

Phase I Trimble County Landfill & CCRT Project

Quarterly Report – Update #19

October 30, 2020

Executive Summary

This report covers LG&E and KU's ("Companies") progress on the Phase I Trimble County Landfill and CCRT¹ Project through the third quarter of 2020.

Safety performance to date remains excellent with an Inception-to-Date OSHA Recordable Incident Rate of 0.47, compared to the industry average of 3.2 and 0.47 as reported for the project in the last report. The Year-to-Date Rate is 0.0.

The Project's total forecasted cost remains \$307.6 million (net),² 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 \$284.5 million (net) to \$289.3 million (net) through September 30, 2020.

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 only significant scope that remains to be completed is the leachate pond pump and final site cleanup. Construction on the CCR Transport subproject scope (i.e., CCR pipe conveyor, bridge and road) was fully commissioned and placed into service in January 2020. The new bridge continues to be utilized for construction traffic to reduce impacts to local roads.

Construction on the landfill subproject scope continues by Charah LLC ("Charah"), a local company. Charah continues maintaining site erosion control measures, constructing storm water collection channels and ponds, and installing piping for the landfill underdrain system. The Companies continue to intermittently discuss land purchases with a few property owners adjacent to the future landfill as it relates to providing additional buffer areas between the landfill and nearby residents.

The Companies continue to monitor the COVID-19 pandemic. To date, there have been no impacts to the project.

¹ The Coal Combustion Residuals Treatment ("CCRT") subproject scope is described in detail in the Appendix found on page 10.

² 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 shares are not included in the costs provided in this report.



CCRT & Transport Quarterly Status Update

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	

The procurement and construction status for the major equipment is summarized in the table below:

AMEC, with involvement from the Companies, has completed engineering activities including incorporating the "as built" conditions into the final documentation for the Fly Ash, Gypsum and Transport subprojects. Final turnover documentation was issued to the Companies and has been accepted. The focus of the CCRT & Transport subprojects, during the quarter, involved addressing stormwater and erosion issues along the haul road corridor and final site cleanup. There are a few minor punch-list and warranty items associated with spare parts and leachate pond pump installation that are expected to be completed during the fourth quarter of 2020.



Landfill Quarterly Status Update

Charah continues to receive deliveries of landfill infrastructure components including underdrain piping and rock. Charah continues grading slopes, constructing permanent storm water collection channels and ponds, and installing underdrain piping. Overall progress on the landfill went well during the quarter with Charah completing mass fill placement activities, installing the composite liner system in the leachate pond, and installing the fabric-form in the sediment basin. Fabric-form installation in storm water collection channels is progressing well and is now planned to be completed during the fourth quarter instead of the third quarter of 2020 due to rainfall events during spring/early summer. The Companies, Charah, and the design engineer (GAI Consultants) determined an appropriate source for the sand to be used in the leachate collection system. Due to schedule impacts from the additional liner underdrain piping required throughout the landfill cell, the composite liner system work has been pushed to the spring of 2021 and therefore, deliveries of sand have been pushed out accordingly. Charah continues making necessary adjustments to their work plan to mitigate schedule impacts from spring/early summer rain events to date and the additional underdrain piping installation work. No impacts to operations are expected from the implementation of Charah's new work plan as they now are forecasting substantial completion (finalization of the landfill cell) in the fourth quarter of 2021 with final completion (final grading, finalization of haul roads, seeding) also occurring in the fourth quarter of 2021.

AMEC Foster Wheeler Environment & Infrastructure's construction quality assurance activities for the landfill this quarter included visual inspections, testing compaction of fill material, lab testing gypsum for use in the leachate collection system, inspection and testing of leachate pond composite liner system components, attending meetings, and reviewing informational submittals and drawings.





CCR Landfill Overview – View Looking Toward Station (Looking West) – June 2020



CCR Landfill Overview – View Looking Toward Station (Looking East) – September 2020





CCR Landfill Overview – View Looking North East – June 2020

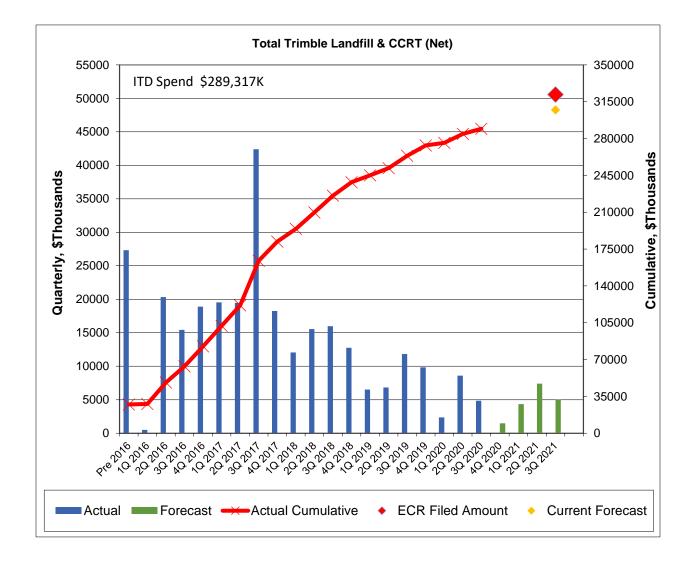


CCR Landfill Overview – View Looking South West – September 2020



Financials

The Project's total forecasted cost remains \$307.6 million (net) and remains a reduction from \$321.9 million (net) as provided in Case No. 2015-00194. The forecast reflects all major contracts that have been awarded, as well as spend and progress to date on construction, including all impacts from the record rainfall over the project construction period to date. Total spend to date has increased from \$284.5 million (net) to \$289.3 million (net) through September 30, 2020. Notes for the graph below: (1) includes a symbol (\diamondsuit) 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 weather events and differences in geotechnical "as found" conditions to bid geotechnical data.





Planned Activities for Next Quarter

CCRT

AMEC will address a minor warranty matter related to the service water supply strainers for the Gypsum Dewatering and Fly Ash Subprojects.

Transport

Project Engineering will provide all final record drawings and turn over documents for the CCR Transport Subproject to the station, install the leachate pond pump back-up generator, leachate pond pumps, and associated piping. AMEC and its subcontractors will complete open and warranty items associated with shipment of remaining spare parts and checkout of the leachate pond pumps.

Landfill

Charah will complete construction of the storm water collection channels and continue installing liner underdrain piping associated with Phase I landfill. Charah will also stabilize the site for winter to prevent major erosion from occurring. The Companies remain open to purchasing a few remaining parcels of land within very close proximity to the landfill to provide a further buffer area between local residents and landfill operations.



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.

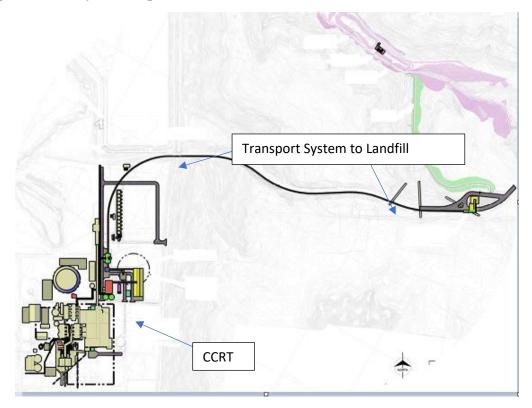
The Landfill Owner's Engineer contract was awarded to GAI. GAI has been the Engineer of Record through the permitting and landfill design phases, as well as the engineering firm that developed the specifications for the road and bridge work.

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.

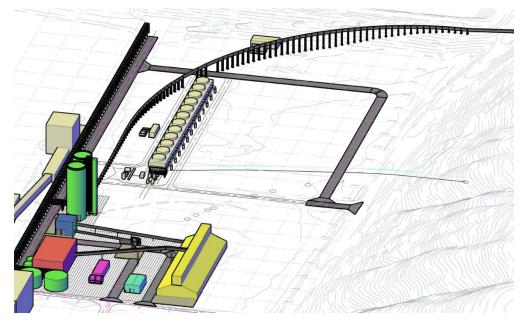
The Phase I Landfill portion of the project was awarded to Charah, a local company. Charah has previously completed successful projects for the Companies, such as the Ghent and E.W. Brown Landfill Phase I projects.



Conceptual Site Layout Graphics



Graphic 1 - Conceptual Layout of the CCRT and Transport System



Graphic 2 - Conceptual 3D Site Layout of the CCRT



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	<u>October 24, 2016</u>
Kentucky Division of Water Dam Safety Permit	Yes	February 15, 2016	<u>August 2016</u>
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

Table 1 - Landfill Permitting Status

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.