

#### **401 KAR 30:031. Environmental performance standards.**

RELATES TO: KRS 224.01, 224.10, 224.40, 224.43, 224.46, 224.50, 224.70, 224.99, 16 U.S.C. 1531 et. seq., 33 U.S.C. 1251 et. seq.

STATUTORY AUTHORITY: KRS 224.10-100, 224.40-305

NECESSITY, FUNCTION, AND CONFORMITY: KRS Chapter 224 requires the cabinet to adopt administrative regulations for the treatment, storage, recycling and disposal of wastes. KRS 224.40-305 requires that persons engaging in the treatment, storage, recycling and disposal of waste obtain a permit. This chapter establishes the general administrative procedures that are applicable to 401 KAR Chapters 31 to 49. This administrative regulation sets forth the minimum environmental performance standards with which all waste sites or facilities shall comply.

Section 1. Purpose, Scope and Applicability. The standards in this administrative regulation are for use under the waste management provisions of KRS Chapter 224 in determining which waste sites or facilities pose a reasonable probability of adverse effects on human health or the environment. Waste sites or facilities failing to satisfy the requirements of this administrative regulation shall be considered open dumps, which are prohibited by KRS 224.40-100. No owner or operator shall cause, suffer, or allow a waste site or facility or any unit of a waste site or facility to violate any provision of this administrative regulation.

Section 2. Floodplains. No waste site or facility shall restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or be placed in a manner likely to result in washout of waste, so as to pose a hazard to human health, wildlife, or land or water resources.

Section 3. Endangered Species. No waste site or facility shall:

- (1) Cause or contribute to the taking of any endangered or threatened species or candidate species listed pursuant to 16 USC 1531 et seq. (the Endangered Species Act of 1983 as amended); or
- (2) Result in the destruction or adverse modification of the critical habitat of an endangered or threatened species or candidate species listed pursuant to 16 USC 1531 et seq. (the Endangered Species Act of 1983 as amended).

Section 4. Surface Waters. No waste site or facility shall:

- (1) Cause a discharge of pollutants into waters of the Commonwealth, including wetlands, that violate any requirements of KRS Chapter 224, or the surface water standards of 401 KAR Chapter 10 or 8; or
- (2) Cause a discharge of dredged material or fill material to waters of the Commonwealth that is in violation of the requirements under 33 USC 1251 et. seq. (Section 404 of the Clean Water Act of 1977 as amended).

Section 5. Groundwater. No waste site or facility shall contaminate an underground drinking water source beyond the point of compliance in excess of the maximum contaminant levels specified in 401 KAR Chapter 8.

Section 6. Application to Land Use for the Production of Food Chain Crops. No waste site or facility shall exist or occur that applies waste within three (3) feet of the surface of land used for the production of food chain crops unless in compliance with all the requirements of subsection (1) or (2) of this section:

- (1)
  - (a) The pH of the waste and soil mixture is six and five-tenths (6.5) or greater at the time of each waste application, except for waste containing cadmium at concentrations of two (2) mg/kg (dry weight) or less;

- (b) The annual application of cadmium from waste does not exceed 0.44 pounds per acre on land used for production of tobacco or food chain crops. The annual cadmium application rate does not exceed 0.44 pounds per acre; and
- (c) The maximum cumulative application of cadmium from the waste does not exceed the levels in Table 1 of this paragraph.

Table 1 - Maximum cumulative application

| Soil Cation Exchange Capacity (meq/100g) | Background Pounds/per/Acre |       |
|--|----------------------------|-------|
|  | Soil pH                    |       |
| <5                                       | >6.5                       | 4.46  |
| 5-15                                     | >6.5                       | 8.92  |
| >15                                      | >6.5                       | 17.84 |
| >15                                      | <6.5*                      | 4.46  |

\*For soils with a background pH of less than six and five-tenths (6.5), the maximum cumulative cadmium applications rate for soils with a background pH equal to or greater than six and five-tenths (6.5) may be used if the pH of the sludge-soil mixture is adjusted to and maintained at six and five-tenths (6.5) or greater whenever food chain crops are grown.

(2) If animal feed is the only food chain crop produced, there is no limit to the cadmium application rate, as long as the pH of sludge and soil mixture is six and five-tenths (6.5) or greater at the time of sludge application or at the time the crop is planted, whichever occurs later, and this pH level is maintained whenever food chain crops are grown. A plan shall also be developed that demonstrates how the animal feed shall be distributed to preclude human ingestion, and the measures to be taken to safeguard against possible health hazards from cadmium entering the food chain, which may result from alternative land uses. Future property owners shall also be notified by a stipulation in the land record or property deed that states that the property received sludge at high cadmium application rates and that food chain crops, except for animal feed, shall not be grown due to possible health hazards.

Section 7. Polychlorinated Biphenyls. No waste site or facility shall exist or occur that places waste containing concentrations of polychlorinated biphenyls (PCBs) equal to or greater than one (1) mg/kg (dry weight) on the land. However, residual landfills may dispose of PCBs in accordance with their permit, and special waste and contained landfills may dispose of wastes containing PCBs equal to forty-nine (49) mg/kg (dry weight) or less.

Section 8. Disease.

(1) Disease vectors. No waste site or facility shall exist or occur unless the on-site population of disease vectors is prevented or controlled through the periodic application of cover material or other techniques as appropriate to protect human health and the environment.

(2) Sewage sludge and septic tank pumpings. No waste site or facility shall exist or occur that applies sewage sludge or septic tank pumpings within three (3) feet of the surface of the land unless a process to significantly reduce pathogens has been utilized.

Section 9. Air.

(1) No waste site or facility shall engage in open burning of wastes. This requirement does not apply to infrequent burning of agricultural wastes in the field, silvicultural wastes for forest management purposes, land-clearing debris, diseased trees, debris from emergency cleanup operations, or ordinance.

(2) No waste site or facility shall violate applicable air pollution requirements contained in KRS Chapter 224 or 401 KAR Chapters 50 to 63.

Section 10. Safety.

(1) Explosive gases. No waste site or facility shall allow the concentration of explosive gases generated by the facility to exceed:

(a) Twenty-five (25) percent of the lower explosive limit for the gases in facility structures, excluding gas control or recovery system components; and

(b) The lower explosive limit for the gases at the facility property boundary.

(2) Fires. No waste site or facility shall pose a hazard to the safety of persons or property from fires. This may be accomplished through compliance with Section 9 of this administrative regulation and this section, through the periodic application of cover material or other techniques as appropriate.

(3) Access. No waste site or facility shall allow uncontrolled public access, unauthorized vehicular traffic, or illegal dumping of wastes. This requirement to ensure protection of human health and the environment may be met by using artificial barriers, natural barriers, or other methods as appropriate.

Section 11. Public Nuisance. No waste site or facility shall result in a public nuisance because of blowing litter, debris, or other waste or material.

Section 12. Wetlands. No new or expanded waste site or facility shall be located in wetlands.

Section 13. Karst. No waste site or facility shall allow contamination of karst terrain.

Section 14. Compliance. No waste site or facility shall violate any requirement of KRS Chapter 224 or administrative regulations promulgated pursuant thereto.

(18 Ky.R. 3074; 3430; eff. 6-24-1992; 23 Ky.R. 487; eff. 3-12-1997; TAm eff. 10-14-2008; Crt eff. 9-5-2018.)