



# GLOBAL

ENVIRONMENTAL ENGINEERING INC.

PROJECT BUDGET

\$2,400,000.00

CONTRACT START DATE

JUNE 2014

CONTRACT END DATE

SEPTEMBER 2014



## Sediment Dewatering - Ceresco Dam

### Calhoun County, Michigan

Global was contracted by Terra Contracting Services, LLC to serve as Water Treatment Specialists in response to the 2010 Enbridge Oil Spill along the Kalamazoo River. An energy pipeline rupture caused 877,000 gallons of heavy crude oil to spill into Talmadge Creek in Calhoun County, Michigan, which flows into the Kalamazoo River. Global engineered a processing plant for material and slurry dredged from the region upstream of the Ceresco Dam.

Material and slurry were pumped from the 4 dredges to the 14 acre treatment pad. Slurry was pumped into 200 foot Geobags to filter solids. Decanted water passed through a large-scale, engineered, graded bed into two sumps, which held a combined capacity of 1.25 million gallons. The wastewater was then pumped through 12 inch headers into bag filter canisters containing 25-micron filter bags. Effluent water then passed through Granular Activated Carbon Tanks, which adsorbed volatile organic compounds. Water was then aerated through a diffuser cap before returning to the river.

Dredging and treatment of contaminated water and sediment from the Ceresco Dam impoundment began in August 2013 and ended in October 2013. 115,000 cubic yards of impacted material was treated during this time. Throughout the project, the contractors collaborated to minimize traffic, light, noise, and other impacts to the public. Global reengineered the water treatment facility twice to operate from 4,000 gallons per minute to 8,000 gallons per minute and then again to 12,000 gallons per minute. Global also reengineered the bag field to accommodate tripling the capacity with existing space and time restraints.