



Case Study:

ARIZONA EXTENDED AERATION WITH TWO 74 MILLION GALLON LAGOONS WASTEWATER TREATMENT PLANT

Challenge:

To determine if Enviro-Tech of America, Inc. and **PX-700**[®] could accomplish the following:

- Reduce amount of solids that are produced at the treatment plant
- Reduce formation of algae in the treatment lagoons
- Improve the quality of the final effluent

Facility personnel were used to gather and maintain records for the appropriate data.

Background Data:

Facility Type: Extended Aeration & Lagoon System
 Design Flow: 8.0 million gallons per day
 Current Flow: 6.5 million gallons per day

Treatment Procedure:

Product Used: **PX-700**[®]
 Treatment Period: 6 weeks
 Amount of Product Used: 6 ½ gallons daily via injection
 220 gallons via aerial application to lagoons
 Injection Points: Two at lower lagoon head works
 One at midpoint lower lagoon at aerator
 Two at head works/transfer point upper lagoon
 One at midpoint upper lagoon at aerator

Results:

	<u>Start</u>	<u>End</u>	<u>Reduction</u>
Composite Effluent TSS	37.41 mg/L	12.50 mg/L	67%
Grab TSS	42.20 mg/L	20.60 mg/L	51%
Transfer Point TSS	89.77 mg/L	39.02 mg/L	57%

The use of **PX-700**[®] controlled biosolids production, keeping effluent well within standards, and also controlled algae growth and reduced sludge volume. An additional benefit of the use of **PX-700**[®] was a reduction in the wear on aerators and control pumps.