

# Status Update Report Phase I Trimble County Landfill & CCRT Project Quarterly Report – Update #4 January 30, 2017

#### **Executive Summary**

This report covers progress on the project during the fourth quarter of 2016, as well as listing any significant events that have occurred to date. Safety performance to date remains excellent with a year-to-date Recordable Incident Rate of 0.00 and an inception-to-date Recordable Incident Rate of 0.00, compared to the industry average of 3.90. Total projected costs remains \$321.9M (net)<sup>1</sup> as provided in Case 2015-00194. Total spend to date has increased from \$63.6M (net) last quarter to \$82.7M (net) through December 31, 2016.

Communications with AMEC - Foster Wheeler (AMEC) (the primary Engineering, Procurement, and Construction (EPC) contractor for the Coal Combustion Residual Treatment System (CCRT) scope of work) continue relative to project management coordination and engineering of final CCRT equipment layouts. The contractual in-service dates remain the fall of 2017 for the Unit 1 Bottom Ash Subproject and the summer of 2018 for the CCRT Fly Ash and Gypsum Subprojects. The Transport (road to landfill, bridge and pipe conveyor) subproject remains late first quarter of 2019 due to the delays for the issuance of the landfill permits.

The start of construction of the road and bridge scopes remain dependent upon the issuance of the Kentucky Division of Waste Management (KYDWM) landfill permit and the US Army Corps of Engineers' (COE) 404 permit. The COE landfill permitting activities with the 404 Permit are ongoing with the draft permit issuance still expected during the first quarter 2017. The Project background information (i.e., scope, 1Q 2016 contract awards, conceptual layouts, permitting status) is located in the Appendix.

## **CCRT & Transport Quarterly Status Update**

LG&E and KU ("Companies") continue to hold monthly project review meetings with AMEC. Weekly project engineering meetings continue and current activities include items such as the review of general arrangements, model reviews and final equipment sizing. Engineering and design work continues for major components: (1) Unit 1 bottom ash submerged chain conveyor awarded to United Conveyor Corporation (UCC); (2) fly ash conditioner and conveying system awarded to UCC; (3) gypsum dewatering vacuum belt filter system awarded to FLSmidth; (4)

<sup>&</sup>lt;sup>1</sup> Co-Owners of the Trimble County plant: Illinois Municipal Electric Agency (IMEA) and Indiana Municipal Power Agency (IMPA) are responsible for 25%. IMEA owns 12.12% and IMPA owns 12.88%. Co-owner share is not included in the costs provided in this report.



gypsum portal scraper reclaimer awarded to Ameco (the same vendor for Ghent's recently commissioned gypsum reclaimer); and (5) pipe conveyor awarded to Beumer Group (same vendor as Ghent's recently commissioned pipe conveyor).

AMEC, with involvement from the Companies, continues the process of procuring equipment and materials, as well as the electrical control subcontract work. Ongoing construction and design activities include site work to grade the CCRT Area, rerouting existing underground utilities in the CCRT Area, constructing underground electrical duct banks, concrete foundations for equipment and tanks, as well as reviewing the Distributed Controls System remote input and output point descriptions and installation of site construction power.

The CCR Transport scope has been contractually defined and included in the EPC contract with AMEC. Procurement and construction is not scheduled to start until the necessary permits from the KDWM and COE are received or imminent; this timing is accounted for in the EPC schedule. The schedule reflects current permit issuance timeframes. The Companies have released AMEC to order the pipe conveyor to maintain the pipe conveyor delivery schedule. Site photographs for the CCRT and Transport systems are provided below:



CCRT Project Area Looking North





CCRT Project Area Looking South

## Landfill Quarterly Status Update

Permitting:

The Kentucky Division of Water issued the approved 401 Dam Safety Permit for the Landfill Sediment Pond dam on August 12, 2016. Also, the first of the three major permits for the work, the Kentucky Division of Water's 401 Water Quality Certification, was issued on October 24, 2016.

The KYDWM issued the draft landfill permit documents on August 8, 2016. KYDWM held a public hearing regarding the draft permit at the Trimble County High School on August 30, 2016. The public comment period ended September 12, 2016. The Companies are now expecting approval in the first quarter of 2017.

As part of the TC Landfill 404 Permit review, the COE and Kentucky Heritage Council (KHC) investigate the archaeological/historic structural aspects of the project relative to the Section 106 review. One of the last steps is the review and concurrence by the KHC to the Section 106 review. The COE sent their favorable recommendation to the KHC on April 15, 2016 and requested their review within 30 days. The KHC sent their favorable recommendation letter to the COE on May 27, 2016 (one week late) concurring with the COE. The next step was the Consulting Parties Meeting, which took place on July 21, 2016. COE subsequently sent an email to the Consulting Parties on January 4, 2017 for final comment. The COE has all of the needed documents to process for the draft 404 Permit.



The Companies previously expected approval from the COE related to the 404 permit in the fourth quarter of 2016; however, recent meetings with the COE now indicate that the 404 permit should be expected late in the first quarter of 2017.

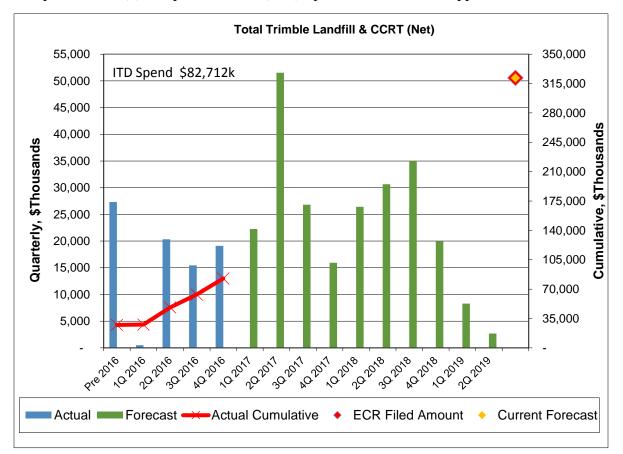
A permit listing is included as Table 1 in the Appendix.

Construction:

B&McD and GAI continued detailed design, engineering and technical specifications development for the Leachate Pump Structure and Landfill Phase 1A construction drawings, respectively. The Companies continue to prequalify potential bidders, prepare contract documents and review technical specifications for the TC Landfill Phase 1A project. With the permits expected to be received in March 2017, the Companies plan to issue the RFQ to the market in February 2017 with an award targeted for May 2017.

#### Financials

The forecasted cost for Phase I of the Landfill and the CCRT and Transport scopes remains \$321.9M (net). Total spend through December 31, 2016 is \$82.7M (net) (KU \$39.7M / LG&E \$43.0M). Please note for the graph below: (1) the chart reflects the awarded EPC contract for the CCRT that was awarded to AMEC; (2) the chart includes a symbol () to show the current forecast to completion; and (3) Inception-to-Date (ITD) Spend is shown in the upper left corner.





## **Planned Activities for Next Quarter**

#### **CCRT and Transport**

In coordination with the Companies' Owner's Engineer, Burns & McDonnell (B&McD), review of AMEC's engineering and procurement documents will continue. AMEC continues to refine its equipment and piping design model based on field data laser scans and site surveys. B&McD, AMEC and the Companies continue to review the Distributed Controls System hardware and software configuration, design for all major foundations, water balances, and reclaim water piping material specifications. AMEC will continue release of purchase orders for equipment and material during the first quarter of 2017. AMEC will continue site work activities to grade the CCRT Area, rerouting existing underground utilities in the CCRT Area, constructing underground electrical duct bank and installing concrete foundations for equipment in the first quarter of 2017.

#### Landfill

The Companies continue to supply information to address questions from the COE for the 404 permit issuance. To prepare for the Landfill RFQ issuance in the first quarter of 2017, the Companies and GAI will continue detailed planning, review of engineering submittals, and evaluation of potential bidders. Final review of the technical specifications is now planned for January 2017. Commercial documents required for the issuance of the Landfill RFQ are nearly complete. Evaluation of Stream Mitigation "in-lieu of fees" or acquisition of banked credits will also continue. The Companies continue to pursue the purchase of land within close proximity of the landfill area for future clay/soil borrow for the long-term operation of the landfill and to provide a buffer area between local residents and the future landfill operation.



## APPENDIX

#### Scope

The Trimble County Landfill and CCRT Project scope comprises three sub-scopes: CCR Treatment facilities, CCR Transport system and Phase I of a dry CCR Landfill.

The CCR Treatment facilities include the Unit 1 bottom ash dewatering system, conversion of station fly ash transport from wet to dry conveyance, fly ash storage and treatment equipment and the station gypsum dewatering system and associated gypsum storage/reclaim system. The CCR Transport system includes a pipe conveyor (approximately 1.5 miles) from the CCR Treatment area to the landfill location, a bridge over KY1838, and a road from the station to the new dry CCR landfill. The CCR Landfill includes Phase I of a new dry CCR landfill that is designed to receive and manage CCR generated over approximately 37 years. The Landfill will be developed in four construction phases with each fully integrated as an extension of the adjacent landfill phase or cell. Only Phase I is included in the CCRT and Landfill project with this CPCN.

#### **Previously Reported Contract Awards**

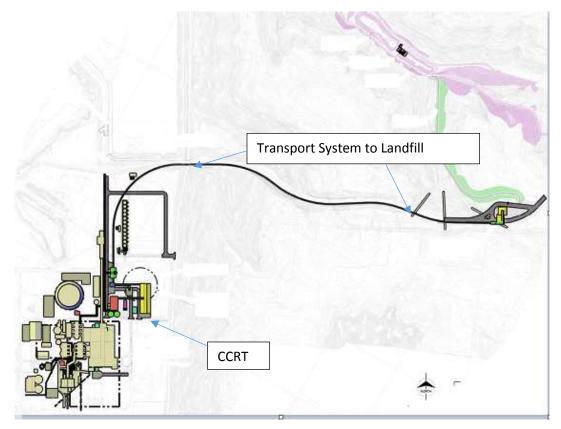
The CCRT Owner's Engineer contract was awarded to B&McD. B&McD has supported various projects for LG&E and KU, and recently supported the Trimble County Unit 1 PJFF capital project. B&McD assisted in the specification development for the CCRT and bottom ash scopes of work, and assisted in the bid evaluations and EPC finalization.

The Landfill Owner's Engineer contract was awarded to GAI. GAI has been the Engineer of Record through the permitting and landfill design phases, as well as the engineering firm that developed the specifications for the road and bridge work. It is anticipated that GAI will be retained to assist construction oversight and adherence to the specifications and permit conditions.

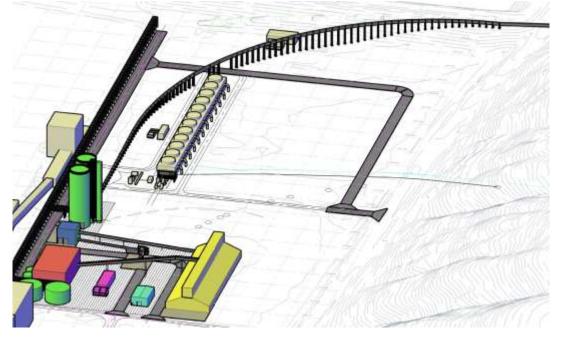
The CCRT and Transport portion of the project has been awarded to AMEC. The initial RFQ was issued in July 2015. Four (4) bids were received in October 2015. Negotiations with the shortlisted bidders began in January 2016 and AMEC emerged as the best evaluated bidder. Final negotiations and finalization of scope continued with AMEC through March 2016 and an EPC was executed with AMEC on April 7, 2016.



# **Conceptual Site Layout Graphics**



Graphic 1 - Conceptual Layout of the CCRT and Transport System



Graphic 2 - Conceptual 3D Site Layout of the CCRT



Required Regulatory Permit	Submitted	Date Submitted	Date Received Or Current Date Expected By
Kentucky Division of Waste Management Landfill Permit	Yes	January 3, 2014	January 2017
US Army Corps of Engineers 404 Permit*	Yes	April 25, 2014	<u>March 2017</u>
US Army Corps of Engineers Nationwide Permit (Monitoring Wells)	Yes	September 9, 2013	September 2014
Kentucky Division of Water 401 Water Quality Certificate	Yes	April 25, 2014	<u>October 24, 2016</u>
Kentucky Division of Water Dam Safety Permit	Yes	<u>February 15, 2016</u>	<u>August 2016</u>
Kentucky Division of Water Flood Plain*	Yes	<u>April 2017</u>	November 2017
Kentucky Transportation Cabinet Bridge Permit	Yes	January 30, 2014	February 2015
Kentucky Division for Air Quality Title V Revised Air Permit	Yes	October 12, 2015	December 2015

The underlined dates reflect updates from Application Exhibit 3 in Case No. 2015-00156 filed on May 22, 2015, which the Commission by order later consolidated into Case No. 2015-00194.

\*This permit is not required for landfill construction.