



Grease Trap Treatment

A grease trap waste hauling operation requested assistance on determining a way to treat their highly varied grease trap waters. The grease is yellow (cooking oils from kitchens/restaurants) as well as grey grease from other nonfood sources. The objective was to find the best Floccin to treat the water so the suspended solids, Oil and Grease, and BOD are removed prior to discharge to the local POTW.

The Floccin 1105 worked very well in “Floccin” the contaminants from the water and an Air Sparged Hydrocyclone (ASH) will be used as the flotation technology to float the oily solids from the water. The residual sludge will be dewatered using a 3 phase centrifuge (oil phase, water phase and solids phase split) for additional oil recovery and dewatering of the sludge. The recovered oil will be added to the oil/grease that is thermally separated upstream and sent to their biodiesel process. The treatment is shown below for the yellow and grey grease waters.



Yellow Grease (Heavy)



Grey Grease (Light)

The Yellow Grease (left photo) flocced well and will separate in the ASH and the solids because of the Floccin 1105's unique chemistry contains 98% of the residual oil that will be recovered in the 3 phase centrifuge. The Grey Grease (right photo), has less grease particles and is of less value to the client for recoverable oil, but the water clarity will insure the surcharges to the local POTW will be low (the POTW charges per pound for BOD and TSS).