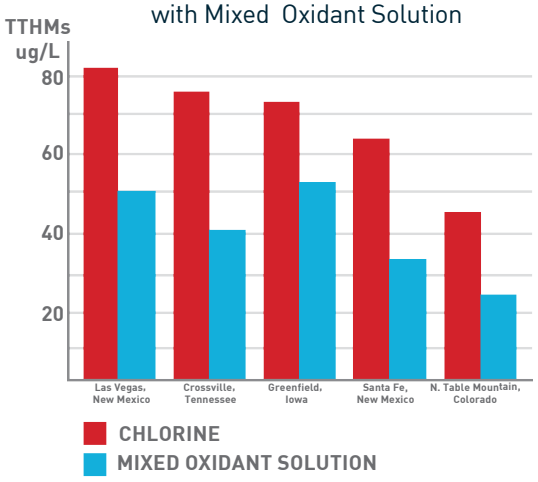
ON-DEMAND CHEMISTRY

WATER DISINFECTION

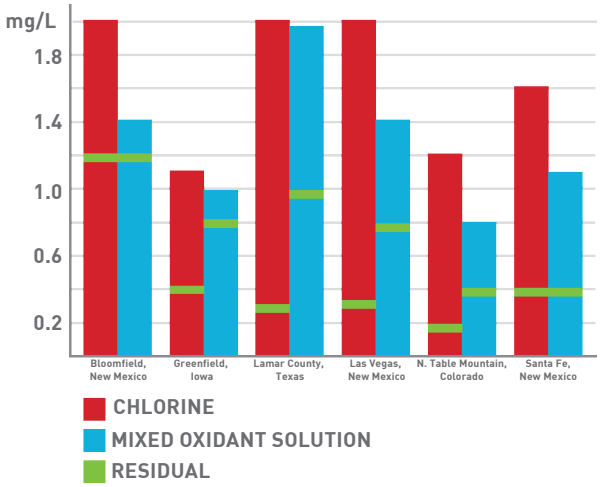
REDUCES DISINFECTION BYPRODUCTS. ELIMINATES BIOFILM. HIGHER RESIDUAL. LOWER DOSE.

MIOX® Corporation has been manufacturing reliable and cost-effective on-site chemical generators for over 20 years. MIOX's installed base of 3,000+ equipment installations globally includes over 1,500 cities in the United States, industrial facilities such as large power plants, data centers of Fortune 500 companies and commercial buildings including universities, hospitals and high security clearance government facilities.

30-50% reduction in DBP formation with Mixed Oxidant Solution



Up to 40% dose reduction and higher residual with Mixed Oxidant Solution



REPLACE HAZARDOUS CHLORINE GAS AND BULK HYPO

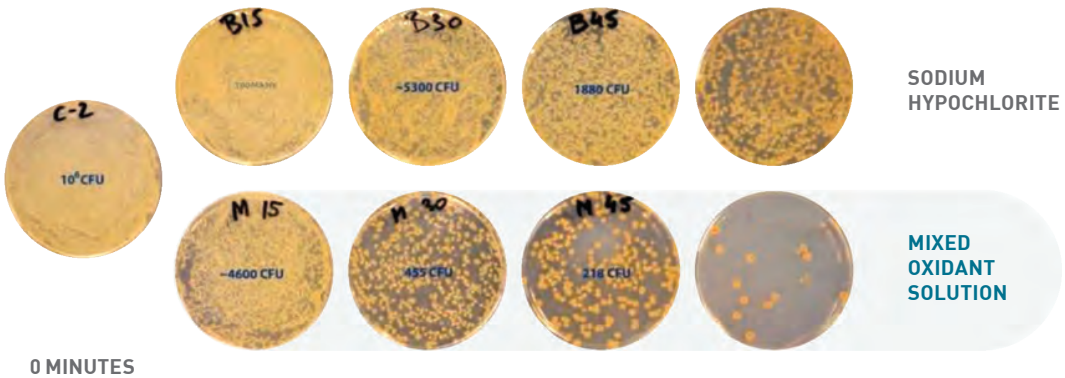
FOR TREATMENT OF:
- DRINKING WATER
- WASTE WATER

Pre-Oxidation
MF/UF Pre-feed
CIP
Water Reuse
Advanced Oxidation (AOP)
Final Disinfection

SUPERIOR DISINFECTION

MIOX MOS has been proven in numerous 3rd party laboratory studies to achieve more rapid and thorough inactivation of a wide range of microbial contaminants, including species highly resistant to chlorine.

Centers for Disease Control and Prevention (US CDC) verifies MIOX Mixed Oxidant Solution (MOS) is more effective than bleach for inactivating very tough to kill spores like Bacillus Globigii.



FASTER ROI BY REDUCING COAGULANT USE UP TO 40%

	COAGULANT CONSUMPTION			EFFLUENT TURBIDITY - ntu		
INSTALLATION SITE	PREVIOUS DOSE	CURRENT DOSE	PERCENT REDUCTION	PREVIOUS LEVELS	CURRENT LEVELS	PERCENT REDUCTION
Crossville, Tennessee	90 GPD	70 GPD	22%	N/A	N/A	N/A
Greenfield, Iowa	14.7 mg/L	8.9 mg/L	40%	0.107	0.065	39%
Las Vegas, New Mexico	10.5 mg/L	7.5 mg/L	29%	0.07	0.03	57%
Santa Fe, New Mexico	90 mg/L	54 mg/L	40%	0.60	0.18	70%
Midwest United States	N/A	N/A	N/A	2.0	0.4	80%

INSTALLATION PROFILES

REPLACING BULK HYPOCHLORITE

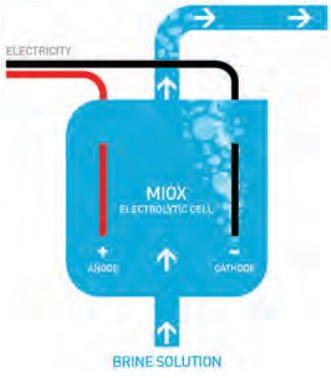
Within months of utilizing MOS, chlorine residuals in the City of Crossville, TN were much higher in areas previously difficult to maintain. After a year, DPBs including TTHM and HAA5 were reduced by 50%. The use of MOS also produced a much quicker and complete oxidation of iron and manganese. Because MOS also improved filter operation and reduced chemical usage, backwash cycles went from 2 days when using chlorine to 4 days when using the MIOX system. Furthermore, the city also achieved significant operational and chemical cost savings.

ELIMINATING CHLORINE GAS

In 2012, the West Point Water Treatment Plant in West Point, GA installed a MIOX Mixed Oxidant Solution chemical generator to meet higher drinking water standards. The city uses MOS to inactivate bacteria, viruses and intestinal parasites that are commonly found in surface waters. Due to removal of biofilm in the distribution systems, MOS maintains higher chlorine residuals for a longer period of time and remains stable at lower doses year round. The lower chlorine demand therefore produces fewer DBPs such as TTHM and HAA5.

ELECTROLYSIS PROCESS

The electrolytic cell of a MIOX on-site chemical generator uses salt combined with water and electricity to generate high performance Mixed Oxidant Solution (MOS) or sodium hypochlorite (HYPO), eliminating the need to transport and store hazardous chemicals.



ON-SITE GENERATION PROCESS FLOW

1. Softened water to Electrolytic Cell & Brine Tank
2. Salt and Water mix in the Brine Tank to form saturated brine
3. Saturated Brine enters the Electrolytic Cell
4. Electrical Current is passed through the Electrolytic Cell producing Oxidant
5. Hydrogen Gas produced during the Electrolysis Process is vented outside
6. Oxidant Solution leaves the Electrolytic Cell and is stored in the Oxidant Tank
7. Oxidant Solution is dosed into the Treatment Process by a metering pump
8. OSG turns ON/OFF from a level switch signal located inside the Oxidant Tank.

JM Johnson Matthey

MIOX

5601 BALLOON FIESTA PARKWAY / ALBUQUERQUE, NEW MEXICO 87113 USA
505.343.0090 / 888.646.9420 / FAX 505.343.0093 / INFO@MIOX.COM / WWW.MIOX.COM

ON-DEMAND CHEMISTRY