

US EPA ARCHIVE DOCUMENT

Comments on Mill Creek

EPA HQ Comments - No comments

EPA Region Comments - No comments

State Comments -

From: "Wells, Gary (EEC)" <gary.wells@ky.gov>
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Cc: Stephen Hoffman/DC/USEPA/US@EPA
Date: 11/10/2009 12:03 PM
Subject: RE: Comment Request on EPA's Draft Coal Ash Impoundment Assessment Reports

Jim,

Here are comments from the Draft Report - LG&E Mill Creek Station Report
Inspection date 9-22-09:

On page 11 of the report (LG&E Mill Creek Station Report) this comment was made, it stated the 'location of the "slide" noted in the 2006 report was not identified'. However, reading the 2006 inspection report (not cover letter) it identified the location of a "slide" on the river side of the structure. This is referring to the west embankment, the river side. The 'slide' in the draft report is in a similar location (page 1 of the inspection checklist). The inspection checklist says, 'A shallow slough was observed on the west d/s slope. The slough appears to be an old occurrence as evidenced by heavy vegetation over 'slide' areas'. KDEP does mention the location of the 'slide' noted in the 2006 report and is similar to the same location that was recently inspected and referred to in the report.

Another comment in the report that needs clarification is found on page 11. It states, 'however, no records of completion of the recommended maintenance were noted'. In our report in this case, the deficiency (overgrown condition) was never resolved, so there is no record of completion. Continued inspections will record deficiencies (minor) until the recommended maintenance is completed or a notice of violation is given based on the severity of the deficiency. A separate record of completion is unnecessary because the next inspection would omit the deficiency (as completed) from the report or a continuance of deficiencies from earlier inspections.

Gary Wells, P.E.

Dam Safety and Floodplain Compliance

Division of Water

502 564-3410 ext 4595

Company Comments - See attached document date November 13, 2009.



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Mr. Stephen Hoffman
U.S. Environmental Protection Agency
Two Potomac Yard
2733 South Crystal Drive
5th Floor, N-5237
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Date: November 13, 2009

Re: LG&E Comments -Draft Assessment Report for Louisville Gas & Electric's Mill Creek Facility

Dear Mr. Hoffman:

On October 30, 2009, the U.S. Environmental Protection Agency ("EPA") provided a draft report to Louisville Gas & Electric (LG&E) regarding coal combustion product impoundment facilities at LG&E's Mill Creek Power Station. The draft report was prepared by O'Brien & Gere and was dated October 2009. This letter provides the comments of LG&E included as an attachment.

Thank you for the opportunity to comment. If you have any questions regarding these comments, please contact me.

Thank you,

A handwritten signature in blue ink that reads "David J. Millay". The signature is fluid and cursive, with the first name "David" being the most prominent.

David Millay, PE
Civil Engineer
502-627-2468

Attachment

Cc: James Kohler, U.S. Environmental Protection Agency
John Voyles, E.ON U.S.
Michael Winkler, E.ON U.S.

LG&E Comments on Draft Report Dam Safety Assessment of CCW Impoundments, LG&E Mill Creek Station Report:

General Statement:

The company suggests that Coal Combustion Byproducts (CCPs) is the appropriate name for the residuals or by-products from the combustion of coal, including, but not limited to, fly ash, bottom ash, boiler slag, or flue gas emission controls residuals.

Page 3, paragraph 1:

Note:

1. Mill Creek Unit 2 began operating in 1974.

Page 3, Section 2.1.1, Ash Pond last paragraph, next to the last sentence:

"...placed in the on-site landfill located in the ~~southwest~~ southeast portion of the plant."

Page 4, paragraph, section 2.1.2, Other Impoundments, paragraph 4, last sentence:

"...below grade with a low embankment ~~less~~ more than about 5 feet in height..."

Page 5, section 2.2.1, Ash Pond, third and fifth sentence:

"...the hazard potential rating recommended for the Ash Pond is ~~HIGH~~ SIGNIFICANT."

"The rating of ~~high~~ significant is assigned due to the close proximity (~~less than 150 feet~~) of a residential development (~~approximately 500 feet~~) and a school building (~~approximately 1000 feet~~) to the east of the Ash Pond."

Notes:

1. The shortest distance from the Mill Creek Ash Pond to the nearest residence is approximately 500 feet based on measurements from a scaled aerial image and data from the Louisville Jefferson County Information Consortium (LOJIC).
2. The shortest distance from the Mill Creek Ash Pond measured from the downstream toe to the nearest school building, Robert Frost Middle School is approximately 1000 feet based on measurements from a scaled aerial image and data from the Louisville Jefferson County Information Consortium (LOJIC).
3. The draft report notes the dam Hazard Potential Classification as "Significant" on the Coal Combustion Dam Inspection Checklist Form in Appendix A (circled in red in the top right corner on the front page of the form) and again on page 2 of the Coal Combustion Waste (CCW) Impoundment Inspection form ("X" marked on the third line).

Page 5, Section 2.2.2, Other Impoundments, paragraph 1, second sentence:

"This impoundment is incised on all sides except the west side, which is diked ~~no~~ more than 5 feet above the toe."

Note:

1. The height of the east embankment of the Construction Runoff Pond (CRP) is approximately 20 feet.

Page 7, Section 2.3.3, only paragraph, second to last sentence:

"Both of the pond discharges ultimately outfall to the Ohio River and are permitted under KPDES permit #KY00032~~21~~."

Note: The correct permit number is #KY0003221.

Page 8, Table 3 Summary of Ash Pond Documents Reviewed:

Notes:

1. Correct date on Ash Pond Volume Surveys from 1192 to 1992
2. Correct spelling Geotechnical Investigation

Page 9, paragraph 1:

Note:

1. Unit 3 was brought online in June 1978.

Page 9, paragraph 5:

"In ~~December~~ 1978, the west outboard slope of the original Unit 1 and 2 ash pond failed after a drawdown of a ~~spring~~ flood of the Ohio River."

Page 10, Section 3.1.3, Modifications from Original Construction, paragraph 2:

"In ~~2008~~ 2006, an ash divider dike was constructed across the northern portion of the ash pond. This divider dike was used to isolate the northern end of the pond for dewatering and excavation of accumulated bottom ash in ~~2009~~ 2008, which was exported off-site for beneficial use."

Page 11, Section 3.2, Previous Inspections, paragraph 1, third sentence:

"The ~~two~~ most recent state inspections ~~was~~ ~~were~~ performed on ~~October 16, 2008 and~~ November 4, 2007."

Page 11, Section 3.2, Previous Inspections, paragraph 2, fourth sentence:

"The ~~most recent~~ state inspection in November of 2007 indicated the dam to be in "excellent" condition."

Page 12:

Notes:

1. The company expects to evaluate the need for a the Mill Creek Ash Pond Operation and Maintenance Plan during 2010.
2. The company expects to complete the Emergency Action Plan (EAP) during the first quarter of 2010.
3. The 2007 topographic map reflects the current configuration of the Mill Creek Ash Pond, therefore the current topographic map is complete.

Page 13 - Table 4, List of Participants:

Notes:

1. Correct spelling of Mike Kirkland.
2. Participant also included Price Dunlap, LG&E - Mill Creek, Title - Engineering Co-op.

Page 17, Section 6.3, paragraph 1:

"O'Brien & Gere recommends continued participation in state ~~bi-annual~~ **biennial** inspections. Consideration should also be given to independent inspections, such as the one conducted by ATC Associates, Inc. by licensed dam safety engineers on at least a ~~bi-annual~~ **biennial** basis."

Page 17,18 , Section 6.3, paragraph 2, second and third sentence:

"...it may be prudent to perform an updated slope stability **and seismic stability** analysis on critical sections of the north and west dikes..."

~~"In addition, the seismic stability of the embankments should be evaluated, since~~ It does not appear that a previous study had been performed for earthquake loading."

Page 18, Section 6.4, paragraph 1, second sentence:

"Based on our conversations with LG&E personnel, it is anticipated that the refilling of this area will be completed ~~before the end of 2009 or shortly thereafter.~~ in coordination with the US Army Corps of Engineers (USACE) and the Louisville Metropolitan Sewer District (MSD)."

Page 18, Section 6.4, paragraph 4:

"If the ash divider dike is expected to remain in service for ~~more than one month~~ **an extended time**, the outboard slope of the dike..."