



DECORATIVE TIN WARE MANUFACTURER, PENNSYLVANIA

THE CHALLENGE

A decorative brass/tin ware manufacturer was using iron chemistry for the removal of selenium in a batch process. Contaminants in the waste stream include copper, tin, chromium, zinc, and selenium. The treatment required multiple pH adjustments, long processing times, failed to consistently meet discharge requirements, and generated a characteristic hazardous waste; filter cake was failing the TCLP test for selenium.

THE SOLUTION

The AQUASIL® product is added to the wastewater without pH adjustment. Batch processing time has been significantly reduced. Treated effluent consistently meets discharge requirements and generated waste passes the TCLP test for Se and other contaminants. Analytical Data are shown in Table below.

Parameter	Discharge Limits (mg/L)	Before Treatment (mg/L)	AQUASIL® Treatment (mg/L)
Se (Water)	3	28.1	0.96
Se (TCLP) Filter Cake Leachate	1	NA	0.92

Both effluent and filter cake resulting from AQUASIL® treatment have consistently met discharge requirements and RCRA guidelines.

Great Chemistry At Work™