

# A Massive Reduction in Annual Hazardous Waste

## THE PROBLEM

The leadership team of an international chemical manufacturer was frustrated with excessive waste disposal costs, reporting metrics, P2 plans, and poor ESG scores. The manufacturer operates dozens of facilities in the United States and needed to make significant improvements.



## THE ALTIRAS SOLUTION

The Altiras Chemicals team reviewed the key priorities and critical objectives from the manufacturer's leadership team and got to work. The Altiras team took the following approach:

- Reviewed the Annual Waste Summaries for all of the US operations with the Owner's personnel.
- Developed a prioritization system based on the waste volumes, product stewardship considerations, product usability, quality management, and logistical considerations.
- Evaluated market opportunities for the most promising waste streams as products and re-prioritized accordingly.
- Assisted the manufacturer in developing 6-sigma specifications, as appropriate, for the materials with the best opportunities for reuse where sufficient data existed. When data was limited, the team established a process to ultimately achieve 6-sigma quality specifications.
- Evaluated the adequacy of the manufacturer's SDS's and provided guidance on SDS improvement where needed, and development where SDS's were not available.
- Performed a Product Stewardship review for every stream to ensure the safety of any customer or user.
- Made purchase offers for the former wastes, now products, as appropriate.
- Worked with the manufacturer to notify the state agencies the wastes would be recycled going forward.
- Provided detailed documentation for each new product.

## RESULTS

In the first year, the Altiras team **turned 14 former industrial and hazardous waste streams into viable, ongoing products**, followed by **another 3 streams the next year**. The total volumes represented approximately 11 million pounds of IHW in the first year and another 3.4 million pounds in the second year. Following this, the manufacturer applied many of the lessons learned to future beneficial reuse around the Altiras approach, including the use of several documents designed and established by Altiras Chemicals.



### Comprehensive

Altiras' extensive experience in reuse, RCRA regulations, product stewardship, and relevant product markets produce the best results.



### Problem Solving

Altiras develops solutions and determines the best markets and uses for coproducts and byproducts.



### Low/No Risk

Altiras solutions include evaluation of RCRA, product safety, Hazcom, and product stewardship considerations.



### Sustainable

Altiras makes maximum reuse of materials and provides net value back to its suppliers and clients.