

CASE STUDY • COAGULATION & CLARIFICATION

A New Coagulant Improves Water Quality

In a Northern California jar-test study, DZ 1675 outperformed a 20-year-incumbent coagulant — lower turbidity, better organic removal, and a lower dose.

2.13 NTURAW WATER
TURBIDITY**Lower**SETTLED TURBIDITY
& NOM (UVA₂₅₄)**60** mg/LMOST ECONOMICAL
DZ 1675 DOSE

A study was conducted at a facility in Northern California. On March 2, 2022, influent data were collected on the plant's water-treatment system: raw-water turbidity of 2.13 NTU and UVA₂₅₄ of 0.075. The plant was running its original product at 60 mg/L as the primary coagulant. The goal was to optimize treatment and lower natural organic matter (NOM, measured by UVA₂₅₄), comparing their coagulant to DZ 1675.

Using the standard jar-test method and a filterability protocol, the study found that feeding DZ 1675 at 60 mg/L delivered the most economical treatment — the lowest settled-water turbidity and the best NOM removal by UVA₂₅₄. DZ 1675 significantly outperformed the technology the plant had used for 20 years, improving filter performance and organic removal at a lower dose.

In side-by-side jar testing, DZ 1675 produced the lowest settled-water turbidity and the best NOM removal (UVA₂₅₄) — outperforming the plant's 20-year incumbent coagulant while using a lower effective dose.

Northern California surface-water plant — March 2022 jar-test & filterability study

A 60-day plant trial was recommended to confirm the results. As the plant incorporated DZ 1675, it saw significant improvement in water-quality markers — lower UVA, lower turbidity (NTU), and improved filter efficiency. DZ 1675 is a high-charge, low-molecular-weight organic/inorganic coagulant that is very effective at removing organic contaminants.

QUESTIONS?

Contact us anytime at deepak@dz-worldwide.com.