RAW PRODUCT FERTILIZER STORAGE & FLOATING COVER SYSTEM

PROJECT NAME:
CJ Bio-Energy - Phase 1

PROJECT LOCATION:
Dodge, Iowa

PROJECT APPLICATION:
Multi-Layer Design-Build Solution with RPE Floating Cover

MATERIAL USED:
HDPE 60 mil, Geonet for Drainage 200 mil & RPE 45 mil

T vent and pump housing

PROJECT CHALLENGE:

- Design a liner and floating cover system to meet a challenging budget while streamlining the process by doing the work as a design build. This process allowed us to get the work designed and built quickly without waiting for drawings and approvals from outside of CLI. .

PROJECT SOLUTION:

- This multi-layer solution for a raw product/fertilizer storage pond used in farming applications included two ponds, each with 3 layers and 45 mil RPE floating covers. The defined sump system that was a design-build effort included sand tubes, floats, and a hatch. Project requirements made this an opportunity for CLI to design and construct a floating cover with RPE material. The UV stability, chemical resistance and exposure durability that is characteristic of RPE liner made the material ideal for this setting.

  The cell lining systems consisted of first layer (over sub-grade) of 60 mil HDPE liner for overall containment, a middle layer of 200 mil Geonet for drainage, and another layer with sump collection comprised of 60 mil HDPE.

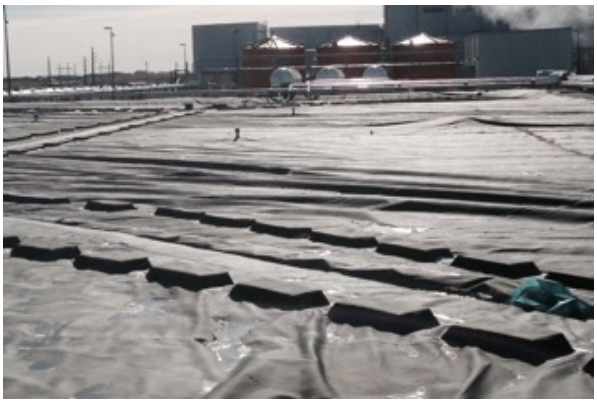
  The Floating Cover layer was designed to keep outside contamination like rain water, dirt and debris out of each pond. Because the contents of the system required regular treatment, a floating cover would greatly reduce the amount of contents needing treatment; thereby saving the site owner tens of thousands of dollars each year. The project will have paid for itself after approximately 2-3 years depending on rainfall and weather events.

RAW PRODUCT FERTILIZER STORAGE & FLOATING COVER SYSTEM

Viaflex

PROJECT IMAGES:

Empty pond with cover



Full pond with cover

Cover testing with inflation to check for any damage prior to filling