

City of Columbia

701 East Broadway, Columbia, Missouri 65201

Department Source: City Utilities - Water and Light

To: City Council

From: City Manager & Staff

Council Meeting Date: November 6, 2017

Re: Disposal of Coal Combustion Residuals at Columbia Landfill

Executive Summary

Staff has prepared for Council consideration a report detailing a plan for the disposal of coal combustion residuals (CCR) at the Columbia Landfill.

Discussion

On March 10, 2017 an interested parties meeting was held at the Municipal Power Plant regarding the More's Lake restoration project. At the meeting, plans to remove the ash from More's Lake, dispose of the ash in the City of Columbia's landfill, and restore the lake for storm water retention were discussed. In April of 2017 a public hearing was held for the More's Lake remediation and site restoration project at the Municipal Power Plant. As part of the public hearing, the appropriation of funds for excavation, hauling and disposal of coal combustion residuals was approved.

The Electric Production Division has completed a trial of disposal of coal combustion residuals (CCRs) from More's Lake at the Municipal Power Plant (MPP) to the Columbia Landfill. The two week trial ran from August 28 through September 8. Over the nine working day period, 4,900 yards, weighing 4,526 tons of CCRs were loaded at the MPP and transported to the Columbia Landfill for disposal. From an operations point of view, the trial went well for both the Municipal Power Plant and the Columbia Landfill.

The cost of hauling and disposing of the CCRs was \$45.77 per cubic yard or \$49.55 per ton based upon the current \$45.76 tipping fee at the Columbia Landfill.

Tipping fees increased to \$52.00 per ton on October 1st. Given the new tipping fee the cost would be \$51.54 per cubic yard or \$55.79 per ton.

Burns & McDonnell, the consulting engineer for the project, estimated the total volume of CCRs and other materials that required disposal at More's Lake to be about 90,000 cubic yards.

Other than disposal of the CCRs in the Columbia Landfill, there are only two other known possible uses for the CCRs. In June 2017, the City received one response from a Request for Proposal for potential beneficial use of the CCRs. The proposal is contingent upon the proposer receiving permission from the Kansas Department of Natural Resources, which has yet to be received. Any possible approval from Kansas is still many weeks away. Should approval be obtained, the cost is expected to be \$35 per cubic yard.



City of Columbia

701 East Broadway, Columbia, Missouri 65201

The only other use is for construction of a haul road at the Columbia Landfill as part of the Cell #6 project. If feasible, this will use only a small portion of the CCR material available, but will reduce the amount of CCRs to be directly disposed of into the Landfill.

The City is under a regulatory deadline to complete the More's Lake remediation project. Without other suitable options at this point in time, staff proposes to continue to haul CCRs to the City Landfill at a moderate rate. Should a potential beneficial use option in Kansas be approved, a switch to that less expensive option will be made. This will allow the City to complete the remediation project within the regulatory deadline.

Fiscal Impact

Short-Term Impact: None Long-Term Impact: None

Strategic & Comprehensive Plan Impacts

Strategic Plan Impacts:

Primary Impact: Not Applicable, Secondary Impact: Not Applicable, Tertiary Impact: Not Applicable

Comprehensive Plan Impacts:

Primary Impact: Not Applicable, Secondary Impact: Not applicable, Tertiary Impact: Not Applicable

Legislative History

Date	Action
June 20, 2016	B149-16 Authorizing an agreement for professional engineering services with Burns & McDonnell Engineering Company, Inc. for the Moore's Lake remediation and site restoration project at the Municipal Power Plant.
January 3, 2017	B345-16 Authorizing a first addendum to agreement for professional engineering services with Burns & McDonnell Engineering Company, Inc. for the More's Lake remediation and site restoration project at the Municipal Power Plant.
April 17, 2017	PH9-17 Proposed construction of the More's Lake remediation and site restoration project at the Municipal Power Plant.
April 17, 2017	B106-17 Appropriating funds for excavation, hauling and disposal of coal combustion residuals as part of the More's Lake remediation and site restoration project at the Municipal Power Plant.

Suggested Council Action

No action required.