

ENERGY AND ENVIRONMENT CABINET

Department for Environmental Protection

Division of Waste Management

(Amendment)

401 KAR 46:110. Standards for the disposal of coal combustion residuals (CCR) in CCR units.

RELATES TO: KRS 224.1, 224.10, 224.40-305, 224.50, 224.70, 224.99, 16 U.S.C. 1531, 33 U.S.C. 1251, 42 U.S.C. 82, 40 C.F.R. 257.50-257.107[~~257.106~~]

STATUTORY AUTHORITY: KRS 224.10-100, 224.40-305, 224.50-760, 151.250

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100(28) authorizes the cabinet to promulgate administrative regulations not inconsistent with the provisions of law administered by the cabinet. KRS 224.40-305 requires a waste site or facility to obtain a permit from the cabinet. KRS 224.50-760(1)(d) authorizes the cabinet to promulgate administrative regulations for the management of special wastes. This administrative regulation establishes the requirements for the disposal of CCR in CCR units.

Section 1. Scope and Applicability. [~~(1)~~] Except as established[~~provided~~] in this section, the purpose, scope, and applicability of 401 KAR Chapter 46 to CCR units and the beneficial use of CCR shall be as established in 40 C.F.R. 257.50 and[~~through~~] 257.52.

~~[(2) 401 KAR Chapter 46 shall not apply to a special waste surface impoundment subject to 401 KAR Chapter 45 containing special waste and liquids at a facility that ceased producing electricity prior to October 19, 2015.]~~

Section 2. Location Restrictions.

(1) The location restrictions for a CCR unit shall be as established in 40 C.F.R. 257.60 through 257.64 and this section.

(2) For a new CCR landfill, a new CCR surface impoundment, and a lateral expansion, CCR shall not be disposed:

(a) Within 100 feet of an adjacent owner property boundary line;

(b) Within 250 feet of a sinkhole, or other karst feature in karst terrain, unless the applicant obtains a variance approval in accordance with 401 KAR 30:020, Section 2; or

(c) Within the 100-year floodplain unless the applicant complies with the applicable requirements of 401 KAR 4:060.

(3) For a new CCR unit or lateral expansion, an owner or operator may utilize a deterministic scenario-based seismic hazard analysis demonstration in lieu of the probabilistic seismic hazard analysis demonstration required by 40 C.F.R. 257.63(a).

Section 3. Design Criteria. The design criteria for a CCR unit shall be as established in 40 C.F.R. 257.70 through 257.72.

Section 4. Structural Integrity Criteria.

(1) The structural integrity criteria shall be as established in 401 KAR 4:070, Sections 2 and 3.

(2) The citation to 40 C.F.R. 257.73 within 40 C.F.R. 257.50 through 257.107~~[257.106]~~ shall be replaced with 401 KAR 4:070, Section 2.

(3) The citation to 40 C.F.R. 257.74 within 40 C.F.R. 257.50 through 257.107~~[257.106]~~ shall be replaced with 401 KAR 4:070, Section 3.

Section 5. Requirements for Identifying CCR management units.

(1) Except as established in this section, the requirements for identifying CCR management units shall be as established in 40 C.F.R. 257.75.

(2) The facility evaluation and identification requirements established in 40 C.F.R. 257.75(b) through (d) shall be replaced with the requirement to complete a conceptual site model for the facility as established in 401 KAR 46:130.

(3) The citations to 40 C.F.R. 257.75 within 40 C.F.R. 257.50 through 257.107 shall be replaced with this section.

Section 6. Operating Criteria. The operating criteria for a CCR unit shall be as established in 40 C.F.R. 257.80, 257.81, and 257.84.

Section 7[6]. Hydrologic and Hydraulic Capacity Requirements for CCR Surface Impoundments.

(1) The hydrologic and hydraulic capacity requirements for CCR surface impoundments shall be as established in 401 KAR 4:070, Section 4.

(2) The citation to 40 C.F.R. 257.82 within 40 C.F.R. 257.50 through 257.107[257.106] shall be replaced with 401 KAR 4:070, Section 4.

Section 8[7]. Inspection Requirements for CCR Surface Impoundments.

(1) The inspection requirements for CCR surface impoundments shall be as established in 401 KAR 4:070, Section 5.

(2) The citation to 40 C.F.R. 257.83 within 40 C.F.R. 257.50 through 257.107[257.106] shall be replaced with 401 KAR 4:070, Section 5.

Section 9[8]. Groundwater Monitoring and Corrective Action.

(1)(a) The groundwater applicability, monitoring systems, sampling and analysis requirements, and detection monitoring program [corrective action requirements] for a CCR unit

1 shall be as established in 40 C.F.R. 257.90 through 257.91, 257.93 through 257.94, and this section
2 [257.98].

3 (b) Groundwater assessment monitoring, assessment of corrective measures, selection of
4 remedy, and corrective action shall be as established in 401 KAR 46:130 and this section.

5 (c) Any alterations or data gaps required by the cabinet in the groundwater monitoring
6 system, additional monitoring wells required, or other required modifications to address data gaps,
7 to ensure compliance with this section shall be addressed in the conceptual site model established
8 in 401 KAR 46:130.

9 (d) The requirements established in 40 C.F.R. 257.90(b)(3) shall be replaced with the
10 requirement to complete a conceptual site model established in 401 KAR 46:130.

11 (e) For CCR facilities subject to 401 KAR 46:130:

12 1. The requirements established in 40 C.F.R. 257.90(e) shall be replaced with the
13 requirement to submit an annual Corrective Action Update as established in 401 KAR 46:130,
14 Section 3; and

15 2. The requirements to be submitted in the annual report established by 40 C.F.R. 257.90(e)
16 shall be included as a part of the Corrective Action Update established in 401 KAR 46:130, Section
17 3.

18 (2)(a) A commingled facility may comply with the requirements of 401 KAR 46:130 and
19 this section in lieu of the requirements established in 401 KAR 45:160.

20 (b) If an owner or operator of a commingled facility chooses to comply with the
21 requirements of this section in lieu of the requirements established in 401 KAR 45:160, the owner
22 or operator shall give prior notice to the cabinet in writing.

1 (3)(a) In addition to the requirements for installing a groundwater monitoring system in 40
2 C.F.R. 257.91(a), if the CCR unit is located in a karst terrain area, the owner or operator of a CCR
3 unit shall:

4 1. Determine whether other detection and background monitoring points that are
5 hydraulically connected to the CCR facility based on site-specific geology and hydrogeology are
6 appropriate and necessary to accurately represent the upgradient and downgradient groundwater
7 quality in addition to or in lieu of groundwater monitoring wells, including:

8 a. Springs;

9 b. Cave streams;

10 c. Bedrock wells;

11 d. Wells on fracture traces and fracture-trace intersections;

12 e. Wells in soil or regolith;

13 f. Wells in epikarst;

14 g. Upgradient wells that contain water that is geochemically similar to compliance
15 monitoring points; and

16 h. Alternative monitoring points; and

17 2. Incorporate those site-specific sample locations into a detection monitoring system.

18 (b) The requirement in 40 C.F.R. 257.91(a)(2) to install monitoring wells at the waste
19 boundary of the CCR unit shall be replaced with a requirement to install monitoring wells or
20 establish detection monitoring points in accordance with subsection (3)(a)1. of this section, at a
21 distance from the CCR unit waste boundary to accurately represent the quality of groundwater
22 passing the waste boundary that ensures detection of groundwater contamination in the uppermost
23 aquifer. All hydraulically connected contaminant pathways shall be monitored.

1 (c) The requirements established in 40 C.F.R. 257.91(e) shall be replaced with the
2 requirement that all monitoring wells shall be installed, maintained and abandoned pursuant to the
3 standards established in 401 KAR Chapter 6.

4 (d) The citations to 257.95 referenced in 40 C.F.R. 257.94 shall be replaced with 401 KAR
5 46:130.

6 Section 9. Closure and Post-closure Care. The closure and post-closure care requirements
7 for a CCR unit shall be as established in 40 C.F.R. 257.100 through 257.104.

8 Section 10. Recordkeeping, ~~[and]~~ Notification, and Publicly Accessible Internet Site
9 Requirements. (1)~~[Except for 40 C.F.R. 257.107, including cross references to 40 C.F.R. 257.107~~
10 ~~within 40 C.F.R. 257.50 through 257.106,]~~ The recordkeeping, ~~[and]~~ notification, and publicly
11 accessible internet site requirements for an owner or operator of a CCR unit shall be as established
12 in 40 C.F.R. 257.105 through 257.107 and this section ~~[and 257.106].~~

13 (2) All recordkeeping, notification, and publicly accessible documents required to be
14 posted on the internet by the owner or operator in accordance with this section shall also be
15 submitted to the Division of Waste Management.

16 Section 11. Constituents for Detection and Assessment Monitoring. (1) The constituents
17 for detection monitoring shall be as established in Appendix III to 40 C.F.R. Part 257.

18 (2) The constituents for assessment monitoring shall be as established in Appendix IV to
19 40 C.F.R. Part 257.

20 Section 12. Alternative Performance Standards. (1) An alternative performance standard
21 shall be as protective as the requirements established in 401 KAR Chapter 46.

22 (2) An alternative performance standard may be used only after approval by the cabinet.

1 Section 13. (1) The owner or operator shall allow the cabinet or its authorized
2 representative to:

3 (a) Enter upon the premises of the owner or operator where a regulated CCR facility or
4 activity is located or conducted, or where records shall be kept by the permit;

5 (b) Have access to and copy at reasonable times any records that shall be kept under the
6 conditions of the permit; and

7 (c) Inspect any facility equipment, including monitoring and control equipment, practices,
8 or operations regulated or required by the permit.

9 (2) The owner or operator shall notify the cabinet 48 hours prior to sampling at the CCR
10 facility required by Section 9 of this administrative regulation and 401 KAR 46:130.

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