



HALEY & ALDRICH, INC.  
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## MEMORANDUM

16 October 2018  
File No. 130116

SUBJECT: Location Restriction Demonstration – Placement Above Uppermost Aquifer  
J.M. Stuart Electric Generating Station  
Pond 5  
Aberdeen, Ohio

AES Ohio Generation, LLC (AES) operates the coal-fired J.M. Stuart Electric Generating Station (Plant) located near Aberdeen, Ohio. Pond 5 (Unit) is an existing coal combustion residuals (CCR) surface impoundment at the Plant. This demonstration addresses the requirements of 40 CFR §257.60 (*Placement above the uppermost aquifer*) of the US Environmental Protection Agency's (EPA) rule entitled *Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities*. 80 Fed. Reg. 21302 (Apr. 17, 2015) (promulgating 40 CFR §257.60); 83 Fed. Reg. 36435 (July 30, 2018) (amending 40 CFR §257.60).


*§257.60(a): New CCR landfills, existing and new CCR surface impoundments, and all lateral expansions of CCR units must be constructed with a base that is located no less than 1.52 meters (five feet) above the upper limit of the uppermost aquifer, or must demonstrate that there will not be an intermittent, recurring, or sustained hydraulic connection between any portion of the base of the CCR unit and the uppermost aquifer due to normal fluctuations in groundwater elevations (including the seasonal high water table). The owner or operator must demonstrate by the dates specified in paragraph (c) of this section that the CCR unit meets the minimum requirements for placement above the uppermost aquifer.*

Haley & Aldrich reviewed available information provided by AES including historic record drawings, design drawings, boring logs, etc. and based on review and evaluation of the information provided, it has been determined that Pond 5 does not comply with the requirements of 40 CFR §257.60(a).



*§257.60(b): The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer or approval from the Participating State Director or approval from EPA where EPA is the permitting authority stating that the demonstration meets the requirements of paragraph (a) of this section.*

I, Steven F. Putrich, being a Registered Professional Engineer in good standing in the State of Ohio, do hereby certify, to the best of my knowledge, information, and belief, that the information contained in this certification has been prepared in accordance with the accepted practice of engineering.

Signed:   
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Consulting Engineer

Print Name: Steven F. Putrich  
License No.: 67329  
Title: Vice President  
Company: Haley & Aldrich, Inc.

Professional Engineer's Seal:

