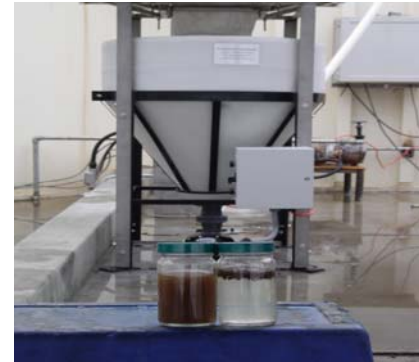




Beef Processing Facility

This facility slaughters 1,200 head of cattle/day and generates a wastewater flow of 80,000 gallons/day. The POTW that receives the wastewater was having difficulty handling the strength of the wastewater (BOD at 3,000 ppm and TSS at 1,800 ppm) and was charging the facility an average of \$162,000 every 2 months (\$7.75/1,000 gallons).



With some help from Integrated Engineers, the facility staff renovated the existing DAF unit and installed a 1.5-meter belt press to dewater the solids. The DAF loading was very high (exceeding the manufacturer's recommendation by 200%) at 1.5 gpm/sq-ft.

Based on preliminary jar testing, the system would require a dosage of Floccin-KP+ at 216 ppm (see the results of the jar test in the case title meat processing). Previous lab analytical showed this reduction to have a BOD of 400 ppm and a TSS of 250 ppm. This decreases the surcharges paid to the POTW down to \$32,000/month. Subtracting the cost of the Floccin KP+, the overall savings is \$80,000/month. Treatment costs (chemical and surcharges are \$3.25/1,000 gallons).

