

## SCS ENGINEERS

October 11, 2017  
File No. 25216068.17

Mr. Jim Jakubiak  
Edgewater Generating Station  
3739 Lakeshore Drive  
Sheboygan, WI 53081-7233

Subject: Groundwater Monitoring System Certification  
Edgewater Generating Station

Dear Mr. Jakubiak:

The groundwater monitoring system at the Edgewater Generating Station is designed and constructed to meet the requirements of 40 CFR 257.91. The monitoring network is sufficient to accurately represent the quality of background groundwater that has not been affected by leakage from the coal combustion residue (CCR) unit and the quality of groundwater passing the waste boundary of the CCR unit.

Based on the design information provided for our review, the number, spacing, and depths of the monitoring system components were determined using site-specific information in accordance with 40 CFR 257.91(b).

The groundwater monitoring system consists of one background and three downgradient monitoring wells, which meets the minimum requirements of 40 CFR 257.91(c)(1). The minimum number of monitoring wells is appropriate at the Edgewater Generating Station for the following reasons:

- The monitored CCR units are contiguous.
- Groundwater flow direction in the uppermost aquifer is well documented based on the existing groundwater monitoring system installed and monitored to meet State groundwater monitoring requirements for the closed CCR landfill adjacent to the CCR units listed below.
- Seasonal variability in the groundwater flow direction has not been observed.

The groundwater monitoring system at the Edgewater Generating Station is a multi-unit system. The facility consists of four existing CCR units that are contiguous:

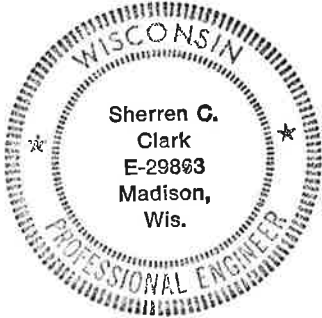
- Slag Pond
- North WPDES Pond (North Pond A)
- South WPDES Pond (South Pond A)
- Primary Pond (Pond B)

The multi-unit system is designed to detect monitored constituents at the waste boundary of the facility as required by 40 CFR 257.91(d).




Based on the installation documentation provided for our review, the monitoring wells have been cased in a manner that will maintain the integrity of the monitoring well borehole and were constructed in accordance with the requirements of 40 CFR 257.91(e).

**P.E. Certification**

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|  | <p>I, Sherren Clark, hereby certify that that the groundwater monitoring system at the Edgewater Generating Station has been designed and constructed to meet the requirements of 40 CFR 257.91. This certification is based on my review of documentation in the operating record regarding the design, installation, and development of the groundwater monitoring system components. I am a duly licensed Professional Engineer under the laws of the State of Wisconsin.</p> |
|  | <p><i>SC Clark</i> <span style="float: right;"><i>10-11-17</i></span></p> <p>(signature) <span style="float: right;">(date)</span></p>   |
|  | <p><i>Sherren Clark</i></p> <p>(printed or typed name)</p>   |
|  | <p>License number <u><i>29863-6</i></u></p> <p>My license renewal date is July 31, 2018.</p>   |
|  | <p>Pages or sheets covered by this seal:<br/><i>Letter (2 pages)</i></p>   |

Sincerely,

  
Sherren C. Clark, PE  
Project Director  
**SCS ENGINEERS**

  
Thomas J. Karwoski, PG  
Senior Project Manager  
**SCS ENGINEERS**

MDB/jsn/EN/SC/TK

cc: Jeff Maxted, Alliant Energy  
Eric Sandvig, Edgewater Generating Station