

## A SUCCESSFUL DEFENSE OF CUSTOMER REUSE VS EPA

An Altiras Chemicals customer was cited by the TCEQ and the EPA for utilizing previously used sulfuric acid in its manufacturing process to make a metal sulfate product used in wastewater treatment. The state and Federal agencies claimed the finished products contained high levels of chromium. They claimed such use did not constitute proper reuse of spent sulfuric acid products.

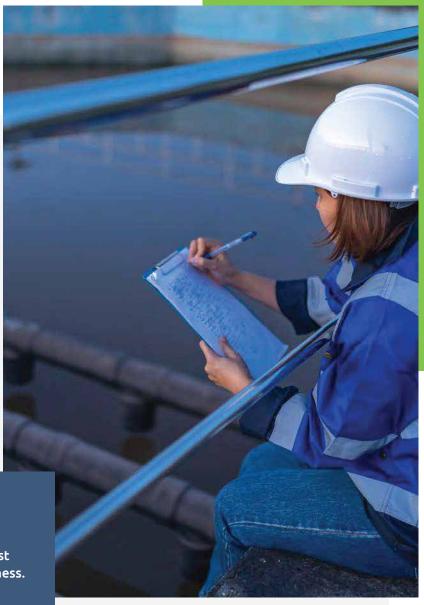


Since these products represented the vast majority of company production and sales, failure to defend against these claims meant the company would be out of business.

## THE ALTIRAS SOLUTION

Our team has extensive experience in the regulatory environment related to the beneficial reuse. Based on this experience, we performed the following process:

- Reviewed the claims being made by the TCEQ and EPA. The claims were related to chromium in the finished product.
- Assessed case law relating to beneficial reuse, chromium, and sulfuric acid. Case law related to the tanning industry and chromium clarified the specific concerns having to do with hexavalent chromium versus trivalent chromium.
- Reviewed the reaction chemistry. We determined that hexavalent chromium should not exist in the strong reducing environment of sulfuric acid.
- Prescribed and coordinated analytical testing, and located a suitable testing laboratory, to measure and differentiate between hexavalent chromium and trivalent chromium.



## **RESULTS**

The Altiras Chemicals team made a proposal to the manufacturer to purchase the 4 streams and to process and recover the 2 remaining streams either on-site or at an off-site location. The solution minimizes waste, significantly enhances value, and significantly improves ESG scores and carbon footprint for the manufacturer.

15354 Park Row Houston, TX 77084 www.altiras.com

Phone: (713) 561-5719 Email: info@altiras.com

