

SCS ENGINEERS

October 11, 2017
File No. 25216070.17

Mr. Cory Carter
2320 Power Plant Drive
Lansing, Iowa 52151

Subject: Groundwater Monitoring System Certification
Lansing Generating Station, Lansing, Iowa

Dear Mr. Carter:

The groundwater monitoring system at the Lansing 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 upgradient 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 Lansing Generating Station for the following reasons:

- Groundwater flow in the uppermost aquifer at the site is to the northwest, parallel to the axis of the valley in which the landfill and pond are located.
- The monitored CCR units are contiguous and are aligned with the direction of groundwater flow.
- The width of the downgradient zone perpendicular to groundwater flow is less than 700 feet.

The groundwater monitoring system at the Lansing Generating Station is a multi-unit system. The Lansing Generating Station includes of two existing CCR units that are contiguous:


- LAN Landfill
- LAN Upper Ash Pond

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

	<p>I, Eric J. Nelson, hereby certify that that the groundwater monitoring system at the Lansing 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 Iowa.</p>
	<p style="text-align: center;"><i>Eric J. Nelson</i></p> <p style="text-align: right;">10/11/2017</p>
	<p>(signature) (date)</p>
	<p><i>Eric J. Nelson</i></p> <p>(printed or typed name)</p>
	<p>License number <u>23136</u></p> <p>My license renewal date is December 31, <u>2018</u>.</p> <p>Pages or sheets covered by this seal: <i>GROUNDWATER MONITORING SYSTEM CERTIFICATION</i> <i>(2 PAGES)</i></p>

Sincerely,



Eric J. Nelson, PE
 Senior Project Manager
SCS ENGINEERS



Thomas J. Karwoski
 Senior Project Manager
SCS ENGINEERS

MDB/jsn/EN/SC/TK

cc: Jeff Maxted, Alliant Energy
 Matt Cole, Lansing Generating Station