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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 6
J.M. Stuart Electric Generating Station
Aberdeen, Ohio

Mr. Spangler:

This letter presents the results of our Initial Hazard Potential Classification Assessment for Pond 6 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 6

Pond 6 is a Coal Combustion Residuals (CCR) surface impoundment surrounded on the east, west, and south sides by above-grade earthen embankments and incised on the north side. The impoundment is separated from Pond 7 by an interior dike between the two ponds. Pond 6 was originally designed by Ebasco Services and constructed in the mid-1970s.

In the early 1980s, Pond 6 was partially re-excavated to El. 523. The pond currently receives ash sluicing water from Ponds 3A, 7 and 10, as well as coal storage area drainage, and Landfill 11 storm water, contact water and leachate.

The original pond has an area of 36.7 acres at the crest with an embankment length of approximately 3,400 feet. The impoundment has a storage volume of approximately 1,390 acre-feet¹ to the crest and a maximum embankment height of 31 feet. The western half of the pond is permanently filled and occupies 18.6 acres, while the eastern half of the pond is liquid filled with an operating area of 18.1 acres.

¹ Ohio Department of Natural Resources, "Dam Safety Inspection Report – J.M. Stuart Station Ash Pond 6," dated June 27, 2013.

Outlet works for Pond 6 consist of a concrete structure with adjustable weirs which conveys water to a treatment building for pH adjustment and sampling. Discharge then flows to Pond 7A for final polishing before flowing to a drop inlet sluiceway for final discharge to the Ohio River through NPDES Outfall 013.

An emergency overflow structure/skimmer exists adjacent to the east interior slope of Pond 6. The overflow structure consists of a 60-in. diameter steel vertical standpipe which transitions to a 36-in. lined Corrugated Metal Pipe (CMP). Flow from the emergency overflow is conveyed via the 36-in. CMP to the Pond 7A drop inlet sluiceway described above for final discharge through NPDES Outfall 013.

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 18 March 2016 site visit and our review of available information, Pond 6 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 the environment (Ohio River), as well as potential damage to Pond 7 located immediately to the south of Pond 6.

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 6 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:

