

PROJECT PROFILE

Key Systems:

Upgraded Pumping
400 GPM submersible pump

Flocculation
ETS Model FT-64 Flocculation Tube, two-polymer chemical makeup and feed system

Dissolved Air Flotation
ETS Model RT-140 DAF, stainless steel construction, 400 gpm capacity, Hellbender™ HB-90 recycle pump, top and bottom skimmers

Float (Sludge) Handling
Rotary lobe pump, level controls

Flow Measurement
4" magnetic flow meter

Effluent Recycling
Storage tank, transfer pump, controls

Lagoon Aeration
Three 15-HP floating aerators

Turn-key Installation
Process design, engineering, installation, start-up, and training included

COMMENTS: "This was a job well done and I appreciate all of the cooperation and efforts from everyone involved."

- COMPANY ENVIRONMENTAL MANAGER

TURN-KEY PRETREATMENT SYSTEM FOR POULTRY FURTHER PROCESSING PLANT

Environmental Treatment Systems, Inc. recently completed the installation and startup of a DAF-based pretreatment system upgrade for the removal of TSS, BOD, and O&G from wastewater generated by a poultry further processing plant in Georgia. The primary objectives of the system were the reduction of TSS and O&G prior to discharge to the biological treatment system and improvement of the biological treatment system for better BOD and phosphorus removal.

The DAF system was installed on a turn-key basis in a new pretreatment building. Wastewater from the plant contains cooking oil, flour, meat pieces, and cleaning chemicals. After biological treatment and DAF clarification, effluent from the system is discharged to a municipal sewer or recycled for use in polymer makeup.

In addition to the new pretreatment system, the aerated lagoons were upgraded



RT-140 DAF system and reclaimed water tank

with additional aeration, rehabilitated banks, and solids recycling capability.

The system is controlled by a centralized PLC system with instrumentation providing flow rate, tank level, and alarm inputs.



Lagoons with added aerators and stabilized banks



New pre-engineered steel building housing new pretreatment system

SYSTEM PERFORMANCE

Parameter	Influent mg/L	Effluent mg/L	Removal %
BOD	7,910	18	99.8
TSS	5,450	103	98.1
O&G	2,860	<5	>99.8
TKN	160	22	86.2
TP	80	1	98.8

