



Reference Case

Cutting 75% wastewater sludge volume
and \$800k in haul-off costs.

CarboNet ●●

A plant in Southern California produces frozen Tex-Mex-style cuisine. Their team aimed to reduce sludge hauling costs and associated emissions, which led to an evaluation of their wastewater treatment chemistry.

The problem:

The plant’s influent had high solids and large swings in temperature and pH. Incumbent chemistry formed weak, inconsistent flocs that couldn’t be dewatered by the screw press, forcing disposal of wet, untreated sludge. Meanwhile, the client aimed to cut Scope 3 emissions and found sludge transport was a key contributor—making wastewater optimization a clear business case.

The approach:

We tested a range of products to optimize treatment performance, reliability, and sludge disposal costs and emissions:

- **SimplePrime:** Coagulant used prior to DAF system to destabilize colloids and improve effluent clarity, enhancing flocculation.
- **SimpleFloc Gel:** A no make-down product applied prior to DAF system to form stronger flocs, reducing TSS and improving water clarity.
- **SimpleFloc Emulsion:** Specifically chosen for screw press dewatering, this flocculant reduced sludge volume by 75%.

Results:

The switch to SimplePrime and SimpleFloc had an immediate impact on the water, the P&L, and the plant’s scope 3 emissions:

- Sludge volume reduction: 75%
- Operational savings: \$800,000 saved annually by reducing sludge haul-off costs.
- Enhanced operational efficiency: Reduced down-time and associated labor
- Reduced Scope 3 emissions: Transportation-related emissions from sludge haul-off

Results cont’d:

The CarboNet field team also recognized the challenge operators were facing with the screw press. Once the chemistry was in place to ensure the equipment could be used effectively, they worked with plant staff to ensure operators felt confident—providing a dosing & troubleshooting guide along with Standard Operating Procedure (SOP) documentation.

“The savings are impressive, but what really stood out with CarboNet was their attention to detail. They helped us tailor the chemistry to our unique challenges, delivering reliable performance at dramatically lower cost”

Plant Manager

RESULTS

- 75% sludge volume reduction
- \$800k reduction in transport costs
- Reduced down time and associated labor
- Reduced Scope 3 emissions

CarboNet: As freshwater becomes increasingly scarce and regulated, companies from energy and mining to food and beauty turn to CarboNet to reduce, recycle, and renew the water they need to compete.