405 KAR 18:140. Disposal of coal mine waste.

RELATES TO: KRS 350.151, 350.410, 350.420, 350.465, EO 2009-538
STATUTORY AUTHORITY: KRS 350.028, 350.151, 350.465, EO 2009 538
CERTIFICATION STATEMENT:
NECESSITY, FUNCTION, AND CONFORMITY: KRS 350.28 and 350.465 require the cabinet to promulgate administrative regulations establishing performance standards for protection of people and property, land, water and other natural resources, and aesthetic values, during underground mining activities and for restoration and reclamation of surface areas affected by underground mining activities. EO 2009-538, effective June 12, 2009, establishes the new Energy and Environment Cabinet. This administrative regulation establishes forth requirements for the disposal of coal mine waste, including design and construction requirements for coal mine waste banks, site inspection requirements, water control measures, provisions for extinguishing burning coal waste and utilization of burned coal waste, and the return of coal mine waste to underground mine workings.

Section 1. General Requirements.
(1) All coal mine waste shall be hauled and conveyed in a controlled manner approved by the cabinet in disposal areas approved by the cabinet for this purpose. These areas shall be within a permit area. The disposal area shall be designed, constructed, and maintained:
(a) In accordance with this administrative regulation and the criteria established in 405 KAR 18:130, Sections 1 and 2; and
(b) To prevent combustion.
(2) Coal mine waste materials from activities located outside the permit area, such as those activities at other mines or abandoned mine waste banks, may be disposed of in the permit area only if approved by the cabinet. Approval shall be based on a showing by the permittee, using hydrologic, geologic, geotechnical, physical, and chemical analyses, that disposal of these materials does not:
(a) Adversely affect water quality, water flow, or vegetation;
(b) Create public health hazards; or
(c) Cause instability in the disposal areas.

Section 2. Site Inspection.
(1) All coal mine waste banks shall be inspected on behalf of the permittee by a qualified professional engineer or other qualified person under the direct supervision of the responsible professional engineer.
(a) Inspections shall occur at least quarterly, beginning within seven (7) days after preparation of the disposal area begins.
1. The cabinet may require more frequent inspections based upon an evaluation of the potential danger to the health or safety of the public and the potential harm to land, air, or water resources.
2. Inspections shall terminate if the coal mine waste bank has:
a. Been graded;
b. Been covered in accordance with Section 4(4)(a) of this administrative regulation; or
c. Had topsoil distributed on the bank in accordance with 405 KAR 18:050, Section 4.
(b) Inspections shall include observations and tests as may be necessary to evaluate the potential hazard to human life and property, ensure that all organic material and topsoil have been removed and that proper construction and maintenance are occurring in accordance with the plan submitted under 405 KAR 8:040, Section 34, and approved by the cabinet.
(c) The engineer shall consider:

1. Steepness of slopes;
2. Seepage;
3. Other visible factors that may indicate potential failure; and
4. The results of failure with respect to the threat to human life and property.

(d)

1. The responsible professional engineer shall certify to the cabinet within two (2) weeks after each inspection that the coal mine waste bank has been constructed as specified in the design approved by the cabinet.
2. Copies of the inspection findings shall be maintained at the mine site.

(2) If an inspection discloses that a potential hazard exists, the cabinet shall be informed within twenty-four (24) hours promptly of the finding and of the emergency procedures formulated for public protection and remedial action.

(a) If adequate procedures cannot be formulated or implemented, the cabinet shall be notified immediately.

(b) The cabinet shall then notify the appropriate emergency agencies that other emergency procedures shall be required to protect the public from the coal mine waste area.

Section 3. Water Control Measures.

(1) Unless the cabinet approves alternative practices that ensure structural integrity of the waste bank and protection of ground and surface water quality, a properly designed subdrainage system shall be provided, which shall:

(a) Intercept all ground water sources;

(b) Be protected by an adequate filter; and

(c) Be covered so as to protect against the entrance of surface water or leachate from the coal mine waste.

(2) During and after construction, surface drainage from the area above the coal mine waste bank and from the crest and face of the waste disposal area shall be diverted, in accordance with 405 KAR 18:130, Section 2(2).

(3)

(a) Slope protection shall be provided to minimize surface erosion at the site.

(b) Disturbed areas, including diversion ditches that are not riprapped, shall be vegetated upon completion of construction.

(4) Discharges of waters from a coal mine waste bank shall comply with 405 KAR 18:060, Sections 1, 2, and 7; 18:070; 18:090; and 18:110.

Section 4. Construction Requirements.

(1) Coal mine waste banks shall be constructed in compliance with 405 KAR 18:130, Sections 1 and 2, except to the extent that the requirements of those sections are specifically varied in this section.

(2) Coal mine waste banks shall have a minimum static factor of safety of one and five-tenths (1.5).

(3) Compaction requirements during construction or modification of a coal mine waste bank shall meet the requirements of this subsection, instead of those specified in 405 KAR 18:130, 1(5)(b).

(a) The coal mine waste shall be:

1. Spread in horizontal layers no more than twenty-four (24) inches in thickness; and
2. Compacted to attain ninety (90) percent of the maximum dry density in order to prevent spontaneous combustion and to provide the strength required for stability of the coal mine waste bank. Dry densities shall be determined in accordance with the American Association of State Highway and Transportation Officials (AASHTO) Specification T99-74 (12th Edition) (1974) as incorporated by reference in 405 KAR 7:015, Section 3(7), or an equivalent method.

(b) Variations may be allowed in these requirements for the disposal of dewatered fine coal waste (minus twenty-eight (28) sieve size) with approval of the cabinet or an equivalent method agreed upon by the cabinet and the permit applicant.

(4)

(a) Following grading of the coal mine waste bank, the site shall be covered with a minimum of four (4) feet of the best available nontoxic and noncombustible material, in accordance with 405 KAR 18:050, Section 2(5), and in a manner that does not impede flow from subdrainage systems.

(b) The coal mine waste bank shall be revegetated in accordance with 405 KAR 18:200.

(c) The cabinet may allow less than four (4) feet of cover material based on physical and chemical analyses that show that the requirements of 405 KAR 18:200 shall be met.

Section 5. Burning Coal Waste. Coal mine waste fires shall be extinguished by the permittee, in accordance with a plan approved by the cabinet and the MSHA. The plan shall contain, as a minimum, provisions to ensure that only persons authorized by the permittee, and who have an understanding of the procedures to be used, shall be involved in the extinguishing operations.

Section 6. Burned Waste Utilization.

(1) Before any burned coal mine waste, other materials, or refuse is removed from a disposal area, approval shall be obtained from the cabinet.

(2) A plan for the method of removal, with maps and appropriate drawings to illustrate the proposed sequence of the operation and methods of compliance with this chapter shall be submitted to the cabinet.

(3) Consideration shall be given in the plan to potential hazards that may be created by removal to persons working or living in the vicinity of the disposal area. The plan shall be prepared by a qualified professional engineer.

Section 7. Return to Underground Workings. Coal mine waste may be returned to underground mine workings only in accordance with the waste disposal program approved by the cabinet and MSHA pursuant to 405 KAR 8:040, Sections 27 and 28.

(405 KAR 018:140. 8 Ky.R. 1574; 9 Ky.R. 718; eff. 1-6-1983; 10 Ky.R. 823; eff. 4-23-1984; 36 Ky.R. 651; 1023; eff. 11-17-2009; Crt eff. 7-3-2018; Crt eff. 6-26-2025.)