

Groundwater Monitoring System Certification

Coal Combustion Residuals (CCR) Surface Impoundments

**R.D. Morrow, Sr. Generating Station
304 Old Okahola School Road
Purvis, Lamar County, Mississippi**

Prepared For:



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Prepared By:



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Pursuant to the U.S. Environmental Protection Agency's (EPA) final rule *Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities* (Federal Register Vol. 80, No. 74, April 17, 2015) 40 CFR § 257.91(a), the owner or operator of a coal combustion residuals (CCR) unit must install a groundwater monitoring system that consists of a sufficient number of wells, installed at appropriate locations and depths, to yield groundwater samples from the uppermost aquifer. In accordance with 40 CFR § 257.91(f), the owner or operator must obtain a certification from a qualified professional engineer stating that the groundwater monitoring system has been designed and constructed to meet the requirements of 40 CFR § 257.91.

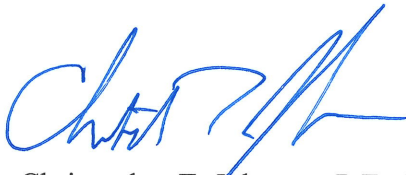
ENGINEERING CERTIFICATION

Pursuant to 40 CFR § 257.91(f), if the groundwater monitoring system includes the minimum number of monitoring wells specified in paragraph 40 CFR § 257.91 (c)(1), the certification must document the basis supporting this determination. The surface impoundments monitoring system, in accordance with 40 CFR 257.91(c)(1), consists of a minimum of one (1) upgradient and (3) downgradient monitoring wells. A multi-unit system has been designed to monitor the two CCR surface impoundments, which encompass approximately 2.0 acres. The limited footprint of this unit renders the CCR surface impoundments monitoring system suitable for the minimum number of monitor wells required in the CCR regulations.

This Groundwater Monitoring System Certification for the CCR surface impoundments at the Cooperative Energy, R.D. Morrow, Sr. Generating Station located in Purvis, Mississippi, was prepared by Environmental Management Services, Inc. (EMS). This Statement of Professional Opinion is based on information available to EMS at the time of the well system construction and EMS's technical understanding of the United States Environmental Protection Agency's "Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments," published in the Federal Register on April 17, 2015 with an effective date of October 19, 2015 (CCR Rule).

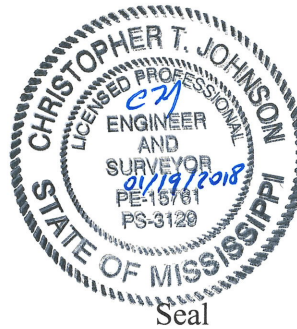
On the basis of and subject to the foregoing it is my professional opinion as a Professional Engineer licensed in the State of Mississippi that the CCR Surface Impoundments Groundwater Monitoring System was constructed in accordance with the United States Environmental Protection Agency's "Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments," published in the Federal Register on April 17, 2015 with an effective date of October 19, 2015. It is my professional opinion based on my understanding of the technical requirements of the CCR Rule that the CCR Impoundments Groundwater Monitoring System meets the technical requirements and/or intent of the CCR Rule. This Statement of Professional Opinion is not and shall not be interpreted or construed as a guarantee, warranty or legal opinion.

Environmental Management Services, Inc.



Christopher T. Johnson, P.E., P.S.
Engineering Manager/Vice President

Date: 01/19/2018



Revision 1