

Due to our past successes with this corrugating corporation, Integrated Engineers was asked to solve a major wastewater problem with their new wastewater treatment system. The company had recently purchased a wastewater treatment system and were having problems with these issues:

- Lack of support from the system supplier
- Several mechanical problems with the pumps, controls and filter press pneumatic valve control problems
- High effluent water conductivity
- Inability to dewater the sludge



The facility was having varied and unstable pH and conductivity levels. The variable pH, due to starch dumps, was causing irregular treatment of the water. The sludge was not dewatering fast enough, backing up the water in the system. To remedy this, the facility required the treatment tank to be pumped out weekly and have the sludge hauled off site wet at a cost of \$4,000/load.

Based on the pH levels with the wastewater this facility will be using either of two Floccin products. They will be using Floccin 1103 for low pH levels, and Floccin 1119 for high pH levels. The reaction tank is 8,500 gallons and in a batch operation they are using 50lbs per batch with the Floccin 1103, and 80lbs per batch using Floccin 1119. The treated water pH level is consistent between 6.5 - 7 and gets discharged to the city.

Integrated Engineers is currently working on installing a pH adjustment system to keep the treated water pH level around 7. This pH system will be in line for the purpose of reusing the treated wastewater for starch make up allowing the facility to become a zero discharge user.



The Floccin products are creating more consistent and drier cakes and pass TCLP for non hazardous materials. It only takes the filter press 2 presses to completely empty the treatment tank. This will save the facility an estimated the \$140,000 per year in waste haul off.