

## Case Study: Biologic Lagoon Dredge Reduces COD to Meet Compliance Levels in Sugar Beet Mill

### SUMMARY

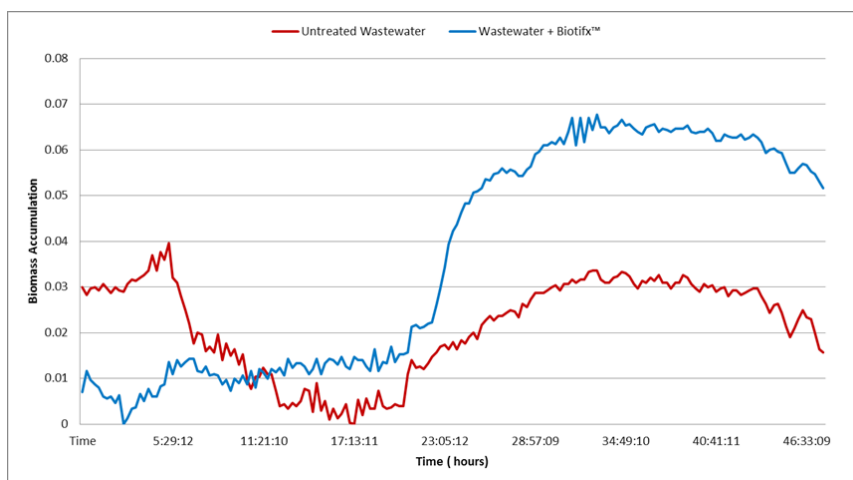
A sugar beet mill wastewater treatment facility plant dosed with Biologic Lagoon Dredge Reduces demonstrated reduced COD levels to meet compliance and avoided the need for equipment expansion.

### BACKGROUND

The sugar beet mill included 13 remote beet-pile sites with storm water holding ponds. Pond capacity was between 50,000-1,500,000 gallons with COD levels ranging from 300 mg/L to 12,000 mg/L. The state required treatment to reduce 25 mg/L cBOD before discharging water. The mill needed to demonstrate to the State that treatment of ponds is possible within the current infrastructure.

### METHODS

Beyond Environmental diagnosed and treat the sugar beet mill's unique wastewater problem. Two ponds were chosen for initial treatment with Biologic Lagoon Dredge Reduces at 2.5ppm of total pond volume, once per month. A third pond was treated with a competitive product, the remaining ponds were left as controls. COD was measured weekly to monitor progress.



*Biomass Growth Analysis: Biomass Growth (BOD Removal Potential) was measured using optical density*

### RESULTS

Biologic Lagoon Dredge Reduces application increased treatment performance and reduced COD levels. The pond treated with the competitor product saw no reduction. Sugar beet mill representatives reported the following results:

- Faster COD removal with Biologic Lagoon Dredge Reduces than past treatment attempts
- Product was easier to handle and store compared to competitor products
- Demonstrated effective treatment for the State
- Avoided installation of expansive capital equipment to treat ponds
- Avoided production limiting scenarios where water can't be discharged

