



DECORATIVE TIN WARE MANUFACTURER

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

Effluent from the facility is currently being treated with the AQUASIL[®] technology.

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 consistently meet discharge requirements and RCRA guidelines for non-hazardous materials.

Great Chemistry At Work™