

**MARION POWER PLANT – EMERY POND
SOUTHERN ILLINOIS POWER COOPERATIVE
LOCATION RESTRICTION EVALUATION – PLACEMENT ABOVE THE UPPERMOST AQUIFER**

Southern Illinois Power Cooperative operates the Marion Power Plant (site) located on the northwestern shore of Lake of Egypt near Marion, Illinois. Emery Pond has been identified as an existing coal combustion residuals (CCR) surface impoundment. The Emery Pond is a less-than-1-acre pond south of the main stack at the site.

This demonstration addresses the requirements of 40 CFR §257.60 Placement above the uppermost aquifer of the US Environmental Protection Agency (EPA)'s rule entitled *Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities*, published in the Federal Register on April 17, 2015 (CCR Rule). The CCR Rule is an extension of the Code of Federal Regulations (CFR) Title 40, Part 257 and was amended on July 2, 2015, by 40 CFR §257 *Technical Amendments to the Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities— Correction of the Effective Date* and again on July 30, 2018, by 40 CFR §257 *Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Amendments to the National Minimum Criteria (Phase One, Part One)*.

§257.60(a) Placement above the uppermost aquifer of the CCR Rule states:

New CCR landfills, existing and new CCR surface impoundments, and all lateral expansions of CCR units must be constructed with a base that is located no less than 1.52 meters (five feet) above the upper limit of the uppermost aquifer, or must demonstrate that there will not be an intermittent, recurring, or sustained hydraulic connection between any portion of the base of the CCR unit and the uppermost aquifer due to normal fluctuations in groundwater elevations (including the seasonal high water table). The owner or operator must demonstrate by the dates specified in paragraph (c) of this section that the CCR unit meets the minimum requirements for placement above the uppermost aquifer.

Hanson Professional Services Inc. has collected additional data for the Emery Pond, including hydraulic conductivity data. These data support the finding that there is not an uppermost aquifer beneath the Emery Pond that meets the definition of "aquifer" found at §257.53 or is within 5 feet of the bottom of the Emery Pond. **Based on these data, the findings do demonstrate compliance with the requirements of §257.60(a).**

As a qualified professional engineer as defined by 40 CFR 257 Subpart D, I certify that I have personally examined and am familiar with the design information referenced below, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete.

I certify that **Emery Pond does meet the aquifer location requirements** set forth by 40 CFR §257.60(a).

David B. Hoots, P.E.
Hanson Professional Services Inc.
1525 South Sixth Street
Springfield, IL 62703-2886
(217) 788-2450
Registration No. 062-055737

Seal:



License Expires 11/30/2019

Signature: _____

A handwritten signature in black ink that reads "David B. Hoots".

Date: 7/10/2019