

Why More Poultry Farms Are Looking Beyond Traditional Chemistry

For years, poultry farms have relied on two main approaches to water treatment: chlorine and hydrogen peroxide. Both can work — but both come with trade-offs that tend to show up over time.

Chlorine is inexpensive and familiar, but its performance is highly dependent on pH, and it struggles to penetrate the biofilm that builds up inside drinker lines and regulators. Residuals often break down long before the water reaches the far end of the house.

Hydrogen peroxide oxidizes effectively on contact, but it breaks down quickly and typically leaves little residual behind — so protection can fade before it reaches the last nipple. It also has limited effect on biofilm that's already established in the lines.

That gap — between what goes into the header and what actually reaches the bird — is why more growers are choosing chlorine dioxide.

Three Key Ideas



Stays effective across a wide pH range — where chlorine performance drops off



Penetrates biofilm — reaching bacteria that chlorine and hydrogen peroxide often leave behind in drinker lines



Holds its residual further through the system — all the way to the last nipple in the house

Could Chlorine Dioxide Be Right for Your Farm?

The right chemistry starts with understanding your water — not guessing at it.

That's why every Aquapproach recommendation begins with a water assessment before a treatment program is ever proposed.

Talk with an Aquapproach Poultry Specialist

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AQUAPPROACH
TREATMENT SYSTEMS

THE POULTRY PRODUCER'S GUIDE TO Chlorine Dioxide

Clean Water Begins With Better Chemistry.



AQUAPPROACH
TREATMENT SYSTEMS

WHY MORE GROWERS ARE MAKING THE SWITCH

Cleaner Water Delivery

Treatment continues down every line to the far end of the house

Better Biofilm Control

Warm houses and low brooding flows feed biofilm — ClO₂ helps keep it in check

Easier to Verify

Residuals are straightforward to test — so you can confirm treatment is working, not just assume it

More Reliable Residuals

Residual ClO₂ at the nipple keeps working on new contamination

Consistent Performance

Designed to perform across changing water conditions and flock ages

Complete Water Management

The best programs combine chemistry, monitoring, testing, and support

Separating Fact From Fiction

MYTH: "Chlorine dioxide is just another form of chlorine."

FACT: The names sound alike, but chlorine dioxide behaves very differently from free chlorine.

MYTH: "More sanitizer is always better."

FACT: Successful water treatment is about delivering the right residual — not the highest residual.

MYTH: "You can't run a sanitizer and still vaccinate through the water."

FACT: A managed program plans around vaccine and medication days — treatment is paused and lines are ready before the product goes in.

How Chlorine Dioxide Works

Chlorine dioxide works throughout the water system to deliver cleaner water to every drinker in the house.



Well

Water is drawn from the source

May contain minerals, iron, organics, and microorganisms



Iron / Minerals

Water can pick up impurities

Can affect water quality, taste, and line cleanliness



Treatment

ClO₂ is generated and injected into the water

Powerful oxidation begins working immediately



Storage

Treated water is held with residual protection

Helps keep water clean between treatment and the house



Drinker Lines

ClO₂ travels through regulators and every line

Penetrates biofilm and helps control bacteria in the lines



Nipples

Clean, treated water reaches every drinker

Helps keep nipples clean and flowing freely



Bird

Consistent, high-quality water supports flock health

**Clean water.
Healthy flocks.
Better results.**



Chlorine dioxide isn't just a different sanitizer. It's part of a different approach to water management.

The Hidden Challenge



Warm houses and slow brooding flows give biofilm everything it needs to grow inside drinker lines — out of sight, and often ahead of the sanitizer.

You can't manage what you can't see.