fertilizers

4-4-934. Use of elephant rings for secondary containment.

(a) Individual storage containers may be contained within an elephant ring as an alternative to a diked containment area. The elephant ring shall serve as a second containing wall in the event that the primary storage container develops a leak. The elephant ring shall be designed and installed to withstand a full hydrostatic head from the fluid stored in the enclosed primary storage container and all other stresses reasonably foreseeable from secondary containment of stored fertilizer.

(b) Both the primary storage container and the elephant ring shall be fabricated of materials compatible with each other and which do not react either chemically or electrolytically the fertilizer being stored. Use of any combination of metals or other materials which contribute to chemical or electrolytic corrosion is prohibited.

(c) The height of the elephant ring wall shall not exceed six feet. The volume contained within the secondary storage walls up to the working height of the elephant ring shall be sufficient to contain a volume of 110% of the volume contained in the primary storage container plus the volume displaced by the footings of any equipment such as pumps, meter or other devices, placed within the secondary containment vessel.

(d) The elephant ring shall be free of leaks and structural defects. The base of the elephant ring shall be protected from corrosion, both from inside and outside, and underlain:

- (1) by a concrete pad; or
- (2) with eight inches of compacted gravel beneath four inches of compacted sand; or
- (3) as recommended by the manufacturer of the elephant ring and approved by the secretary.

(e) All piping connections to the primary storage container shall be made over the wall of the elephant ring and adequately supported and braced. Pumps and other

fixtures, if located within the elephant ring containment structure, shall be placed on an elevated platform.

(f) Accumulations of storm water and other material shall be pumped over the wall of the elephant ring by a sump pump within the secondary container, or by an exterior pump, and disposed of according to K.A.R. 4-4-935.

(g) Inspection and maintenance of the primary storage container and of the elephant ring shall be conducted as required by K.A.R. 4-4-920, and records of inspections and maintenance shall be made and maintained as required by K.A.R. 4-4-921.

(Authorized by and implementing K.S.A. 2-1227; effective Jan. 14, 1991; amended Jan. 25, 1993.)

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