

**COAL COMBUSTION RESIDUALS RULE
GROUNDWATER MONITORING SYSTEM CERTIFICATION
ETEM REMEDIATION ONE, LLC**

**W.H. SAMMIS POWER STATION
NORTH AND SOUTH ASH IMPOUNDMENTS
STRATTON, OHIO**

Civil & Environmental Consultants, Inc. (“Consultant”) has been retained by ETEM Remediation One, LLC to provide certification of the groundwater monitoring system as required under 40 Code of Federal Regulations (CFR) § 257.91(f) of the HAZARDOUS AND SOLID WASTE MANAGEMENT SYSTEM; DISPOSAL OF COAL COMBUSTION RESIDUALS FROM ELECTRIC UTILITIES; FINAL RULE, 80 Fed. Reg. 21302 (Apr. 17, 2015) (“CCR Rule”) for the coal combustion residual (CCR) unit(s) identified by the previous site owner, FirstEnergy Generation, LLC, at their W.H. Sammis Power Station located in Stratton, Ohio.

Requirements

Pursuant to 40 CFR § 257.90(b)(1), by October 17, 2017, the owner or operator of a CCR unit must install a groundwater monitoring system that meets the requirements of 40 CFR § 257.91. The groundwater monitoring system must meet the CCR Rule’s performance standard, which requires the system to consist of a sufficient number of wells, installed at appropriate locations and depths, to yield groundwater samples from the uppermost aquifer that accurately represent the quality of:

- (1) background groundwater that has not been affected by leakage from a CCR unit; and
- (2) groundwater passing the waste boundary of the CCR unit and monitoring all potential contaminant pathways.

The CCR units identified at the site are the contiguous north and south bottom ash impoundments. The CCR Rule groundwater monitoring system requirement for both is addressed by a single multi-unit system that initially consisted of two (2) upgradient and five (5) downgradient monitoring wells as certified by AECOM on October 17, 2017. Recently, monitoring well MW-12S has been added to the CCR Rule groundwater monitoring system as an additional upgradient well, and the system now consists of three (3) upgradient and five (5) downgradient monitoring wells. Information regarding the groundwater monitoring system design and construction has been provided to the qualified professional engineer as required by 40 CFR § 257.91(e)(1) and is included in the facility operating record per 40 CFR § 257.91(e)(1).

Limitations

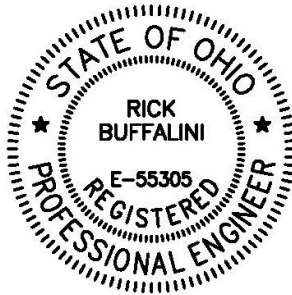
The signature of Consultant’s authorized representative on this document represents that to the best of Consultant’s knowledge, information, and belief in the exercise of its professional judgment, it is Consultant’s professional opinion that the aforementioned information is accurate as of the date of such signature. Any opinion or decisions by Consultant are made on the basis of Consultant’s experience, qualifications, and professional judgment and are not to be construed as warranties or guaranties. In addition, opinions relating to environmental, geologic, and geotechnical conditions or other estimates are based on available data, and actual conditions may vary from those encountered at the times and locations where data are obtained, despite the use of due care.

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CERTIFICATION

I, RICK J. BUFFALINI being a Registered Professional Engineer, in accordance with the State of Ohio Professional Engineer's Registration program, possessing the technical knowledge and experience to make the specific technical certifications required under 40 Code of Federal Regulations (CFR) Part 257, Subpart D, Standards for the Disposal of Coal Combustion Residuals (CCRs) in Landfills and Surface Impoundments, and being licensed in the state where the CCR unit(s) is located, do hereby certify to the best of my knowledge, information, and belief, that the groundwater monitoring system that is the subject of this certification has been designed and constructed to meet the requirements of 40 CFR §257.91.



Rick J. Buffalini