401 KAR 48:050. Siting requirements for solid waste landfills.

RELATES TO: KRS 224.01, 224.10, 224.40, 224.43, 224.99
STATUTORY AUTHORITY: KRS 224.10-100, 224.40-305

NECESSITY, FUNCTION, AND CONFORMITY: KRS Chapter 224 requires the cabinet to promulgate administrative regulations for the management, processing or disposal of wastes. KRS 224.40-305 requires that persons engaging in the storage, treatment, recycling and disposal of waste obtain a permit. This chapter establishes the minimum technical standards for solid waste sites or facilities. This administrative regulation sets forth the siting requirements for construction/demolition debris, contained, and residual landfills.

Section 1. Buffer Zones. Wastes shall not be placed:
(1) Within 250 feet of an intermittent or perennial stream unless a 401 water quality certification has been issued pursuant to 401 KAR Chapter 10.
(2) Within the zone of collapse of deep-mine workings or within the critical angle of draw of such workings;
(3) Within 250 feet of a feature of karst terrain;
(4) Within 250 feet of the property line;
(5) Within 250 feet of a residence;
(6) Within fifty (50) feet of a gas, sewer or water line; and
(7) Within 250 feet of a unplugged well except monitoring wells.

Section 2. Seasonal High Groundwater Table. (1) The lowest component of the bottom liner of new units of a landfill shall be at least four (4) feet above the seasonal high groundwater table. 
(2) Wastes that leach heavy metals in concentrations exceeding the primary drinking water standards when analyzed using the toxicity characteristic leaching procedure test shall be placed no closer than five (5) feet above the seasonal high groundwater level.

Section 3. Flood Plains. (1) No person shall be issued a permit to construct a new contained landfill in the 100-year flood plain.
(2) Waste disposed in residual or construction/demolition debris landfills shall not be placed within the 100 year flood plain of the waters of the Commonwealth unless the applicant complies with Section 2 of 401 KAR 47:030 of the Environmental Performance Standards concerning base flow restriction, temporary water storage capacity reduction, and waste washout. Where available, empirical data shall be used to determine the frequency of flood exposure. Where data are not available, the frequency of flood exposure shall be established by the unit hydrograph technique.

Section 4. Airport Location Criteria. (1) No new contained landfill shall be located within 10,000 feet of any airport runway used by turbojet aircraft or within 5,000 feet of any airport runway used by only piston-type aircraft and no landfill shall pose a bird hazard to aircraft.
(2) An owner or operator proposing to site a new contained landfill or proposing to horizontally expand within a five (5)-mile radius of any airport runway end used by turbojet or piston-type aircraft shall notify the affected airport and the Federal Aviation Administration.

Section 5. Fault Areas. Waste cells of a solid waste landfill shall not be located within 200 feet of a fault that has had displacement in holocene time.

Section 6. Site Suitability. Landfills shall not be permitted in any area unless the applicant can demonstrate to the satisfaction of the cabinet that:
(1) The uppermost aquifer is capable of being monitored in a manner that detects the presence of any constituent listed in Section 10 of 401 KAR 48:300; and

(2) Corrective action of the uppermost aquifer is capable of being performed in accordance with 401 KAR 48:300. (16 Ky.R. 1766; 2205; 2367; 2673; eff. 5-8-1990; 18 Ky.R. 147; eff. 9-25-1991; 21 Ky.R. 501; eff. 11-7-1994; TAm eff. 10-14-2008; Crt eff. 8-13-2018.)