



Beneficial Use Case Study

ACAA B.C. Cobb Generating Facility and J.C. Weadock Landfill

Coal Combustion Product Type

Fly Ash, Bottom Ash

Project Locations

Muskegon, Michigan; Essexville, Michigan

Project Participants

Charah Solutions Inc., through its subsidiary Muskegon Environmental Redevelopment Group LLC (MERG); Consumers Energy, former B.C. Cobb Generating Facility site in Muskegon, Michigan; Consumers Energy, licensed J.C. Weadock Landfill in Essexville, Michigan, located at the former J.C. Weadock Generating Station site.

Project Completion Date

Equipment mobilization and construction at the B.C. Cobb ponds started in April 2020. Onsite dewatering, excavation, and transportation began in Q3 2020 and will continue through the end of 2021. State approval of the final pond closure is targeted as soon as early 2022, in advance of the Federal CCR Rule compliance deadline, which requires pond closure by March 2023.

Project Summary

Charah Solutions, through its MERG subsidiary, took ownership of the ash ponds at Consumers Energy's former B.C. Cobb Generating Facility site in Muskegon, Michigan. The coal combustion residuals (CCR) materials will be excavated and beneficially used as necessary fill material in Consumers Energy's licensed J.C. Weadock Landfill in Essexville, Michigan, located at the former J.C. Weadock Generating Station site.

Project Description

Since the late 1940s, the B.C. Cobb Generating Facility, in Muskegon, Michigan, situated near Muskegon Lake, was owned and operated by Consumers Energy (Consumers), Michigan's largest energy provider. Consumers' B.C. Cobb Generating Facility and J.C. Weadock Generating Station in Essexville, Michigan, along with the J.R. Whiting Plant in Luna Pier, Michigan, were retired in April 2016.

Harvesting the existing ash ponds at the B.C. Cobb Generating Facility was part of the post-closure regulation requirements and sustainability objectives for the site and community along the eastern shore of Lake Michigan. In 2018, Charah Solutions approached Consumers with an innovative and cost-effective proposal to provide harvesting of the ponds and sustainable repurposing of the site while also implementing beneficial use practices for another Consumers licensed landfill project. A comprehensive one-stop solution was offered to effectively manage



Former B.C. Cobb ash ponds to be harvested and sustainably repurposed for the benefit of the watershed.



Ash being excavated from B.C. Cobb ash ponds in preparation for pond closure.



Ash from B.C. Cobb ponds being loaded into railcars and trucks for transport to J.C. Weadock Landfill.

the environmental and construction aspects of safely closing the ponds and enhancing the site for the benefit of the community, while lowering the cost for Consumers and its customers. Charah Solutions' turnkey environmental risk-transfer services involve property acquisition, site harvesting/redevelopment, responsibility for the environmental liabilities plus permitting, and compliance with state and federal regulations—all designed to meet the evolving and increasingly complex needs of utility partners.

In April 2020, Charah Solutions announced its plans to close the B.C. Cobb Generating Facility's ash ponds and help restore the watershed's native soils and wildlife habitat. As part of this agreement, Charah Solutions, through its subsidiary Muskegon Environmental Redevelopment Group LLC, took ownership of the ash ponds during the closure process.

In addition to harvesting and sustainable repurposing, Charah Solutions is implementing beneficial recycling practices for the existing ponded ash. Approximately 650,000 cubic yards of coal combustion residuals (CCR) materials will be excavated and beneficially used as necessary fill material in Consumers' licensed J.C. Weadock Landfill, located at the former J.C. Weadock Generating Station site, to help fill the landfill and design closure grades. Approximately 75% to 85% of the ash will be transported by a fleet of 150 covered, high-sided railcars, with the remainder transported by covered trucks.

Upon completion of the project, the B.C. Cobb ash ponds, totaling 62.8 acres, will be sustainably repurposed for the benefit of the watershed. By reusing the ash as necessary fill material, it will be recycled, conserving approximately 650,000 cubic yards of virgin materials that would otherwise be required.



Straddle carrier unloading recycled ash from the railcars at J.C. Weadock Landfill.

As a sustainability leader in utility services for over 30 years, Charah Solutions is dedicated to preserving natural resources in an environmentally conscious manner through projects like this with Consumers. Sustainability is a Charah Solutions core value, and the company focuses its business on developing innovative solutions to complex environmental issues for the betterment of the planet, the communities in which it operates, and its customers.

This project is also a great example of Consumers' ongoing focus on communities and the environment. Leveraging an innovative, turnkey approach to risk transfer and beneficially using the ash material and repurposing the ponds will result in cost savings and reduced environmental risk for Consumers and its customers while protecting and enhancing the environment for the Muskegon Lake community.