DP&L

Working For You Today And Tomorrow

July 27, 2011

VIA ELECTRONIC DELIVERY

Mr. Stephen Hoffman
U.S. Environmental Protection Agency
Two Potomac Yard
2733 South Crystal Drive
5th Floor, N-5237
Arlington, VA 22202-2733

Dear Mr. Hoffman:

The Dayton Power and Light Company (DP&L) has received the final report dated April 2011 related to the site assessment of the coal combustion residual impoundments at the O.H. Hutchings Generating Station. The site assessment was conducted on August 18, 2010 by U.S. EPA's engineering contractor, AMEC Earth & Environmental, Inc. The cover letter accompanying the final report includes several recommendations related to the operation and maintenance of the impoundments at the station and requests that a response containing specific plans and schedules for addressing the recommendations be submitted to USEPA by July 27, 2011. Enclosed with this letter is a listing of those recommendations along with actions that DP&L is planning or those that are already underway for implementation.

DP&L appreciates this opportunity to respond to the final impoundment assessment report for O.H. Hutchings Station. If you have any questions please contact Ms. Kris Singleton at (937) 865-6215.

Sincerely,

Mark Sizemore

Mark Sizemore
Operations Manager

Cc: JoAnne Rau – DP&L
Kris Singleton – DP&L

DP&L O.H. Hutchings Station Response to Recommendations
Contained in Coal Combustion Surface Impoundments Site Assessment
April 2011 Final Report

### 4.1.1 Hydrologic and Hydraulic Recommendations

*September 2010 Draft Report* - AMEC recommends that an appropriate design storm rainfall and freeboard depth in accordance with MSHA guidelines be applied to the impoundment's watershed to assess whether the dams and decant systems can safely store, control, and discharge the design flow. Based on the size and rating for the three ash ponds, the MSHA design storm would be the ½ PMF. Hydraulic calculations should also be completed to determine the rate at which the discharge structure and associated piping could pass the design storm, if necessary, or draw down elevated water surfaces following such an event. The analysis should consider all critical stages over the life of the pond including full pond conditions.

*Final Report* - Subsequent to submittal of the September 2010 Draft Report, DP&L provided comments to the report dated December 30, 2010. DP&L noted, with respect to hydrologic and hydraulic recommendations for the ponds noted by AMEC in the previous paragraph, that "As these facilities are upland reservoirs which receive minimal direct stormwater inflow, the watershed is non-existent and therefore this recommended analysis does not apply."

AMEC continues to recommend that DP&L conduct hydrologic and hydraulic analyses for each pond at the Hutchings Generating Station to determine pond conditions that would result from a design storm event of ½ PMF. Design storm event rainfall depth and pond specific stage/storage/discharge curves should be developed based on pond geometry and outlet structure capacity. Pond water surface elevations resulting from the design storm routing should be determined and utilized to set a safe and effective operating freeboard depth as set forth by MSHA criteria as outlined previously in this report.

DP&L will perform a hydrologic and hydraulic analysis of these ponds.

### 4.1.2 Geotechnical and Stability Recommendations

*September 2010 Draft Report* - AMEC recommends that stability analyses be completed for the East Primary Settling Pond, West Primary Settling Pond, and Secondary Settling Pond that includes the maximum design water levels and appropriate steady-state phreatic surfaces. Likewise, the stability analyses should consider all critical stages during the life of the

facility, such as maximum pool area and any potential surcharges, as well as likely loading combinations. AMEC recommends that the slope stability analyses include slip surface optimization to allow for noncircular failure surfaces.

*Final Report* - AMEC continues to recommend that the stability analyses described above be performed.

DP&L will retain the services of a qualified firm to perform the requested stability analyses.

### 4.1.3 Monitoring and Instrumentation Recommendations

*September 2010 Draft Report* -AMEC recommends additional instrumentation to monitor slope stability and landslide conditions. In order to monitor these parameters, DP&L should install combination slope inclinometers and additional piezometers in the river side dike of each ash pond. These instruments may be installed within the same borehole. Routine monitoring should be established with corresponding elevations within the ash ponds at the time of the measurement in order to establish an understanding of the embankment behavior. In order to monitor change of water surface, a gauge should be added to the East and West Primary Settling Pond and the Secondary Settling Basin. Routine monitoring should be established and read in conjunction with slope inclinometer and piezometer readings.

*Final Report* - Subsequent to submittal of the September 2010 Draft Report, DP&L provided comments to the report dated December 30, 2010. DP&L noted, with respect to monitoring and instrumentation recommendations for the ponds noted by AMEC in the previous paragraph, that "As there is no indication of movement, the installation of slope inclinometers is not warranted. Note also that only one primary settling pond is located along the river."

AMEC continues to recommend additional monitoring and instrumentation steps be taken as described above.

DP&L will install additional piezometers in conjunction with the stability analyses which will require several borings. DP&L will further evaluate the need for installing slope inclinometers and proceed with installation if it is determined to be beneficial.

### 4.1.4 Inspection Recommendations

*September 2010 Draft Report* - DP&L plant personnel currently perform quarterly and daily inspections of the ash ponds that are not documented. Although daily inspection by DP&L is

commendable, a more detailed and documented record would be appropriate. AMEC recommends that the current inspection program by the plant be expanded to include at least monthly documented inspections which identify potential problems, areas inspected, instrumentation monitoring (when installed) and pond and river levels. Additionally, inspections of the ponds should be performed after significant rainfall events. AMEC understands a Professional Engineer performed an inspection in 2009. We recommend this type of inspection program and report by a Professional Engineer be continued at least annually, in addition to the recommended monthly inspections by facility personnel.

*Final Report* - AMEC continues to recommend changes to the inspection regimen as described above.

DP&L will implement detailed documentation of its ash pond inspections. The ponds will be inspected on a monthly basis by facility personnel. In addition, inspections will be conducted by a Professional Engineer at least annually.