KEY ENVIRONMENTAL INCORPORATED

July 2020

SUBJECT: Revised Groundwater Monitoring Systems Certification
Pond 3A, Pond 5, Pond 7/7A, Pond 10, Landfill 9, and Landfill 11
Former Stuart Electric Generating Station
Kingfisher Development, LLC
Manchester, Adams County, Ohio

Groundwater monitoring and corrective action requirements are conducted at the former Stuart Electric Generating Station (Site) in accordance with the U.S. Environmental Protection Agency's (USEPA) rule entitled *Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities* (CCR Rule). The Site is a former coal-burning electricity generating facility located along the Ohio River near the Village of Manchester, Ohio. The CCR Rule groundwater monitoring and corrective action requirements were initiated by AES Ohio Generation, LLC (AES), the former Site owner. Haley and Aldrich prepared a groundwater monitoring systems certification in October 2017 on behalf of AES. Annual groundwater monitoring and corrective action reports are completed, along with any additional requirements specific to each monitoring system, in accordance with the CCR Rule. Kingfisher Development, LLC (KD) acquired the Site and assets (including environmental responsibilities) from AES Ohio Generation, LLC (AES) in 2020. The Site is in a decommissioning phase and plans to close all CCR units are underway or being developed.

The October 2017 groundwater monitoring system certification identified seven individual unit groundwater monitoring systems for the Site. As indicated in the 2019 annual groundwater monitoring and corrective action reports, the Pond 3A monitoring system is in a detection monitoring phase; the Pond 6 and Landfill 9 monitoring systems are in an assessment monitoring phase; and the Pond 5, Pond 7/7A, Pond 10, and Landfill 11 monitoring systems are in a corrective measures assessment phase. Considering that three years of annual monitoring and reporting have been completed, the individual monitoring systems have progressed through different sequential monitoring phases as specified in the CCR Rule, and plans to close the CCR units are being developed, it is appropriate to reevaluate and update the groundwater monitoring systems.

Multiple individual unit monitoring systems (in contrast to one multi-unit monitoring system) are more appropriate for CCR units that are distinctly separated (i.e. enough separation between units such that there is little potential for plume comingling) such as Landfill 9 and Pond 5. Multiple individual unit monitoring systems are also more appropriate when initiating a monitoring program or demonstrating compliance after corrective action has been completed. However, individual unit monitoring systems are less efficient when multiple units within close

proximity exhibit similar conditions. A multi-unit monitoring system is more technically appropriate when several units are located in close proximity, have similar groundwater conditions, and are in a similar monitoring phase. Multi-unit monitoring systems are equally capable of monitoring the waste boundary in comparison to multiple individual monitoring systems.

The monitoring systems at the Site are being updated and it has been determined that a multi-unit monitoring system is appropriate for Pond 3A, Pond 6, Pond 7/7A, Pond 10, and Landfill 11. This document addresses the requirements of §257.91(f), which requires a certification stating the groundwater monitoring system has been designed and constructed to meet the CCR Rule requirements. Consolidating individual monitoring systems at Pond 3A, Pond 6, Pond 7/7A, Pond 10, and Landfill 11 into a multi-unit monitoring system will enhance monitoring and reporting continuity, maintain equivalent monitoring along the waste boundary, and is permitted in accordance with the CCR Rule §257.91(d).

The monitoring systems at the Site will be updated and consist of the following three monitoring systems:

1. Multi-unit monitoring system - Pond 3A, Pond 6, Pond 7/7A, Pond 10, and Landfill 11
2. Individual unit monitoring system – Pond 5
3. Individual unit monitoring system – Landfill 9

Each monitoring system has been designed to include a minimum of one upgradient and three downgradient monitoring wells pursuant to 257.91(c). In the case of the multi-unit monitoring system, it is equally capable of detecting monitored constituents at the waste boundary as multiple individual unit monitoring systems. The actual number of wells used in the groundwater monitoring systems is sufficient and appropriate to characterize the quality of groundwater flowing beneath each monitoring system based on Site specific conditions.

Corrective Measures Assessment reports were previously completed by Haley and Aldrich on behalf of AES for Pond 7/7A, Pond 10, Landfill 11, and Pond 5. The Pond 7/7A, Pond 10, and Landfill 11 Corrective Measures Assessment reports will be revised based on the multi-unit monitoring system certification. The revised Corrective Measures Assessment report will apply to all units within the multi-unit monitoring system. Remedial alternatives will be redeveloped with consideration of the multiple units that comprise the multi-unit monitoring system.

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I certify that the groundwater monitoring systems for Pond 3A, Pond 5, Pond 6, Pond 7/7A, Pond 10, Landfill 9, and Landfill 11 CCR units have been designed and constructed to meet the requirements of §257.91. The certification submitted is, to the best of my knowledge, accurate and complete.

Signed: Mark Lahr 7/28/2020

Certifying Engineer

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