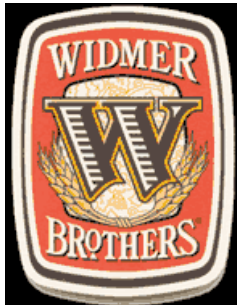




Widmer Brothers Brewing Company



Problem:

- Beer & Yeast stream with high BOD and TSS
- Previous disposal option unavailable
- est. Sewer charges ~\$120,000/year

Approach:

- Find short term solution and long term solution with highest value use for process discharge constituents
- Collaborate with OSU/ODA Food Innovation Center, Quest International

Results:

- Short term solution- use beer and yeast for animal feed (est. cost: ~\$15,000 per year)
- Long term solution- yeast as flavor additive for beer-batter type products (est. pricing \$3-5/lb for dried yeast and potential profit est. \$0.25-0.50/lb)

