

Phase I Trimble County Landfill & CCRT Project

Quarterly Report – Update #16

January 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 fourth quarter of 2019.

Safety performance to date remains excellent with an Inception-to-Date OSHA Recordable Incident Rate of 0.49, compared to the industry average of 3.2 and 0.50 as reported 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, as well as the delays attributed to the record precipitation experienced to date on the project. Total spend to date has increased from \$263.7 million (net) to \$273.5 million (net) through December 31, 2019.

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, the Dry Fly Ash and Gypsum Dewatering systems are in commercial operation with only minor punch-list activities remaining. The majority of final grading and resurfacing activities has been completed, with a few minor outstanding areas that will be completed in the spring when weather is more favorable for the placement of asphalt. Construction on the CCR Transport subproject scope (i.e., CCR pipe conveyor, bridge and road) is nearly complete with final punch-list items being addressed during the quarter. Final grading activities and installation of permanent traffic controls along the roadway corridor from the generating station to the future landfill site remain to be completed. AMEC’s subcontractor Louisville Paving, a local company, has completed placing asphalt pavement throughout the generating station site and along the haul road, and is nearing completion on installing the permanent guardrail 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

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.

underdrain system. The forecasted end date of the landfill subproject remains the fourth quarter of 2020. During the quarter, the Companies purchased a small parcel of property near the future landfill site, located at the intersection of Ogden Ridge Road and Wentworth Road. 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.

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	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)	Bridge and Haul Road are in service. Commissioning activities and Performance Testing for the Pipe Conveyor system were completed during the fourth quarter of 2019.

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 documentation. The CCRT scope is essentially constructed with only minor scope and punch-list items remaining. AMEC achieved Mechanical and Substantial Completion of the Transport subproject during the quarter. AMEC’s subcontractor Louisville Paving completed the placement of asphalt pavement throughout the generating station site and along the haul road corridor, with the exception of a few minor areas that will be completed early in the second quarter of 2020 when the weather is more favorable for placing asphalt.

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 placement of asphalt pavement for the haul road and continues installing permanent traffic safety controls. AMEC completed electrical and mechanical commissioning in the truck loading facility and electrical enclosure, completed installing the above ground portion of the leachate pipe that crosses the

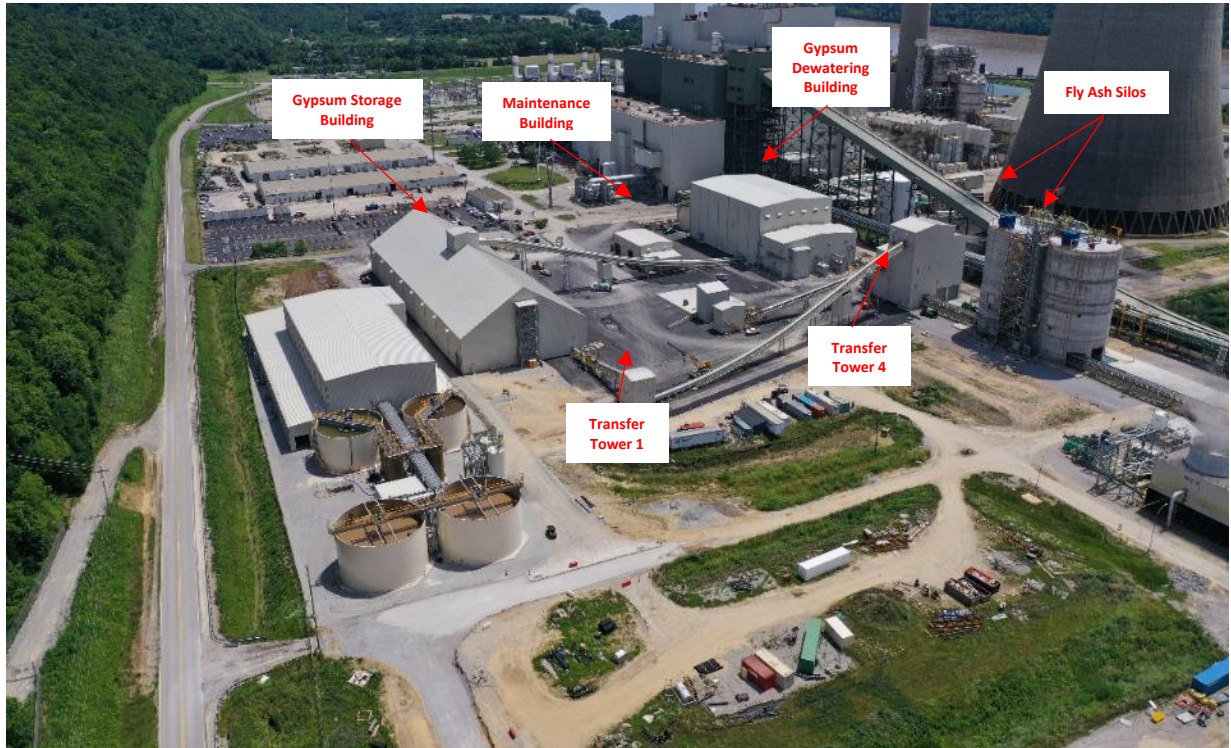
bridge over KY 1838 and tied it into the Knockout Pond. AMEC also completed energization of the transformer and power distribution center at the leachate pond. AMEC, with the assistance of their subcontractor Beumer (pipe conveyor manufacturer), completed commissioning and performance testing of the pipe conveyor system. AMEC is now focused on completing punch-list items and fine-tuning the pipe conveyor system and its supporting conveyors.



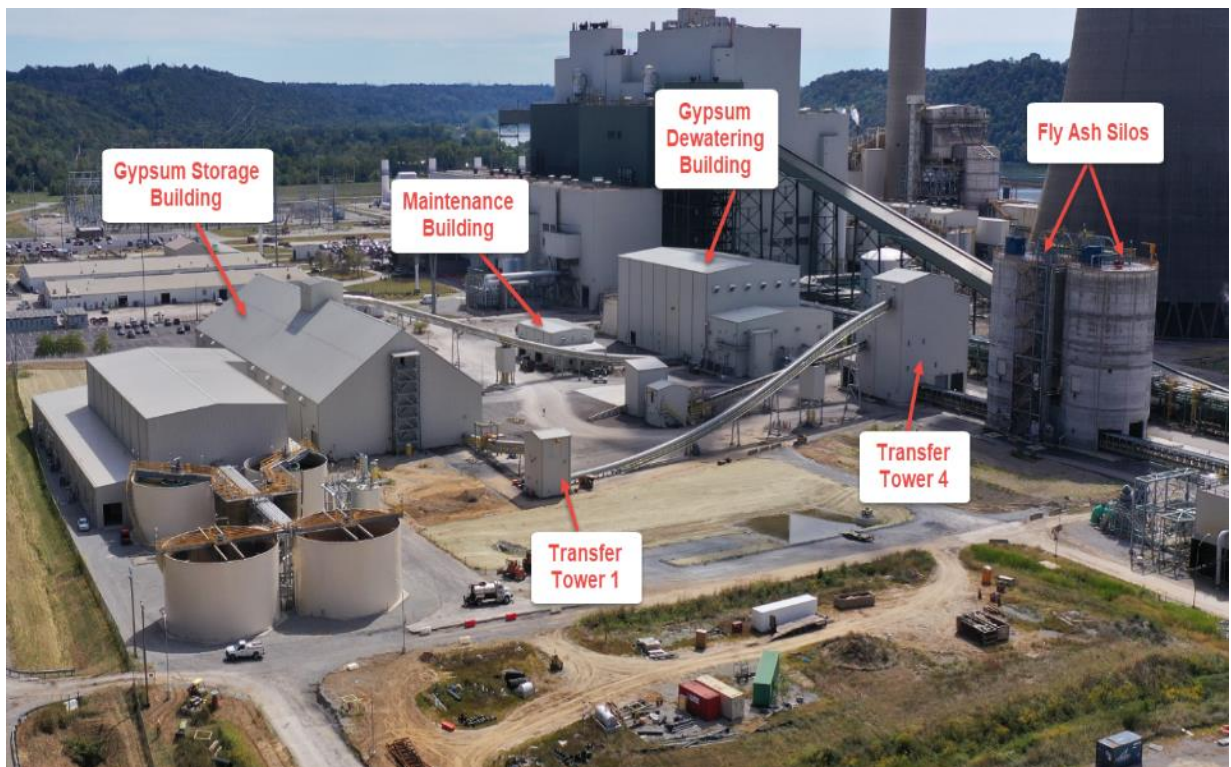
CCRT Project Area Looking North – October 2019



CCRT Project Area Looking Northwest – December 2019



CCRT Project Area Looking South – June 2019



CCRT Project Area Looking South – September 2019



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



CCRT Transport Corridor – View of Bridge Over KY 1838 to Landfill (Looking East) – December 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, construction of the permanent leachate and storm water ponds, and placement of structural fill in the future landfill cell. Charah completed installing the perforated underdrain piping in the footprint of the future landfill cell. Overall progress on the landfill went well this quarter but was slightly impacted by weather, as well as experienced some issues with the permeability of the material designated for use in the leachate pond compacted soil liner. To better facilitate future cleaning activities and reduce future maintenance costs, the Companies decided to line the sediment basin with fabric-form concrete. The original scope of the sediment basin was completed during the quarter and the preparation for fabric-form concrete installation began but will likely occur during the second quarter of 2020 when the weather is more favorable for concrete work. 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 the fourth quarter of 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) – October 2019



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



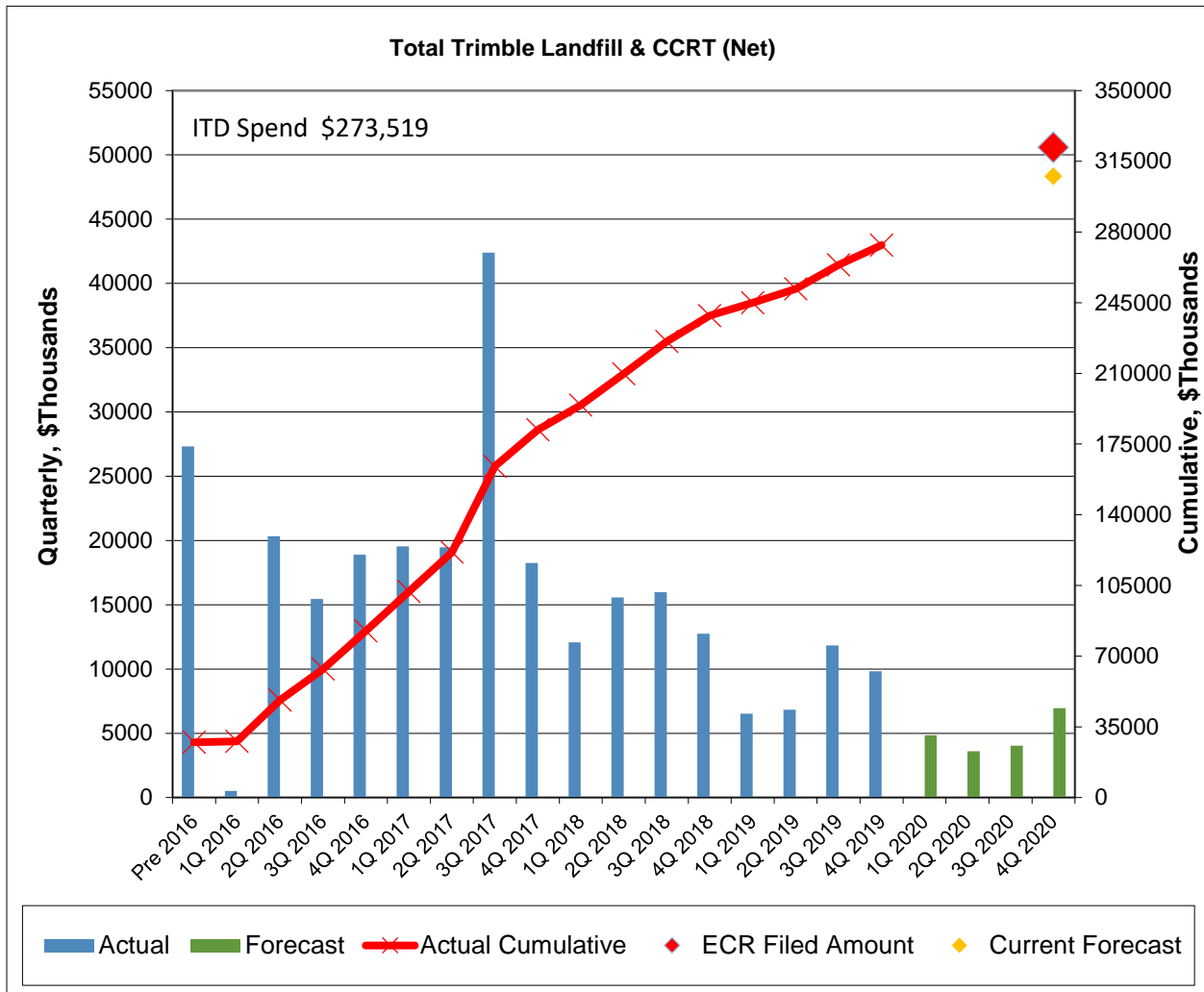
CCR Landfill Overview – View toward Station (Looking South West) – October 2019



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

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 \$263.7 million (net) to \$273.5 million (net) through December 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 complete the majority of the punch-list items, update final record drawings and turn over documents for the Gypsum Dewatering and Fly Ash Subprojects.

Transport

AMEC's subcontractor Louisville Paving will complete installation of traffic controls on the haul road and revegetation of the surrounding slopes. AMEC will complete fine-tuning the pipe conveyor and achieve Commercial Operation.

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 constructing perimeter storm water drainage channels throughout the landfill cell footprint. 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 -00198 and affirmed in Case No. 2015-00194.

Previously Reported Contract Awards

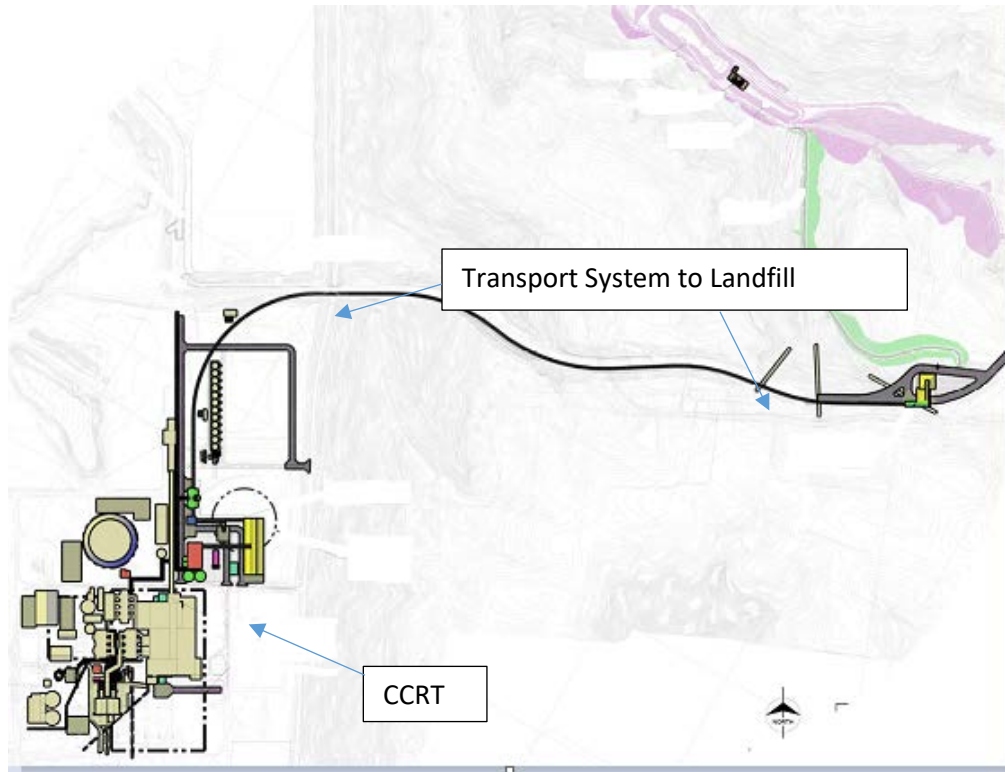
The CCRT Owner's Engineer contract was awarded to B&McD. B&McD has supported various projects for LG&E and KU, and recently supported the Trimble County Unit 1 PJFF capital project. B&McD assisted in the specification development for the CCRT and bottom ash scopes of work and assisted in the bid evaluations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

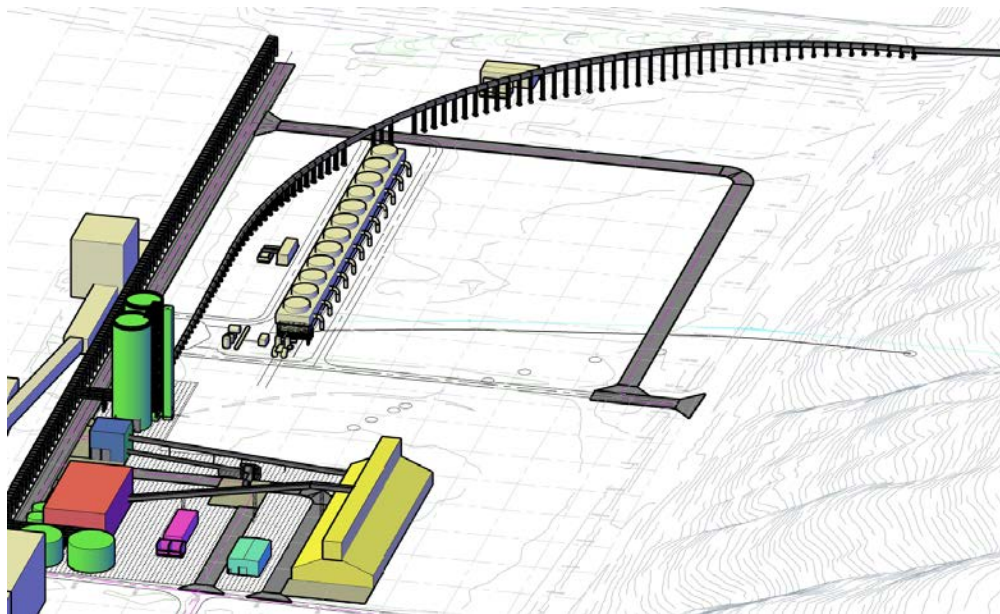
The CCRT and Transport portion of the project was awarded to AMEC. An EPC was executed with AMEC on April 7, 2016. AMEC has performed very well for the Companies in the recent past with completion of the E.W. Brown Unit 3 and Trimble County Unit 1 baghouse projects. AMEC has also been awarded the CCR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