



## Teflon (PTFE) Coating Operation

The facility coats fiberglass cloth material with PTFE (generic Teflon) and generates approximately 3,500 gallons per week of wastewater. The wastewater has Teflon particles, surfactants, TiO<sub>2</sub>, yielding total solids up to 40,000 ppm. The majority of the solids are organic in nature.

Previous testing done by US Filter followed the generic treatment approach using conventional coagulants (ferric, alum, polymers) as well as oxidation with bleach (sodium hypochlorite) and ozone. In addition, testing was done for a biological solution in the form of aerobic aeration as well as anaerobic tests. All of these tests were unsuccessful.

Integrated Engineers received a sample and testing was successful with adding 0.6 ml of 15% caustic to a 500 ml. sample and then adding 3.0 grams of Floccin JP. The jar was mixed for 10 minutes forming a small floc with clear water. More Floccin JP made larger floc, but the water clarity remained the same. The sample was dewatered by pouring it through dewatering paper. The sample is at the lab for analysis for BOD/COD and TSS.

