

Phase I Trimble County Landfill & CCRT Project

Quarterly Report – Update #17

April 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 first quarter of 2020.

Safety performance to date remains excellent with an Inception-to-Date OSHA Recordable Incident Rate of 0.48, compared to the industry average of 3.2 and 0.49 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 \$273.5 million (net) to \$275.9 million (net) through March 31, 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 (Unit 1 bottom ash, dry fly ash, gypsum dewatering, and pipe conveyor systems) are in commercial operation with only minor punch-list activities remaining. The work remaining to be done in the spring of 2020 are final asphalt work and final site cleanup. Construction on the CCR Transport subproject scope (i.e., CCR pipe conveyor, bridge and road) has been fully commissioned and was placed into service in January 2020. AMEC’s subcontractor Louisville Paving, a local company, completed installing the permanent guardrail and miscellaneous traffic controls along the haul road corridor. 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”), also a local company. Charah continues maintaining site erosion control measures, stripping and grading slopes, rock blasting and structural fill placement associated with the future landfill cell, and installation of piping for the landfill underdrain system. The forecasted end date of the landfill subproject has shifted to the first quarter of 2021 with final seeding in the second quarter of 2021. This shift is attributed to the rainfall events experienced

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 share is not included in the costs provided in this report.

to date and resolution with Charah on differences of geotechnical quantities and elevations experienced to date compared to those used to bid and award the work. 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 are currently monitoring the COVID-19 global pandemic and are working with all contractors to minimize the impact to the projects.

CCRT & Transport Quarterly Status Update

The Companies have decreased the frequency of meetings with AMEC and the station due to all CCRT and Transport equipment being commissioned and placed into service. Meetings now are focused on punch-list activities and finalization of documentation, along with minor field activities such as the final paving scope being performed this spring.

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

Equipment	Awarded Contractor	Status
Unit 1 Bottom Ash Submerged Chain Conveyor	United Conveyor Corporation	Equipment placed into service 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

AMEC, with involvement from the Companies, has completed engineering activities with the exception of 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 is under review. Construction on the CCRT scope is complete with only minor punch-list items remaining. AMEC achieved Commercial Operation of the Transport subproject during the quarter. AMEC’s subcontractor, Louisville Paving, completed restoration activities throughout the generating station site and along the haul road corridor. There are a few minor punch-list items associated with final grading that will be completed early in the second quarter of 2020 when the weather is more favorable for placing asphalt.



CCRT Project Area Looking South – September 2019 (no change in 4Q Report)



CCRT Project Area Looking South – March 2020

Landfill Quarterly Status Update

Charah continues to receive deliveries of landfill infrastructure components including concrete culverts, storm water structures, piping and rock. Charah and its subcontractors are continuing to strip and grade slopes, are approaching completion of the blasting of rock and construction of the permanent leachate and storm water ponds, and are continuing to place structural fill in the future landfill cell. Charah also began rough grading the permanent haul road into the landfill cell and shaping perimeter storm water collection ditches to prepare them for installation of fabric-form. Overall progress on the landfill went well this quarter but was slightly impacted by weather. Fabric-form installation is planned to be completed during the second quarter of 2020 when the weather is more favorable for concrete work. The Companies, Charah, and the design engineer GAI Consultants are working together to source sand for the leachate collection system. Deliveries of sand are planned to begin during the second quarter of 2020. Charah continues making necessary adjustments to their work plan to mitigate schedule impacts from rain events to date and from differences of geotechnical data provided during the bid period to those found at the site during the project execution. 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) by the end of 2020 with final completion (final grading, finalization of haul roads, seeding) in the first 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 sand and gypsum for potential use in the leachate collection system, attending meetings, and reviewing informational submittals and drawings.



CCR Landfill Overview – View from Station (Looking East) – December 2019



CCR Landfill Overview – View from Station (Looking East) – March 2020



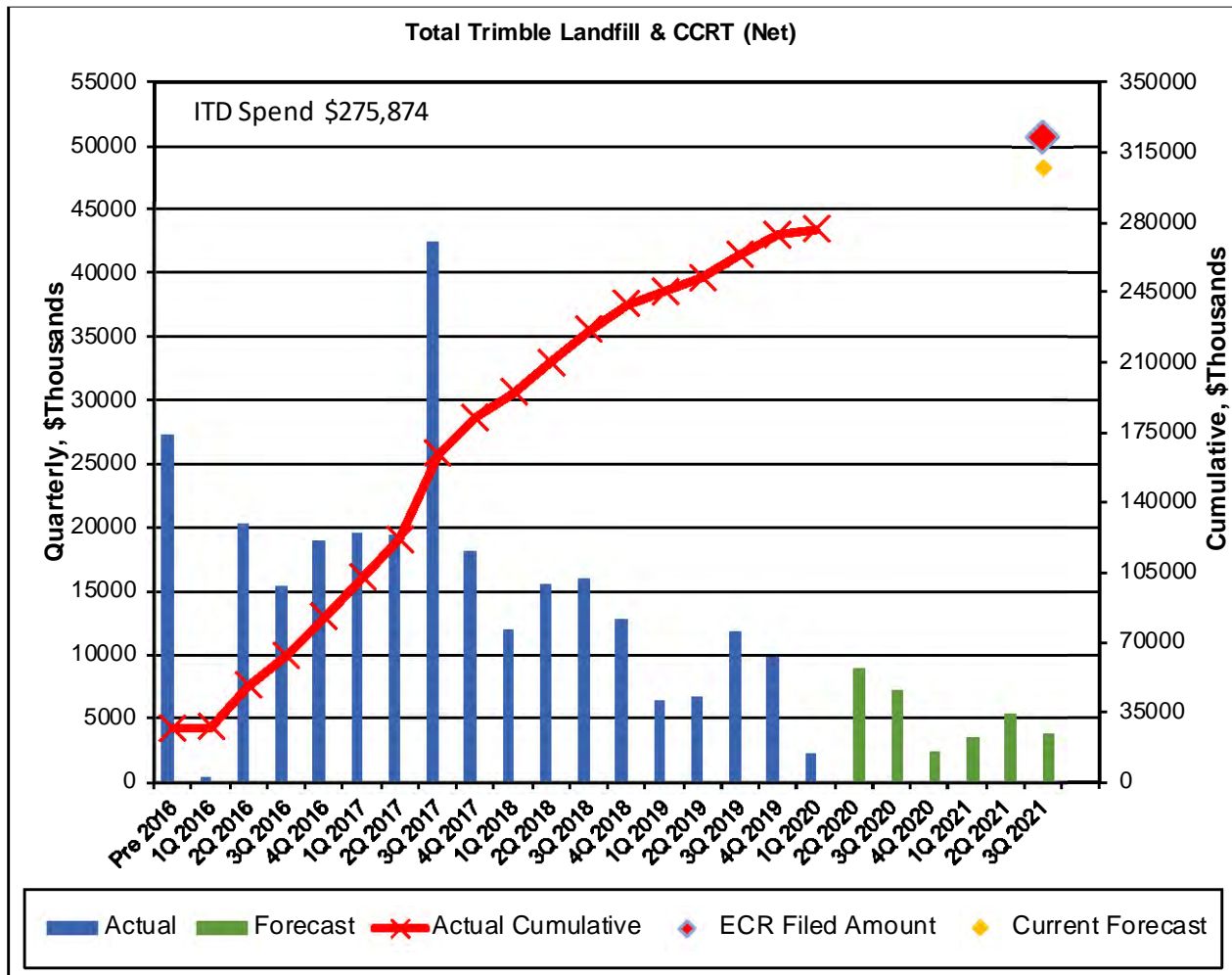
CCR Landfill Overview – View toward Station (Looking South West) – December 2019



CCR Landfill Overview – View toward Station (Looking South West) – March 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, spend and progress to date on construction. Total spend to date has increased from \$273.5 million (net) to \$275.9 million (net) through March 31, 2020. 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 weather events and differences in geotechnical “as found” conditions to bid geotechnical data.



Planned Activities for Next Quarter

CCRT

AMEC will address comments from the Companies on the final record drawings and turn over documents for the Gypsum Dewatering and Fly Ash Subprojects.

Transport

AMEC's subcontractors Louisville Paving and Hinkle Contracting will complete punch-list activities associated with the asphalt throughout the site. AMEC will complete punch-list items and final record drawings and turn over documents for the CCR Transport Subproject.

Landfill

Charah will continue with major earthwork and blasting activities associated with Phase I landfill construction including installation of the geosynthetic liner system in the leachate pond, installation of fabric-form concrete in the sediment basin and perimeter storm water drainage channels throughout the landfill cell footprint, delivery and stockpiling of sand for the leachate collection system, and liner subgrade preparation in the landfill cell. The Companies remain open to purchasing additional 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

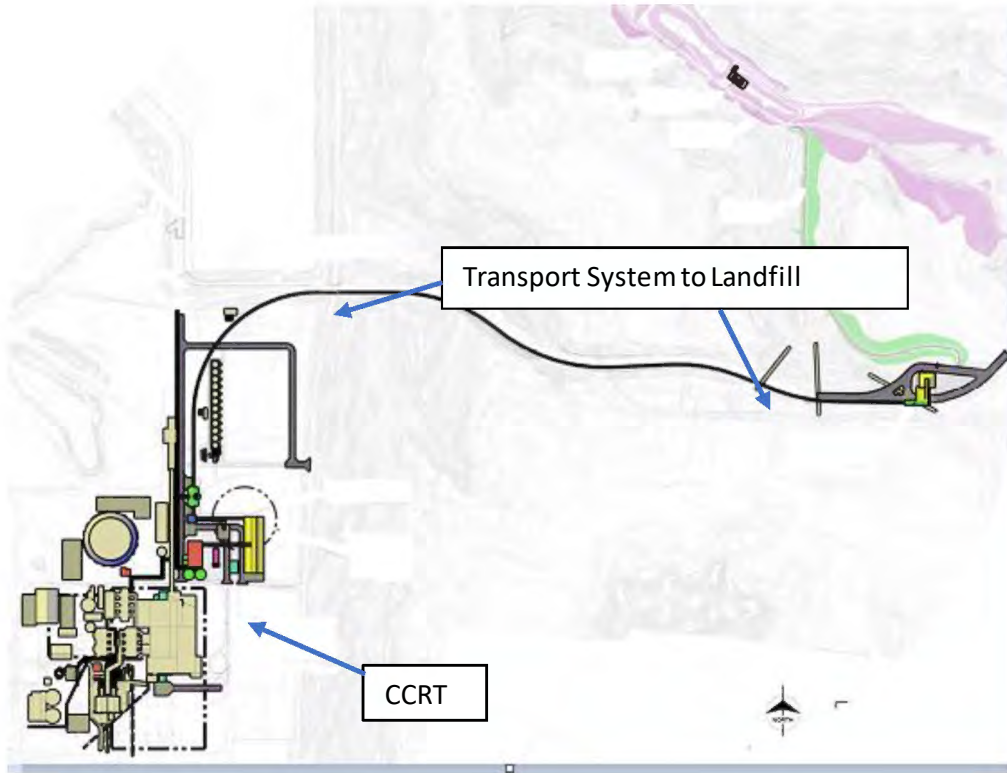
The CCRT Owner's Engineer contract was awarded to B&McD. B&McD has supported various projects for LG&E and KU, and recently supported the Trimble County Unit 1 PJFF capital project. B&McD assisted in the specification development for the CCRT and bottom ash scopes of work and assisted in the bid evaluations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

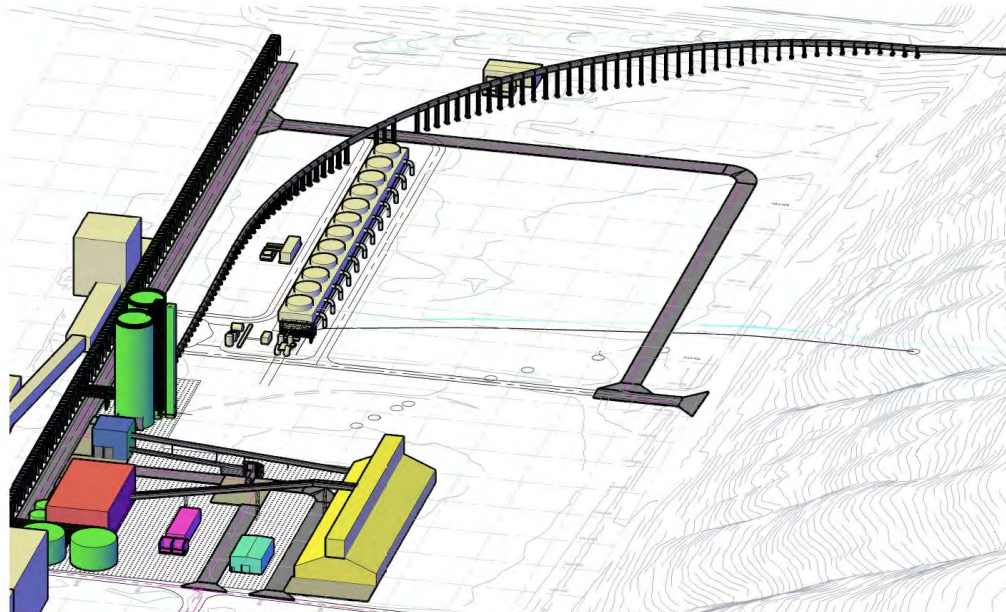
The CCRT and Transport portion of the project was awarded to AMEC. An EPC was executed with AMEC on April 7, 2016. AMEC has performed very well for the Companies in the recent past with completion of the E.W. Brown Unit 3 and Trimble County Unit 1 baghouse projects. AMEC has also been awarded the CCR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

Table 1 - Landfill Permitting Status

<u>Required Regulatory Permit</u>	<u>Submitted</u>	<u>Date Submitted</u>	<u>Date Received</u>
Kentucky Division of Waste Management Landfill Permit	Yes	January 3, 2014	<u>February 2017</u>
US Army Corps of Engineers 404 Permit	Yes	April 25, 2014	<u>June 28, 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 Transportation Cabinet Bridge Permit	Yes	January 30, 2014	February 2015
Kentucky Division for Air Quality Title V Revised Air Permit	Yes	<u>October 12, 2015</u>	<u>December 2015</u>

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.