

FOR IMMEDIATE RELEASE

*ACEC Announces Award:*



## PROJECT OF THE YEAR - Arkansas Water and Wastewater

The collective team of World Water Works, Inc., Zentox Corporation, Install Inc., and FTN Associates, Ltd., won the ACEC Water and Wastewater project of the year in Arkansas:

*Project:* **Townsend's Water Reuse Project**  
*Clients:* Environmental Management Corporation (EMC) and  
Townsend's Poultry

World Water Works is pleased to announce recognition for our **success of the largest known poultry water reuse system in the world**. Located in Batesville, AR, this Townsend's facility is a fresh poultry processing plant. The water reuse system was designed to treat up to two million gallons per day (2 MGD). The system commissioned in June of 2006 currently treats all the plant effluent of ~1.5 MGD. Approximately 700,000 gallons of the water, which meets all USDA guidelines for poultry water reuse, is made available for the kill facility daily.



The system design incorporated upgrading of the existing wastewater pretreatment facility and the provision of further unit operations. World Water Works designed, manufactured and provided the major components required to remove Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Fats, Oils and Greases (FOG), and Total Suspended Solids (TSS) from the wastewater. A new equalization tank with mixing was installed to improve wastewater normalization on both flow and load. The existing DAF was upgraded with a Nikuni pump to improve performance and consistency. A two-stage Moving Bed Biofilm Reactor (MBBR) was designed to remove soluble BOD. A Resource DAF was designed to remove the biomass from the MBBR.

These process units significantly reduced BOD, TSS and FOG to concentrations that may allow for potential direct discharge although the water is currently discharged to a POTW. The effluent averages less than 2 ntu Turbidity. The second DAF consumes approximately 1 ppm or less of polymer to achieve these results.

*A sampling of the data:*

BOD			TSS			FOG			Turbidity
Influent	Effluent	% Eff.	Influent	Effluent	% Eff.	Influent	Effluent	% Eff.	Effluent
3,900.0	8	99.8%	2,550.0	4	99.8%	N/A	2		1.5
890.0	8	99.1%	790.0	5	99.4%	206.0	2	99.0%	1.3
3,450.0	7	99.8%	1,817.0	1	99.9%	N/A	2		1.1
3,900.0	7	99.8%	2,150.0	3	99.9%	623.0	2	99.7%	2.5
4,200.0	6	99.9%	2,325.0	4	99.8%	312.0	2	99.4%	2.7
4,050.0	6	99.9%	2,300.0	3	99.9%	291.0	1	99.7%	1.3
6,000.0	5	99.9%	4,125.0	4	99.9%	366.0	1	99.7%	1.5

Once the water is treated to these levels, a Zentox system polishes it with ozone and sand filters and then further disinfects it with chlorine. At this point, the water meets all USDA guidelines for water reuse in a poultry kill facility.

Install Incorporated provided the installation of all the equipment and provided the tank foundations and the new building structures. FTN provided the site engineering including structural, site, plumbing and electrical design. EMC currently provides operation and maintenance of the wastewater treatment plant. The synergy of the team and each party's contribution created the extraordinary success of this project.



For further information on this project, please call 800-607-PURE.