

405 KAR 30:350. Permanent impoundments.

RELATES TO: KRS 151.100, 350.600

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

CERTIFICATION STATEMENT:

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 environment of the Commonwealth. This administrative regulation sets forth requirements for permanent water impoundments.

Section 1. General.

(1) Permanent impoundments are prohibited unless authorized by the cabinet, upon the basis of the following demonstration:

(a) The quality of the impounded water shall be suitable on a permanent basis for its intended use, and discharge of water from the impoundment shall not degrade the quality of receiving waters to less than the water quality standards established pursuant to applicable state and federal laws.

(b) The level of water shall be sufficiently stable to support the intended use.

(c) Adequate safety and access to the impounded water shall be provided for proposed water users.

(d) Water impoundments shall not result in the diminution of the quality or quantity of water used by adjacent or surrounding landowners for agricultural, industrial, recreational, or domestic uses.

(e) The design, construction, and maintenance of dams or hazardous structures shall achieve the minimum design requirements as set forth in 401 KAR 4:030, 401 KAR 4:040 and Division of Water Engineering Memorandum No. 5 entitled, "Design Criteria for Dams and Associated Structures." Structures not meeting the size criteria of a dam as defined in KRS 151.100(13) shall be designed, constructed and maintained in accordance with the criteria set forth in the United States Soil Conservation Service, Kentucky Standard and Specification for Pond (378) as a minimum.

(f) The size of the impoundment is adequate for its intended purposes.

(g) The impoundment will be suitable for its intended purposes.

(2) Excavations that will impound water during or after the mining operation shall have perimeter slopes that are stable and shall not be steeper than 1v:2h (fifty (50) percent). Where surface run-off enters the impoundment area, the side slope shall be protected against erosion.

(3) Slope protection shall be provided to minimize surface erosion at the site and sediment control measures shall be required where necessary to reduce the sediment leaving the site.

Section 2. Dams and Embankments.

(1) All dams and embankments of permanent impoundments, and the surrounding areas and diversion ditches disturbed or created by construction, shall be graded, fertilized, seeded, and mulched to comply with the requirements of 405 KAR 30:400 immediately after the dam or embankment is completed, provided that the active, upstream face of the embankment where water will be impounded may be riprapped or otherwise stabilized. Areas in which the vegetation is not successful or where rills and gullies develop shall be repaired and revegetated to comply with the requirements of 405 KAR 30:390, Section 7, and 405 KAR 30:400.

(2) All dams and embankments meeting the size or other criteria of KRS 151.100(13) shall be routinely inspected by a qualified registered professional engineer, or by

someone under the supervision of a qualified registered professional engineer, in accordance with KRS 151.295.

(3) All dams and embankments shall be routinely maintained during the mining operations. Vegetative growth shall be cut where necessary to facilitate inspection and repairs. Ditches and spillways shall be cleaned. Any combustible material present on the surface, other than material such as mulch or dry vegetation used for surface stability, shall be removed and all other appropriate maintenance procedures followed.

(4) All dams and embankments that meet or exceed the size or other criteria of KRS 151.100(13) shall be certified to the cabinet by a qualified registered professional engineer, immediately after construction and annually thereafter, as having been constructed and/or maintained to comply with the requirements of this administrative regulation. All dams and embankments that do not meet the size or other criteria of KRS 151.100(13) shall be certified by a qualified registered professional engineer. Certification reports shall include statements on:

(a) Existing and required monitoring procedures and instrumentation;

(b) The design depth and elevation of any impounded waters at the time of the initial certification report or the average and maximum depths and elevations of any impounded waters over the past year for the annual certification reports;

(c) Existing storage capacity of the dam or embankments; and

(d) Any other aspects of the dam or embankment affecting stability.

(5) Plans for any enlargement, reduction in size, reconstruction, or other modification of dams or impoundments shall be submitted to the cabinet and shall comply with the requirements of this administrative regulation. Except where a modification is required to eliminate an emergency condition constituting a hazard to public health, safety, or the environment, the cabinet shall approve the plans before modification begins.

Section 3. The permittee shall forward a certified copy of "as built" engineering plans for all dams or structures which meet either of the following criteria to the Environmental and Public Protection Cabinet, Division of Water, Frankfort, Kentucky 40601. Such plans shall be provided immediately after construction is completed.

(1) The embankment is twenty-four (24) feet or more in height measured from the natural bed of the stream or watercourse at the downstream toe of the fill to the low point in the top of the embankment.

(2) The structure has an impounding capacity of fifty (50) acre-feet or more at the lowest point in the top of the embankment.

(405 KAR 030:350. 8 Ky.R. 128; eff. 3-1-1982; TAm eff. 8-9-2007; Crt eff. 7-3-2018; Crt eff. 6-30-2025.)