



# CCR RULE LOCATION RESTRICTIONS FACT SHEET

## U.S. Environmental Protection Agency CCR Rule

On April 17, 2015, the U.S. Environmental Protection Agency (EPA) published its final [Coal Combustion Residuals \(CCR\) Rule](#), creating a detailed set of minimum requirements for the disposal of CCR, or coal ash, in landfills and surface impoundments (i.e., “ash ponds”). The CCR Rule falls under Subtitle D of the [Resource Conservation and Recovery Act](#), which regulates management and disposal for solid waste.

These standards apply to both new and existing CCR landfills and surface impoundments, including lateral expansions of any existing unit.

### CCR Disposal Requirements

The Tennessee Valley Authority (TVA) has been working through an extensive program at all of its facilities to investigate whether they meet the requirements for:

- location restrictions
- design
- operations
- groundwater
- closure and post-closure care
- record keeping and reporting

This fact sheet summarizes the review that TVA has done to comply with the CCR Rule on location restrictions.

### CCR Location Restrictions

TVA is required to report on the location of any landfills and surface impoundments storing CCR, based upon five criteria that define restrictions on their location if they are:

- 1 within five feet of the uppermost aquifer
- 2 in wetlands
- 3 within 200 feet of active fault zones
- 4 in seismic impact zones
- 5 in unstable areas, including karst areas

Owners or operators must demonstrate that existing surface impoundments currently meet all five restrictions and that landfills meet the unstable areas restrictions, through engineering enhancements or established alternatives, as set forth in the CCR Rule. Owners or operators of existing units that cannot meet these restriction requirements must close the unit. New units must also be compliant with the requirements.

The summary of the location restrictions review for TVA’s existing landfills and surface impoundments storing CCR is shown on the following page.

### CCR Location Restrictions Results

Demonstrations for impoundments at Bull Run, Gallatin and Allen Fossil Plants were not performed based upon pending plans for closure at those sites. In addition, the demonstrations were not performed for Kingston and John Sevier units that were already closed. The remaining units that were subject to review, with the exception of the units located at Paradise Fossil Plant, met the location restriction requirements.

At Paradise Fossil Plant, preliminary review showed the existing surface impoundments may not meet the aquifer restriction. TVA has initiated plans for these facilities to be closed within the timeframe required by the CCR Rule.

#### DEFINITIONS—EPA Rule 40 CFR 257.53

**Aquifer**—a geologic formation, group of formations, or a portion of a formation capable of yielding usable quantities of groundwater to wells or springs

**Karst areas**—an area where topography, with its characteristic erosional surface and subterranean features, is developed as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present in karst terranes include, but are not limited to, dolines, collapse shafts (sinkholes), sinking streams, caves, seeps, large springs, and blind valleys

**Seismic impact zone**—an area having a 2% or greater probability that the maximum expected horizontal acceleration, expressed as a percentage of the earth’s gravitational pull (g), will exceed 0.10 g in 50 years

## Location Restriction Demonstrations Review Summary for TVA's Landfills and Surface Impoundments Storing CCR

Fossil Plant	Impoundment or Landfill Name	Aquifer	Wetlands	Fault Areas	Seismic Impact Zones	Unstable Areas
Allen	East Ash Disposal Area	Not reviewed due to pending closure				
Bull Run	Main Ash Pond	Not reviewed due to pending closure				
	Fly Ash Stilling Pond 2C and Sluice Channel					
	Dry Fly Ash Stack Lateral Expansion	Not required for landfills*				
Cumberland	Dry Ash Stack	Not required for landfills*				
	Gypsum Storage Area	Not required for landfills*				
	Bottom Ash Pond					
	Stilling Pond (including Retention Pond)					
Gallatin	Ash Pond A	Not reviewed due to pending closure				
	Ash Pond E					
	Bottom Ash Pond					
	Middle Pond A					
	NRL Cell 1	Not required for landfills*				
Johnsonville	Active Ash Pond 2					
John Sevier	Bottom Ash Pond	Not reviewed due to unit already closed				
Kingston	Sluice Trench/Area East of Sluice Trench	Not reviewed due to unit already closed				
	Stilling Pond	Not reviewed due to unit already closed				
	Peninsula Disposal Area	Not required for landfills*				
Paradise	Gypsum Disposal Area Stilling Pond 1					
	Gypsum Disposal Area Stilling Pond 2					
	Gypsum Disposal Area					
	Peabody Ash Pond					
	Slag Ponds 2A and 2B					
	Slag Stilling Pond 2C					
Shawnee	Ash Pond 2 (Main Ash Pond and Stilling Pond)					
	Consolidated Waste Dry Stack	Not required for landfills*				

Meets requirements
  Not reviewed
  Does not meet requirements—closure required

\* **NOTE:** Existing CCR landfills are only subject to the unstable areas demonstration.

For more information on the CCR Rule Compliance Data and Information click [here](#) or contact TVA Environmental Communications (865) 632-2911