Tidal Clear®
Water Science

Poultry Processing Plant
Midwest USA : 2025

INDUSTRIAL REPORT

Better Chemistry Removes Ferric and Can Help Reduce Sludge and Total Cost Significantly.

Customer Goals

A poultry processing facility was relying heavily on ferric salts to manage their wastewater system. While ferric had been a staple in their program, its side effects were clear: more sludge, higher handling costs, and downstream operational inefficiencies. Together, we evaluated their site conditions and designed a tailored chemistry program that reduced sludge, cut overall chemical spend, and phased out ferric without sacrificing performance or reliability.

Plan & Process

Equipment : Primary DAF, Coagulant Feed

Flow Rate : 1.2 – 1.4 MGD

To move away from the cost and sludge challenges of ferric-based treatment, we introduced a chitosan-based program. This approach delivered more efficient solids separation, which directly reduced sludge volumes and lowered hauling demands. By optimizing chemistry selection and reducing reliance on metal-based treatment, the facility achieved the performance they needed with a significant cut in overall chemical spend.

Tidal Clear Solution vs. Incumbent

Our Chemistry	**211.2 ppm**
Coagulant : TideForce® 316	200 ppm
Flocculant : PF 852AH	11.2 ppm

Incumbent Chemistry	**109 ppm**
Ferric Chloride	99.7 ppm
Incumbent Flocculant	9.3 ppm

Expected Results vs. Incumbent

50%
Reduction
in Chemistry Costs

Zero
Metal Salts
Total System Reduction

$624,000 → $312,000
In Sludge Disposal Annually

Send us a water sample or schedule a site visit today!
TidalClear.com/get-started

TideForce® reliably cleans more water with less chemistry - making it safer, more efficient, reducing wear on machinery, and minimizing risk for human handlers.

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