Case Study #05

Client Category: Chicken Processing Plant

Location: Georgia, USA

Physical Plant: 3.5 million gallon pond and 0.9 million gallon settling pond

Flow: 230,000 GPD

Problem: The protein conversion plant (rendering plant) has a LAS permit (Land Application System Permit) that allows the rendering plant to spray the treated water from the final settling pond onto fields at a rate limited by the phosphorous levels in the water. The phosphorous level was at the maximum allowable limit.

Previous Treatment: Chemically treated for reduction of BOD and grease. There was not a phosphate removal system.

Custom* Treatment:** An initial "shock" treatment of 110 gallons of ***Custom FM+PO4 with a daily application of 20 ppm ***Custom FM+PO4***. The initial sludge analysis showed phosphate in the amount of 448.03 mg/L.

***Custom* Results:**

Days	PO4 Level	
0	448.03	mg/L
31	248.17	mg/L
42	153.00	mg/L

Also, the average sludge reduction was 12 inches in the final settling pond with some reported reduction up to 26 inch as measured by a "sludge judge".