Phase I Trimble County Landfill & CCRT Project

Quarterly Report – Update #27

October 31, 2022

Executive Summary

This report covers LG&E and KU's ("Companies") progress on the Phase I Trimble County Landfill and CCRT[1] Project through the third quarter of 2022.

Safety performance to date remains excellent with an Inception-to-Date OSHA Recordable Incident Rate of 0.54 compared to the industry average of 3.2, and 0.54 as reported for the project in the last report. The 2022 Year-to-Date Rate is 0.00.

The project's total forecasted cost slightly increased from $314.9 million (net) as reported last quarter to $316.9 million (net), compared to $321.9 million (net) as provided in Case No. 2015-00194. The forecast reflects that all major contracts have been awarded, accounts for spend and progress to date on construction, incorporates resolution on cost and schedule from impacts due to geotechnical quantity differences, as well as the delays attributed to the record precipitation experienced to date on the project. Total spend-to-date has increased from $312.4 million (net) to $314.6 million (net) through September 30, 2022.

As previously reported, all necessary permits to construct the Project have been received. Project background information (i.e., scope, contract awards, conceptual design layouts, and permitting status) are located in the Appendix.

With regards to the CCRT subprojects, all subprojects (i.e., Unit 1 bottom ash, dry fly ash, gypsum dewatering, and pipe conveyor systems) are in commercial operation and have achieved final completion. The remaining activities on the CCRT subprojects are associated with addressing minor warranty items.

Construction on the landfill footprint subproject scope was completed by Charah LLC ("Charah") in December 2021. The Companies contracted with Tetra Tech to maintain the landfill site and to install a rain cover to assist with erosion control. Tetra Tech completed the rain cover project in September 2022.

[1] The Coal Combustion Residuals Treatment ("CCRT") subproject scope is described in detail in the Appendix found on page 6.

CCRT & Transport Quarterly Status Update

The procurement and construction status for the CCRT subprojects are summarized in the table below:

Equipment	Awarded Contractor	Status
Unit 1 Bottom Ash Submerged Chain Conveyor	United Conveyor Corporation	Placed into Commercial Operation in November 2017
Fly Ash Conditioner and Conveying System	United Conveyor Corporation	Placed into Commercial Operation in April 2019
Gypsum Dewatering Vacuum Belt Filter System	FLSmidth	Placed into Commercial Operation in April 2019
Gypsum Portal Scraper Reclaimer	Ameco (same vendor as Ghent's portal reclaimer commissioned in December 2014)	Placed into Commercial Operation in April 2019
Pipe Conveyor	Beumer Group (same vendor as Ghent's pipe conveyor commissioned in December 2014)	Placed into Commercial Operation in January 2020

Landfill Quarterly Status Update

Charah achieved Final Completion on July 27, 2022.

AMEC Foster Wheeler Environment & Infrastructure's ("AMEC") construction quality assurance activities for the landfill this quarter included visual inspections, attending meetings, and compiling testing data to be incorporated into a Construction Progress Report ("CPR").

GAI Consultants ("GAI") Owner Engineer activities for the landfill this quarter included reviewing as built information, updated design drawings, development of the CPR (operating permit). The CPR is anticipated to be submitted to Kentucky Division of Waste Management ("DWM") in the fourth quarter of 2022. GAI also provided owner's engineering services for the construction of the landfill rain cover project which has been completed.

Tetra Tech ("TT") was awarded the rain cover construction project in May 2022 and completed this work during September 2022.

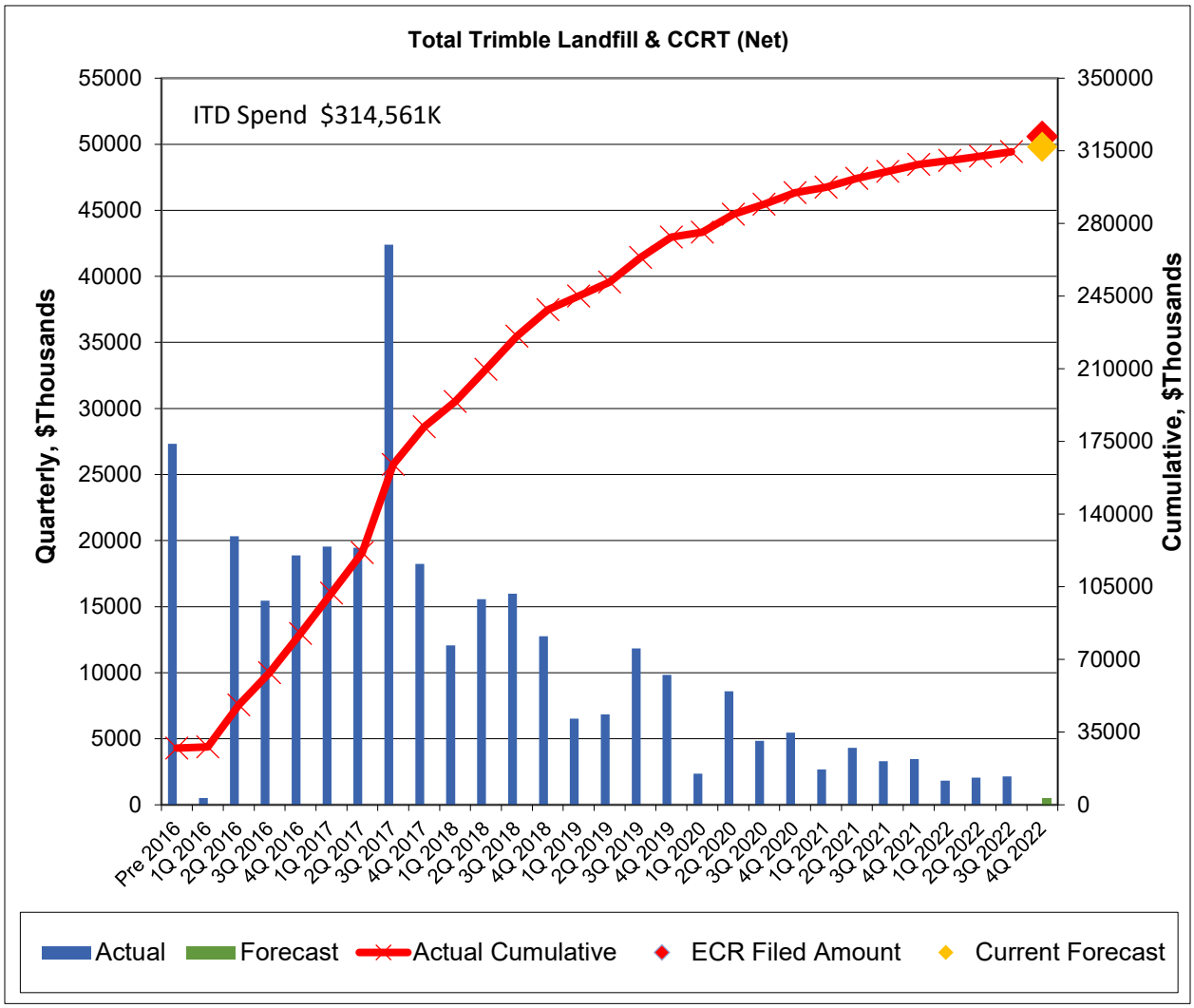
Project Engineering competitively bid a single contract that includes several small Balance of Plant ("BOP") projects that were outside of Charah's Landfill Phase I scope of work. The BOP projects will address minor scope items identified during execution of the work. Project Engineering is in final negotiations with the short-listed bidder. The slight increase in the project forecast is directly related to the minor BOP projects.

CCR Landfill Overview – View Looking North July 2022

CCR Landfill Overview – View Looking North October 2022

Financials

The project's total forecasted cost slightly increased from $314.9 million (net) as reported last quarter to $316.9 million (net), compared to $321.9 million (net) as provided in Case No. 2015-00194. Total spend-to-date has increased from $312.4 million (net) to $314.6 million (net) through September 30, 2022. Notes for the graph below: (1) includes a symbol ( ) to show the current forecast to completion, (2) Inception-to-Date ("ITD") Spend is shown in the upper left corner, and (3) the cash flow now incorporates the delays from all past weather events and differences in geotechnical "as found" conditions to bid geotechnical data.



Planned Activities for Next Quarter

CCRT

AMEC continues to address minor warranty items.

Transport

Nothing planned for next quarter as AMEC has addressed all minor warranty items.

Landfill

Project Engineering will award a single contract that includes several small Balance of Plant ("BOP") projects that were outside of Charah's Landfill Phase I scope of work. The BOP projects will address minor scope issues identified during execution of the work.

APPENDIX

Scope

The Trimble County Landfill and CCRT Project scopes include: 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 KY 1838, 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 multiple 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. The certificate of public convenience and necessity for this project was awarded in Case Nos. 2009-00197 and 2009-00198 and affirmed in Case No. 2015-00194.

Previously Reported Contract Awards

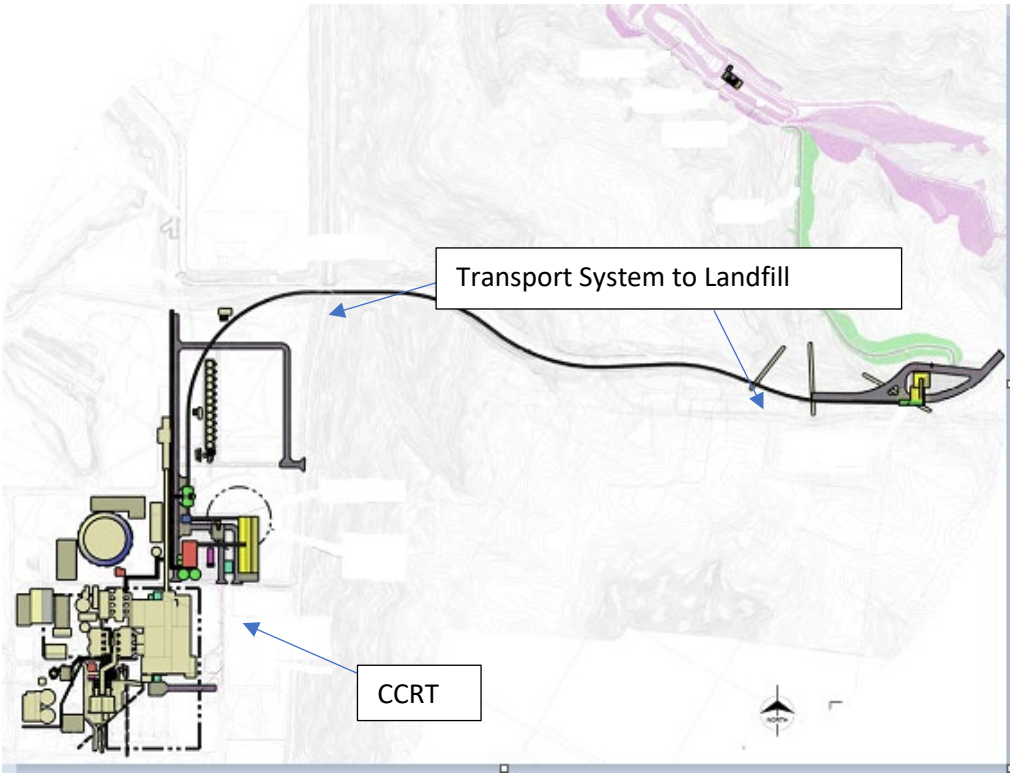
The CCRT Owner's Engineer contract was awarded to B&McD. B&McD has supported various projects for LG&E and KU, and recently supported the Trimble County Unit 1 PJFF capital project. B&McD assisted in the specification development for the CCRT and bottom ash scopes of work and assisted in the bid evaluations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

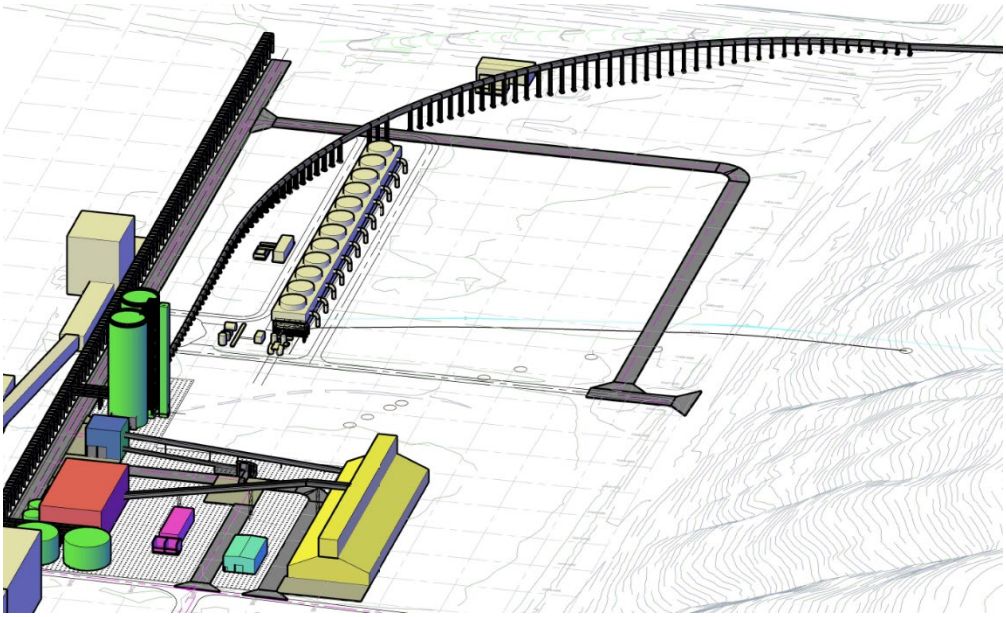
The CCRT and Transport portion of the project was awarded to AMEC. An EPC was executed with AMEC on April 7, 2016. AMEC has performed very well for the Companies in the recent past with completion of the E.W. Brown Unit 3 and Trimble County Unit 1 baghouse projects. AMEC was also awarded the CCR Rule Process Water System projects for Trimble County and Mill Creek generating stations.

The Phase I Landfill portion of the project was awarded to Charah. Charah has previously completed successful projects for the Companies, such as the Ghent and E.W. Brown Landfill Phase I projects.

Conceptual Site Layout Graphics



Graphic 1 - Conceptual Layout of the CCRT and Transport System



Graphic 2 - Conceptual 3D Site Layout of the CCRT

Table 1 - Landfill Permitting Status

Required Regulatory Permit	Submitted	Date Submitted	Date Received
Kentucky Division of Waste Management Landfill Permit	Yes	January 3, 2014	February 2017
US Army Corps of Engineers 404 Permit	Yes	April 25, 2014	June 28, 2017
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	October 24, 2016
Kentucky Division of Water Dam Safety Permit	Yes	February 15, 2016	August 2016
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

Note: 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.