Phase I Trimble County Landfill & CCRT Project

Quarterly Report – Update #13

April 30, 2019

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 first quarter of 2019.

Safety performance to date remains excellent with an inception-to-date OSHA Recordable Incident Rate of 0.59, compared to the industry average of 3.2 and 0.67 as reported in the last report.

The Project's total forecasted cost remains $290.6 million (net),[2] which reflects the reduction made in the third quarter of 2018 and is a significant reduction from $321.9 million (net) as provided in Case No. 2015-00194. The forecast reflects that all major contracts have been awarded, as well as accounts for spend to date and progress on construction. Total spend to date has increased from $238.5 million (net) to $245.0 million (net) through March 31, 2019.

As previously reported, all necessary permits to construct the Project have been received. Performance testing for the CCRT Fly Ash and Gypsum systems was completed during the quarter and test results are being reviewed. Both systems continue to be fully utilized by the station during the commissioning and testing periods. The Project background information (i.e., scope, contract awards, conceptual design layouts, and permitting status) is located in the Appendix.

Construction of the CCRT subprojects continues to progress very well; construction activities are winding down and most of the work is focused on punch-list activities. The dry fly ash and gypsum dewatering systems are expected to be placed into commercial operation during the second quarter of 2019. Construction on the CCR Transport subproject scope during the quarter has consisted of installation of pipe conveyor components inside the truck loading facility, erection of the landfill electrical and emergency CCR storage enclosures, and civil construction for the landfill sediment pond, and roadway corridor from the generating station to the future landfill site. AMEC's subcontractor, Louisville Paving, a local company, completed the haul road storm-water management pond and began constructing permanent crash barriers along the haul road corridor and bridge over KY 1838. 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, 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 changed due to significant precipitation during the last half of 2018 and during the reporting period. While discussions regarding these impacts are on-going with Charah, the Landfill is now expected

[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 be completed in early 2020, instead of by the end of 2019. No operational impacts are expected from this shift. No additional land purchases occurred during the quarter; however, the Companies continue to intermittently discuss land purchases with a few adjacent property owners to the future landfill as it relates to providing additional buffer areas between the landfill and residents.

CCRT & Transport Quarterly Status Update

The Companies continue to hold project review meetings with AMEC and the station. Activities at daily and weekly Project Engineering and construction meetings are primarily focused on construction plans and schedules, punch-list items, and final commissioning and testing activities.

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 as planned.
Fly Ash Conditioner and Conveying System	United Conveyor Corporation	Performance testing completed. The system continues to be operated.
Gypsum Dewatering Vacuum Belt Filter System	FLSmidth	Performance testing completed. The system continues to be operated.
Gypsum Portal Scraper Reclaimer	Ameco (same vendor as Ghent's portal reclaimer commissioned in December 2014)	Performance testing completed. The system continues to be operated.
Pipe Conveyor	Beumer Group (same vendor as Ghent's pipe conveyor commissioned in December 2014)	The pipe conveyor is constructed with work now focused on the truck loading area electrical enclosure and emergency storage facilities located at the future landfill.

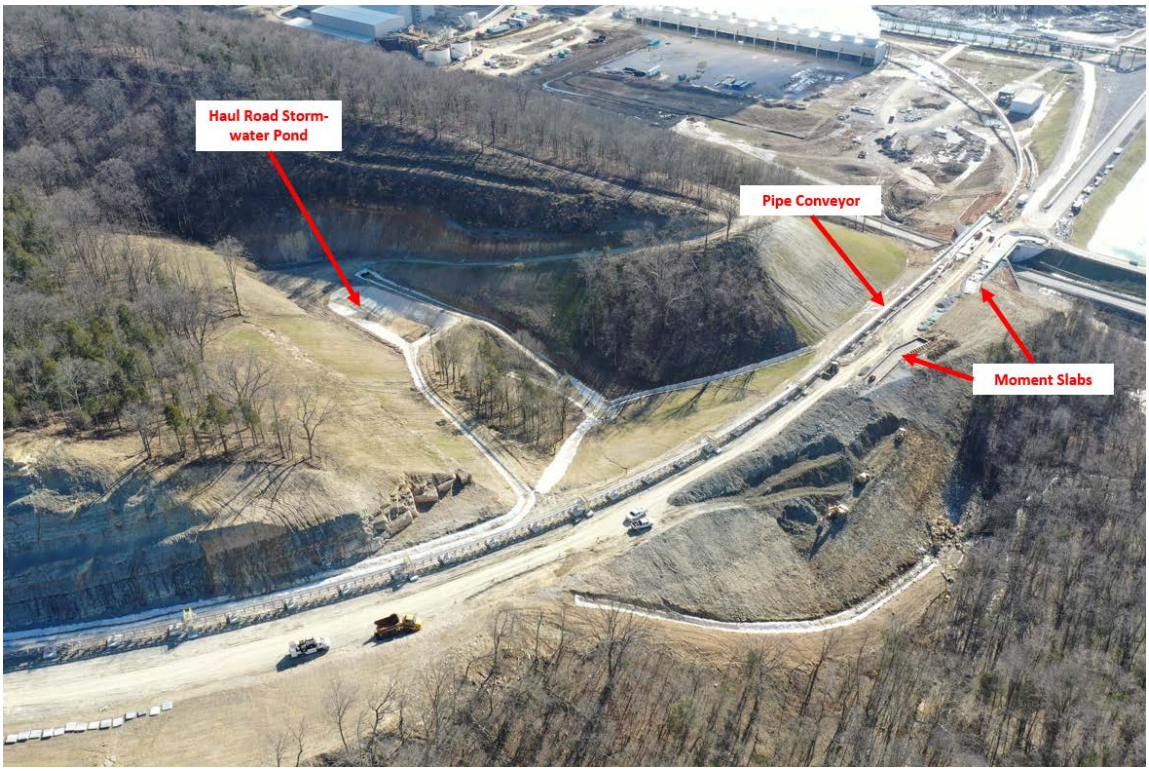
AMEC, with involvement from the Companies, has completed engineering with the exception of accounting for "as built" conditions on the final documents. The CCRT scope continues to progress well with construction winding down and the focus now on punch-list and final grading of the site. Significant milestones were met during the quarter by AMEC with the performance testing of the gypsum dewatering and dry fly ash systems. The test results are under review with commercial operation expected in the second quarter of 2019.

The CCR Transport scope is also progressing well. During the reporting period, AMEC and their subcontractors continued civil construction activities. AMEC's subcontractor, Louisville Paving, completed the haul road storm-water management pond, continued constructing the moment slabs along the haul road that will support and anchor the permanent concrete traffic barriers, and began constructing the permanent traffic barriers along the bridge and haul road corridor. AMEC completed installing exterior siding on the truck loading facility and electrical enclosure, and began erecting structural steel for the landfill emergency CCR storage building.

CCRT Project Area Looking South – December 2018

CCRT Project Area Looking South – April 2019

CCRT Transport Corridor – View of Bridge Over KY 1838 to Landfill (Looking West) –December 2018



CCRT Transport Corridor – View of Bridge Over KY 1838 to Landfill (Looking West) – March 2019

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 continue stripping and grading slopes, blasting of rock, major excavation and construction of the access road to the ravine landfill lower work area (i.e., sediment pond, storm-water pond, leachate pond), and placement of structural fill in the future landfill cell. Charah continued installing perforated underdrain piping in the footprint of the future landfill cell. The outfall structures associated with the ponds have been completed. Overall progress on the landfill was impacted by significant precipitation during the quarter, mainly during the month of February. Charah continues making necessary adjustments to their work plan to mitigate schedule impacts. No impacts to operations are expected from the implementation of Charah's new work plan as they progress towards completion in early 2020.

AMEC Foster Wheeler Environment & Infrastructure's construction quality assurance activities for the landfill this quarter included visual inspections, testing compaction of fill material, attending meetings, and reviewing informational submittals and drawings.

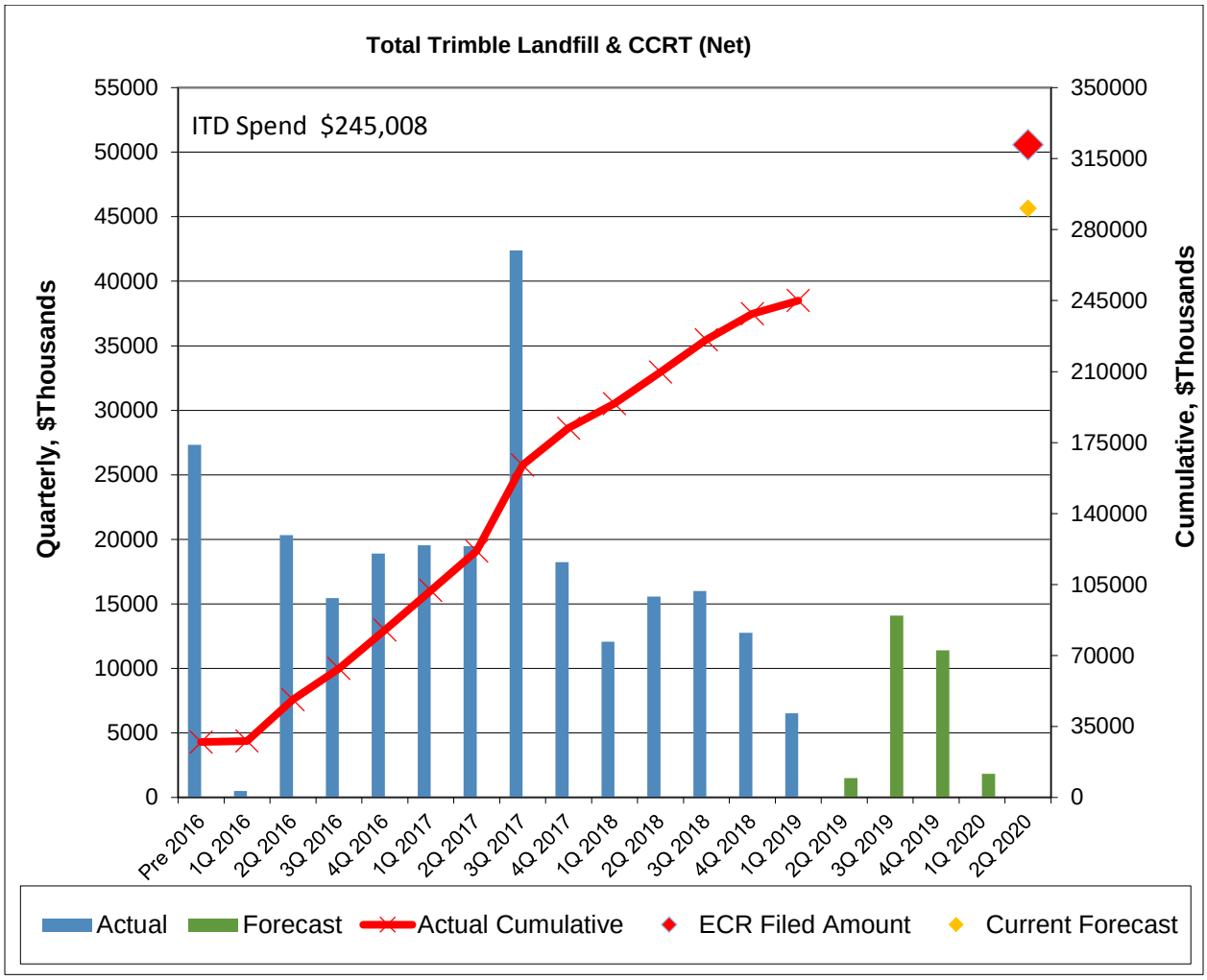
CCR Landfill Overview – View from Station (Looking East) –December 2018

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

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

Financials

The Project's total forecasted cost remains $290.6 million (net), which reflects the reduction made in the third quarter of 2018 and is a significant 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 $238.5 million (net) to $245.0 million (net) (KU $113.1 / LG&E $131.9) through March 31, 2019. Note for the graph below: (1) includes a symbol (◆) to show the current forecast to completion; and (2) Inception-to-Date ("ITD") Spend is shown in the upper left corner.



Planned Activities for Next Quarter

CCRT

AMEC will continue site grade prep work and begin paving, as well as work towards completing punch-list items and updating final record drawings for the Gypsum dewatering and Fly Ash Subprojects. The dry fly ash and gypsum dewatering systems are expected to be placed into operations and transferred to the Companies in the second quarter of 2019.

Transport

AMEC's subcontractor, Louisville Paving, will complete constructing moment slabs, permanent concrete traffic barriers, and miscellaneous infrastructure components for the haul road. AMEC will begin prep-work for paving the haul road, as well as continue installing pipe conveyor grounding and electrical cable tray, interior and exterior building elements for the truck loading facility, landfill electrical enclosure, and emergency CCR storage building.

Landfill

Charah will continue with major earthwork and blasting activities associated with Phase I landfill construction including the leachate pond pump structure and sediment basin dam. The Companies remain open to purchasing additional land within very close proximity of 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 -00198 and affirmed in Case No. 2015-00194.

Previously Reported Contract Awards

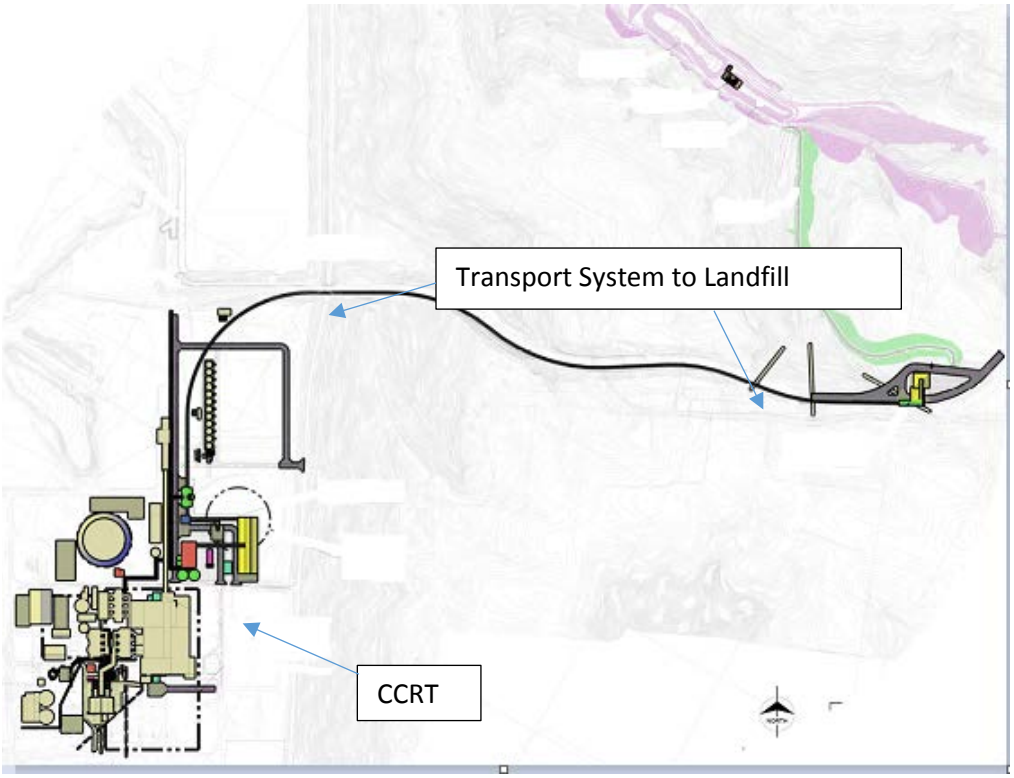
The CCRT Owner's Engineer contract was awarded to B&McD. B&McD has supported various projects for LG&E and KU, and recently supported the Trimble County Unit 1 PJFF capital project. B&McD assisted in the specification development for the CCRT and bottom ash scopes of work, and assisted in the bid evaluations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

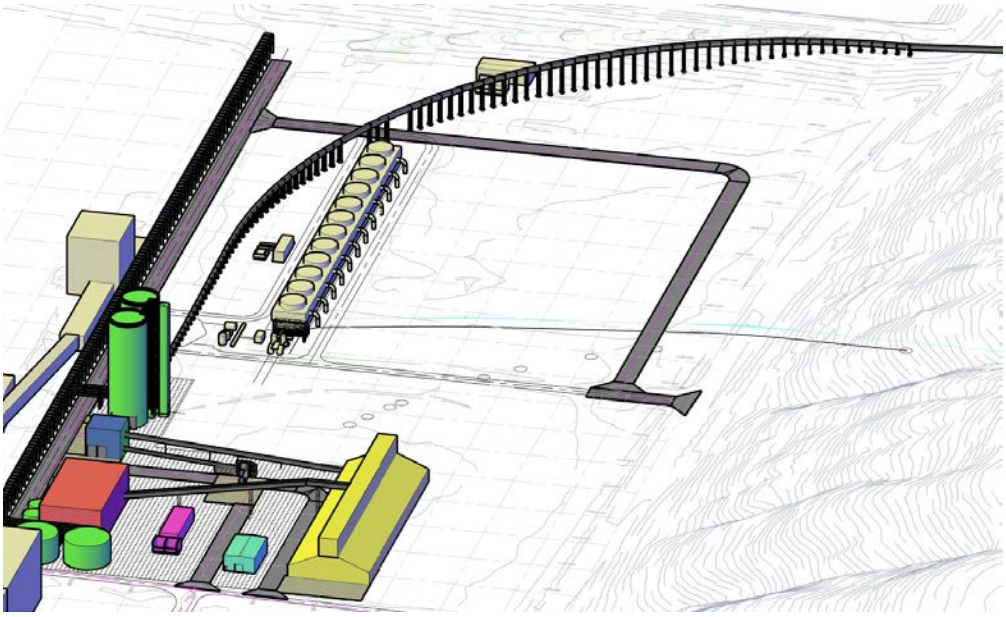
The CCRT and Transport portion of the project was awarded to AMEC. An EPC was executed with AMEC on April 7, 2016. AMEC has performed very well for the Companies in the recent past with completion of the E.W. Brown Unit 3 and Trimble County Unit 1 baghouse projects. AMEC has also been awarded the CCR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

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.