

ARIZONA EXTENDED AERATION 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
- Improve settling of solids in both the aeration ditches and clarifiers.
- 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
Design Flow: 0.700 million gallons per day
Current Flow: 0.450 million gallons per day

The clarifiers were overloaded, exhibited poor settling, and the weirs were covered with algae. The settling in the aeration ditches was also poor. The effluent turbidity had been running high for numerous months.

Treatment Procedure:

Product Used: **PX-700®**
Treatment Period: 6 weeks
Amount of Product Used: First four weeks at 53 ounces per day
Two weeks at 66 ounces per day
Injection Points: Splitter box prior to the two extended aeration racetracks

Results:

	<u>Start</u>	<u>End</u>	<u>Reduction</u>
Settling	978	780	20%
Effluent NTU	431	282	35%
MLSS	2975 mg/L	1899 mg/L	36%
RAS	444 mg/L	237 mg/L	47%

The weirs on the clarifier are completely free of algae and other accumulated solids that could cause short-circuiting within the tank.