

CASE STUDY—ADDITIONAL INFORMATION

**NIAGARA WSAC® WASTEWATER COOLER FOR
LARGE REFINERY ON TEXAS GULF COAST**

A WSAC wastewater cooler was supplied to a large refinery on the Texas gulf coast for the refinery's plant water treatment facility.

WSAC System:

Duty	Wastewater cooling
Flow	2361 GPM
Process Temp In	125.0 deg F
Process Temp Out	98.0 deg F
Wet Bulb	82.0 deg F
Heat Load	31,873,500 BTU/hr

The system offers the ability to achieve the critical wastewater outlet temperature during hottest Texas summer months. The unit was designed based on factors including customer specifications for inlet and outlet temperatures, as well as weather conditions. All WSAC systems are tailored to meet the unique needs of the most demanding applications in the world. Niagara custom designed a large field erected concrete system for this customer. Bolted removable headers were included for access and cleanability of inside of tubes. Due to the quality of the water (the units were cooling high fouling, high solids, high chlorides wastewater), prime surface tube bundles (316L stainless steel) were manufactured. Redundant standby tube bundles, fans, and pumps were also included for critical wastewater cooling.

The WSAC was supplied by Resorcon in 2005. Resorcon is a subsidiary of Niagara Blower Company which designs and manufactures the largest Wet Surface Air Coolers in the world.



91 Sawyer Avenue, Tonawanda, NY 14150 ~ Phone: (716) 875-2000 ~ Fax (716) 875-1077
sales.niagarablower@alfalaval.com / www.niagarablower.com