

405 KAR 30:360. Waste management provisions.

RELATES TO: KRS 350.600

STATUTORY AUTHORITY: KRS 151.125, 224.033, 350.028, 350.050, 350.600

NECESSITY, FUNCTION, AND CONFORMITY: KRS 350.600 requires the Environmental and Public Protection Cabinet to develop administrative regulations for oil shale operations to minimize and prevent their adverse effects on the citizens and the environment of the Commonwealth. This administrative regulation sets forth the requirements for the handling and disposal of wastes other than excess spoil and spent shale.

Section 1. General Requirements.

(1) Mining waste not disposed in the mine workings shall be transported and placed in designated disposal areas within the permit area in a manner approved by the cabinet. The mining waste shall be placed in a controlled manner to ensure:

- (a) That leachate and surface run-off from the disposal site will not degrade surface or groundwater or exceed the effluent limitations as specified in 405 KAR 30:320;
- (b) That the area designated as the disposal site is suitable for reclamation and revegetation compatible with the natural surroundings; and
- (c) That the waste is compacted and covered to prevent combustion and becoming wind-borne.

(2) At a minimum, the permit applicant shall conduct tests to determine the active and potential acid levels from disposal of mining wastes and an EP toxicity test. The cabinet will use the results of these tests to determine if the proposed disposal methods will fulfill the requirements of subsection (1) of this section. The cabinet may require additional tests as necessary to make this determination.

(3) The permit applicant shall determine if the mining waste streams are hazardous as regulated in 401 KAR Chapters 30 through 47. If a mining waste stream exhibits the characteristics of a hazardous waste or is a listed hazardous waste as described in 401 KAR Chapter 31, then the mining waste must be handled and disposed of in accordance with KRS Chapter 224 and administrative regulations promulgated pursuant thereto.

Section 2. Acid-forming and Toxic-forming Mining Wastes. Drainage from acid-forming and toxic-forming materials in soil, overburden, spoil, spent shale, mining waste, and in other materials, shall be controlled in accordance with 405 KAR 30:340, or shall be prevented from entering groundwater and surface water. Methods of prevention may include but shall not be limited to:

- (1) Identifying, burying, and treating, where necessary, spoil or other materials that, in the judgment of the cabinet, will be toxic to vegetation or that will adversely affect water quality if not treated or buried.
- (2) Preventing or removing water from contact with acid-producing or toxic-producing deposits.
- (3) Burying or otherwise treating all toxic or harmful materials within thirty (30) days, if such materials are subject to wind and water erosion, or within a lesser period designated by the cabinet. If storage of such materials is approved, the materials shall be placed on impermeable material and protected from erosion and contact with surface water.
- (4) Acid-forming or toxic-forming material shall not be buried or stored in proximity to a drainage course so as to cause or pose a threat of water pollution or otherwise violate the provisions of these administrative regulations.
- (5) All acid-forming or toxic-forming materials that are exposed, used, or produced during oil shale operations shall be covered with a minimum of four (4) feet of nontoxic and nonacid forming material. Covering the material with an impermeable liner(s) may be required by the cabinet. If necessary, such materials shall be treated in order to prevent

water pollution or sustained combustion and to minimize adverse effects on plant growth and land uses. Where necessary to protect against upward migration of salts or exposure to erosion, to provide an adequate depth for plant growth, or to otherwise meet local conditions, the cabinet shall specify greater depths of cover using nontoxic material.

(6) All methods of material placement and compaction pursuant to this section shall be approved by the cabinet.

Section 3. Other Mining Wastes.

(1) Wastes including, but not limited to, grease, lubricants, paints, flammable liquids, garbage, abandoned machinery, lumber and other combustibles generated during the mining operation shall be placed and stored in a controlled manner in a designated portion of the permit area. If any of these other mining wastes are hazardous wastes, then these other mining wastes shall be managed in accordance with KRS Chapter 224 and the administrative regulations promulgated pursuant thereto. Placement and storage shall ensure that leachate and surface run-off do not degrade surface or groundwater as specified in 405 KAR 30:320, fires are prevented, and that the area remains stable and suitable for reclamation and revegetation compatible with the natural surroundings.

(2) Final disposal of such other mining wastes shall be in a designated disposal site in the permit area or other appropriate disposal areas approved by the cabinet. Disposal sites shall be designed and constructed with appropriate water barriers on the bottom and sides of the designated site. Appropriate water barriers shall include but not be limited to impervious liners, impermeable liners or subdrainage systems as specified in Section 3(2) of 405 KAR 30:370. Other mining wastes shall be routinely compacted and covered to prevent combustion and becoming wind-borne. When the disposal is completed a minimum of four (4) feet of nontoxic and nonacid forming material shall be placed over the site. Soil material shall be replaced as specified in 405 KAR 30:290, slopes shall be stabilized consistent with 405 KAR 30:390, and the revegetation accomplished in accordance with 405 KAR 30:400. Operation of the disposal site shall be conducted in accordance with all local, state, and federal requirements concerning the permit area.

Section 4. All processing wastes shall be disposed of in accordance with the requirements set forth in KRS Chapter 224 and administrative regulations promulgated pursuant thereto. (9 Ky.R. 1072; eff. 11-2-1983; TAm eff. 8-9-2007; Crt eff. 7-3-2018.)