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File No. 40373-345

Dayton Power & Light Company  
P.O. Box 468  
Aberdeen, Ohio 45101

Attention: Mr. Craig Spangler  
Commodities Manager

Subject: Initial Hazard Potential Classification Assessment  
Pond 10  
J.M. Stuart Electric Generating Station  
Aberdeen, Ohio

Mr. Spangler:

This letter presents the results of our Initial Hazard Potential Classification Assessment for Pond 10 located at Dayton Power & Light Company (DP&L) J.M. Stuart Electric Generating Station in Aberdeen, Ohio. This work was completed in accordance with the US Environmental Protection Agency's (EPA's) Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities, 40 CFR Part 257, specifically §257.73(a)(2).

## Description of Pond 10

Pond 10 is a Coal Combustion Residuals (CCR) surface impoundment with above-grade embankments surrounding the pond except along the southeast side which is incised and borders Landfill No. 11. Pond 10 was constructed in 2001 and is currently used for settling of fly ash sluiced from the J.M. Stuart generating units.

Pond 10 has a maximum embankment height of 23 feet. During construction, the pond bottom was excavated below ground surface resulting in a total pond depth of about 40 feet and storage volume of approximately 930 acre-feet<sup>1</sup> to the crest. The pond is periodically drained and the accumulated fly ash excavated and hauled to an on-site landfill.

The Pond 10 decant structure consists of an 8-1/2 foot by 8-1/2 foot, 24-foot high reinforced concrete riser structure located in the south corner of the pond. The level in the pond is controlled by removable stop logs installed in the structure. Flow from Pond 10 is conveyed to Pond 6 via a 30-inch diameter HDPE pipe.

<sup>1</sup> Ohio Department of Natural Resources, "Dam Safety Inspection Report – J.M. Stuart Station Ash Pond 10," dated June 27, 2013.

## Hazard Potential Classification Assessment

### GENERAL

The Hazard Potential Classification of a CCR surface impoundment is based on the potential for loss of human life, economic losses, environmental damage, and/or disruption to lifelines caused by failure or mis-operation of the surface impoundment.

EPA's Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities, 40 CFR Part 257 requires the owner or operator of a CCR surface impoundment to determine which of the following three hazard potential classifications characterizes their CCR unit:

- High Hazard Potential Classification – A diked surface impoundment where failure or mis-operation will probably cause loss of human life.
- Significant Hazard Potential Classification – A diked surface impoundment where failure or mis-operation results in no probable loss of human life, but can cause economic loss, environmental damage, disruption of lifeline facilities, or impact other concerns.
- Low Hazard Potential Classification – A diked surface impoundment where failure or mis-operation results in no probable loss of life, and low economic and/or environmental losses. Losses are principally limited to the surface impoundment's owner's property.

### HAZARD POTENTIAL CLASSIFICATION

Based on observations during our 17 March 2016 site visit and our review of available information, Pond 10 is judged to have a **Significant** Hazard Potential Classification in accordance with 40 CFR Part 257. The **Significant** Hazard Potential Classification is due primarily to no probable loss of life in the event of a failure, but with potential adverse impacts to Route 52, the J.M. Stuart Station main access road, and portions of the plant facilities.

## Professional Engineer Certification

*§257.73(a)(2)(ii): The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the initial hazard potential classification and each subsequent periodic classification specified in paragraph (a)(2)(i) of this section was conducted in accordance with the requirements of this section.*

I certify that this initial hazard potential classification for Pond 10 surface impoundment at J.M. Stuart Electric Generating Station was conducted in accordance with §257.73(a)(2) of the CCR Rule.

Signed:   
Consulting Engineer

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

Professional Engineer's Seal and date:

