Comments on Martin's Creek

EPA HQ: No comments

EPA Region: No comments

State: See attached document dated November 30, 2009.

Company: See two (2) attached documents: 1) comment document, 2) comments made on draft report itself

November 30, 2009

Pennsylvania Department of Environmental Protection's Comments On:

Draft Report – Coal Combustion Waste Impoundment Dam Assessment Report

Martins Creek Steam Electric Station

Northampton County, Pennsylvania

Report has been prepared for the U.S. Environmental Protection Agency, Washington, D.C. by Dewberry & Davis LLC.

Comments per Section of the Report:

Cover Sheet and Throughout
Pennsylvania Department of Environmental Protection (DEP) recommends removing the reference to the town of Bangor and referencing the site to be located within Lower Mt. Bethel Township, Northampton County, PA.

1.1.5 Conclusions Regarding the Field Observations
DEP was not provided the attachments associated with the draft report, so if not already included, we recommend that a figure drawing be included detailing the location of the "shallow depression" to assist PPL Generation (PPL) and future inspectors in monitoring this area.

1.2.6 Recommendations Regarding the Maintenance and Methods of Operation
Similar to the comment for Section 1.1.5, if not already included, DEP recommends including a figure providing the locations where additional maintenance items are needed.

1.3.1 List of Participants
Please add Jim Aiello to the list of attendees. Mr. Aiello works for PADEP Dam Safety and was present for the assessment.

2.1 Location and General Description
DEP's Water Management Program issued the NPDES permit and maintains the lead jurisdiction for the Industrial Water Treatment Basin (IWTB) facility as it relates to wastewater treatment. In the paragraph discussing the IWTB, bottom of page 2-2, please revise the statement to read "The IWTB is regulated by the PADEP Water Management Program". This same comment applies to the last sentence in Section 9.1 "Surveillance Monitoring" on page 9-1.

2.2 Size and Hazard Classification
The Hazard Potential Classification of the Ash Basin No. 4 Dam was incorrectly recorded within Dam Safety's files. The current approved Emergency Action Plan states that there are up to 50 people that would be affected by a dam failure; therefore, this dam should be assigned a Hazard Potential Classification of "1". This change does not alter the U.S. Army Corps of Engineers classification as Intermediate Size, High Hazard Potential.

3.2 Summary of Local, State and Federal Environmental Permits
Similar to comments for Sections 1.1.5 and 1.2.6, if not already included, DEP recommends that a figure be included detailing the location of where the north and south ends of Basin No. 1 are considered. Also, DEP ask that it be clarified that the south end was previously closed without the placement of one foot of cover soil and regrading via approval of an alternate closure process. The current closure plan under review will incorporate all south end postclosure obligations as well as north end closure/postclosure requirements including any basin-wide requirements such as the outfall structure.

4.1.1 Original Construction
DEP requests that the opening sentence for Ash Basin No. 4 be revised to read "This man-made basin was permitted for construction on March 31, 1988 by the PADEP Dam Safety Program".

4.2.1 Original Operational Procedures
Please incorporate the fact that the original filling operations also allowed for trucked wastes to both basins at least since 1992 in addition to "sluicing" the coal ash/waste mixture to the basins.

5.3 Ash Basin No. 4
DEP allowed PPL to place additional ash from the closure of its coal-fired burners into Basin No. 4 after the date of coal-burning cessation; therefore, the exact date of last disposal of coal ash cannot be confirmed by DEP. This comment pertains to Section 8.1 for Ash Basin No. 4 also.

5.3.2 Outlet Structures
It is stated within the first bullet that "The structure is no longer used for outflow through the bottom discharge pipe". While it is correct that the structure is not currently in use, there is the potential that it could be used during closure/postclosure operations. DEP recommends that the statement be revised to reflect this possibility.

6.1.2 Inflow Design Flood
DEP recommends revising the descriptions for both basins to clarify that the acre-foot number is maximum storage volume.

7.1.4 Factors of Safety and Base Stresses
DEP recommends providing clarification for terms "normal" and "unusual" loading cases. These terms are well known within the dam safety arena, but may be obscure to other environmental professionals or third parties.

8.0 Adequacy of Maintenance and Methods of Operation
DEP concurs with the recommendations in this section related to maintenance.

9.0 Adequacy of Surveillance and Monitoring Program
DEP concurs with the recommendations in this section concerning additional inspections by PPL.

PPL's Comments on Dewberry's September 2009 Draft Report of Martins Creek Assessment of Dam Safety:

Section 1.1.2 & 1.1.3 - Table 1.1.3 indicates Hydrologic/Hydraulic Safety as Insufficient; however, in Sections 1.1.2 and 6.3 the write-up contradicts the table.

Section 1.1.6 - Basin 1 vegetation maintenance. We have submitted a closure application for "natural" closure of the basin which includes leaving the existing vegetation and enhancing the vegetative cover. Based on PPL's experience and our HELP modeling results, this basin will not pond water, therefore, we see no need to limit the vegetation at this basin and our closure plan is to enhance the vegetation.

Section 1.1.7 - Report states that the surveillance program is inadequate; PPL does not agree with the statement. We had been conducting quarterly inspections and earlier this year implemented monthly inspections.

Section 2.1 - 5th paragraph should indicate that our closure plan proposes an "alternate" closure.

Section 2.3 - Paragraph should indicate that the north end of the basin was used for emergency disposal and that the closure plan is for an alternate closure.

Sections 6.1.1 and 6.1.2 - As for hydrology and in-flow calculations, since there is no watershed other than the basin, the required freeboard in the basins (three feet) can handle the probable maximum flood (26 inches or so) assuming not outflow. So no inflow analysis is required. Our permit application just states that fact and the DEP accepts it.

Section 6.3 – In this section, Dewberry indicates that they simulated a ponding of rainwater on the southern end of Basin 1 to a depth of 5.7 ft. Based on PPL's experience and with the HELP modeling that simulated extreme storm events during an unusually wet year, PPL has not nor does not ever expect to have natural precipitation create standing water within any area of the former basin. The basin rarely discharged when PPL was continually sluicing water to the basin, and the limited ponding of water only existed in the northern end.

Section 8.1 - Paragraph should state that the closure plan is an alternate plan.

Section 8.3 – Based on PPL's experience and from the HELP modeling, PPL never expects the basin to pond any water and therefore is requesting the PA DEP Dam Safety not to require regulation of this facility as a dam.

Section 9.3 – PPL does not agree with the statement that our Basin 1 inspection program is inadequate. Need to discuss as in Section 1.1.7. Again, for Basin 1, based on PPL's experience and from the HELP modeling PPL never expects the basin to pond any water and pending approval of the proposed closure plan by PA DEP, PPL does not expect to have requirements to manage this facility as a dam along with it associated monitoring and maintenance requirements.