



# CASE STUDY

## Shrimp Processing Facility

### Biloxi, Mississippi

Following the reduction and consolidation of shrimp processing operations in coastal Mississippi, the remaining facilities began discharging higher volumes of high-strength wastewater, placing added strain on local waterways. To comply with state and local environmental regulations, these facilities required a cost-effective pretreatment solution capable of ensuring consistent compliance.



#### RCPG TREATMENT OF SHRIMP PROCESSING WASTEWATER

Constituent	Influent (mg/L)	Effluent (mg/L)	% Removal
COD (n=16)	157.8 +/- 36.6	24.7 +/- 9.3	83%
BOD (n=16)	999 +/- 269	36.95 +/- 14.1	96%



### Problem:

Elevated and variable BOD and TSS concentrations were identified as the primary environmental challenges posed by the wastewater.



### Solution:

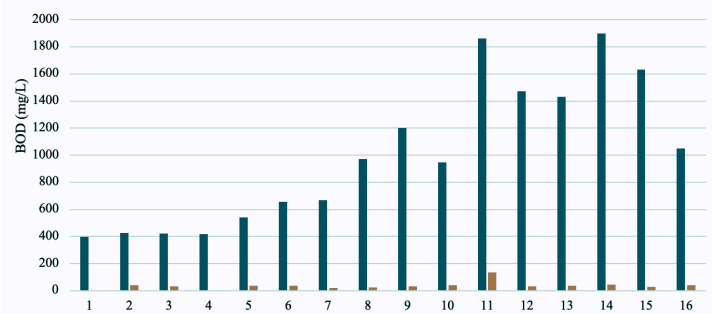
The facility implemented an onsite pilot using AST's Recirculating PolyGeyser® technology to evaluate its effectiveness in handling their high-strength wastewater. The system was designed to provide a reliable and easy-to-operate solution with the goal of reducing untreated BOD concentrations to below 750 mg/L, while demonstrating a scalable approach to increasing onsite pretreatment capacity.



### Results:

AST's pilot demonstrated that the Recirculating PolyGeyser® technology could reliably and significantly lower BOD concentrations in the facility's wastewater, achieving an average reduction of 88%. Based on these results, the facility is moving forward with the installation of two RCPG-500 treatment modules, which will eliminate the need for costly wastewater trucking and disposal.

BILOXI SHRIMP PROCESSING: BOD



BILOXI SHRIMP PROCESSING: TSS

