

SITE VISIT - MEMORANDUM

DATE: September 27, 2011

TO: Ameren - Labadie Plant File

FROM: Tom Siegel, EE III
DNR, St. Louis Regional Office

SUBJECT: Ameren Labadie Site Visit, 9/20/11

People present during the site visit included John Pozzo, Mike Bollinger, Matthew Frerking and Mike Hanneken from Ameren and Department of Natural Resources staff, Refaat Mefrakis (WPP), Scott Hoffman and Tom Siegel from SLRO.

The purpose of the visit was to assess the seeps in the berm at the Labadie Power plant ash drying ponds. Included with this memo is a satellite photo which shows the plant, coal pile, bottom ash pond, fly ash pond and the Missouri River (Attached).

The pictures in this memo were taken by Scott Hoffman during the 9/20/11 visit to document the visual findings of the visit.

Information obtained from Ameren during the visit indicated that the large bottom ash pond shown on the attached photo is not lined and does not have a clay seal. According to Ameren, the small fly ash pond shown on the photo does have a 60 mil synthetic liner.

We found a small seep in the vicinity of the 24-inch discharge pipe that travels through the berm wall of the bottom ash pond. This discharge pipe is the permitted outfall (002) for the ash pond. The discharge from this outfall is about 25 million gallons per day (**Picture 1**). There is a low lying area below the discharge pipe where the pipe rests on a rock and soil support at the top of the bank of the unnamed tributary to the Missouri River.

Picture #1



This low lying area collects water from precipitation, flush water from the sample tap and a small amount of water from a leaking riser pipe whose source of water is the discharge pipe. This water seeps through the pipe support and dampens the stream bank under the discharge pipe. **(Picture 2)**

Picture #2



Two visible seeps were located along the southwest toe of the bottom ash pond berm (see attached satellite photo). One seep was very small with the discharge rate unknown and the other seep was discharging about 30 gallons per minute, according to Ameren (**Picture 3, 4**). The effluent from both seeps was running clear and discharging to a wetlands area on Ameren property and isolated from the Missouri River except during flood conditions. According to Ameren the river flood level would have to be approximately 479 – 480 feet before river water would back up into the wetland.

Picture #3



Picture #4



According to Ameren, the original 30 gallon per minute seep reported in 1992 at the south corner of the bottom ash pond (see attached satellite photo) had ceased in 2008 when Ameren filled the area in anticipation of an ash reuse project. The project lost funding **(Picture 5)**.

Picture #5



According to Ameren, it has begun design on a 500 foot long, 30 foot deep “cut off wall” to stop the water seeping from the along the southwest side of the bottom ash pond.

TS/ka

Attachments

c: Refaat Mefrakis, WPP
Scott Hoffman, SLRO