

October 13, 2022  
File No. 25222067.00

Mr. Brian Clepper  
Columbia Energy Center  
W8375 Murray Rd.  
Pardeeville, WI 53954

Subject: Groundwater Monitoring System Certification Update  
Columbia Dry Ash Disposal Facility, Modules 1-3, Pardeeville, Wisconsin

Dear Mr. Clepper:

The groundwater monitoring system at the Columbia Dry Ash Disposal Facility, Modules 1-3 (COL MOD 1-3) was originally certified to meet the requirements of 40 Code of Federal Regulations (CFR) 257.91 on October 11, 2017. The original groundwater monitoring system consisted of two upgradient (MW-84A and MW-301) and three downgradient monitoring wells (MW-33AR, MW-34A, and MW-302), which exceeds the minimum requirements of 40 CFR 257.91(c)(1). Based on monitoring data collected after the original certification, a fourth downgradient monitoring well (MW-1AR) was added to the groundwater monitoring system with a January 21, 2022, updated groundwater monitoring system certification. Monitoring well MW-1AR has since been abandoned because it was within the footprint of the pending MOD 10-11 expansion area. This groundwater monitoring system certification acknowledges the removal of monitoring well MW-1AR from the groundwater monitoring system.

The groundwater monitoring system at COL MOD 1-3 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 residual (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 two upgradient and three downgradient monitoring wells, which exceeds the minimum requirements of 40 CFR 257.91(c)(1).

Although not part of the certified monitoring system, several additional monitoring wells at the Columbia Facility are used to collect groundwater elevation data, which is used to prepare site-wide water table maps and calculate hydraulic gradients. These additional wells are:

M-3	M-4R	MW-5R	MW-33BR	MW-34B	MW-37A
MW-39A	MW-39B	MW-48A	MW-48B	MW-57	MW-59
MW-83	MW-84B	MW-86	MW-91AR	MW-91B	MW-92A



MW-92B	MW-93A	MW-93B	MW-216R	MW-217	MW-220RR
MW-303	MW-304	MW-305	MW-306	MW-307	MW-308
MW-309	MW-310	MW-311	MW-312		

The groundwater monitoring system for COL MOD 1-3 was initially identified as a multiunit system monitoring the following CCR units:



- COL Dry Ash Disposal Facility – Module 1
- COL Dry Ash Disposal Facility – Module 2
- COL Dry Ash Disposal Facility – Module 3

These three modules were subsequently recognized as a single existing landfill CCR unit; therefore, the groundwater monitoring network is now identified as monitoring a single CCR unit.

The groundwater monitoring 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).

### PE Certification

	<p>I, Sherron C. Clark, hereby certify that that the groundwater monitoring system at the Columbia Dry Ash Disposal Facility, Modules 1-3, 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> <span style="float: right;">10-13-2022</span></p>
	<p>(signature) <span style="float: right;">(date)</span></p>
	<p>Sherron Clark (printed or typed name)</p>
	<p>License number <u>29863-06</u> My license renewal date is July 31, 2024. Pages or sheets covered by this seal: Groundwater Monitoring System Certification Update, all pages.</p>

Sincerely,

  
Sherron C. Clark, PE  
Project Director  
SCS Engineers

  
Thomas J. Karwoski, PG  
Senior Project Manager  
SCS Engineers

TK/REO/SCC

cc: Jeff Maxted, Alliant Energy

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