



# Case Study: Activated Sludge Plant

**Waste Type:** Municipal

**Flow:** 5 MGD

**Problem:** A high level of incoming grease and filamentous bacteria caused this activated sludge plant to have difficulty settling. In addition, they were looking at ways of reducing the high cost of dealing with secondary sludge. Total suspended solids in the effluent were 12-16 ppm and polymer was being added to improve settling.

Sludge was filter pressed to produce a dry cake of 15-17% solids content.

1500 cubic feet of grease had accumulated in the scum pit and 35 cubic feet was being added each week. Disposal involved manual removal for transporting to a landfill.

**Solution:** After working with the operators and learning about their system, the addition of Bio-Systems products containing select microorganisms and key micronutrients was started with the objectives of:

- Creating a healthier bio-mass
- Reducing secondary sludge production
- Improving settling
- Eliminating grease buildup

A month after adding Bio-Systems products, operators were beginning to notice subtle improvements in floc formation and in the biological community as a whole. The 1500 cubic feet of grease accumulation was beginning to degrade and two months later it was gone.